HEALTH AND SAFETY POLICY HANDBOOK

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*TSSA FUEL OIL CODE – CSA-B-139 (2016)
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REVISIONS OF THIS POLICY

Date of Revision	Changes/Topics	Next Review Date	Changes reviewed by	Owner
Oct. 16, 2016	**Multiple**	**October 2017**		**GM Group**
Nov. 20, 2017	**Multiple**	**October 2018**		**Erin Terveld**
June 7, 2018	**Acknowledgement and Agreement**	**October 2018**	**CCL Mgmt.**	**Erin Terveld**
Oct. 23, 2018	**Reformat Layout Pages: 12,36,37, 89,142,143,188, 190**	**October 2019**	**CCL Mgmt.**	**Erin Terveld**
June 2019	**Policy Statement(s), Goals, Company Rules, Emergency Response, WHMIS, Probation, RTW, Internal Docs added**	**October 2020**	**CCL Management**	**Erin Terveld**

EMERGENCY CONTACT NUMBERS

Cannington Construction Limited - Head Office	(905) 841-0430
Cannington Construction Limited - Fax	(905) 841-0967
President	(416) 414-2040
H & S Representative - Worker	(416) 684-1736
H & S Representative - Management	(416) 579-5204
Ministry of Labour (M.O.L)	1-800 202-0008
Emergency Services - Police, Ambulance, Fire Department	911
Poison Control	1-800 268-9017
Enbridge Gas	(416) 447-4911
Bell Canada	1-800 310-2355
Ontario One Call Locates	1-800-400-2255

INTRODUCTION

Cannington Construction Limited is a 100% Canadian owned and operated company with the corporate head office located at *4 Fortecon Drive, Stouffville, Ontario, L4A 2G8.* Through hard work and commitment to excellence, we always provide superb service to all of our clients regardless of their needs or location. We are also committed to applying the same approach to health, safety and environmental concerns.

Our Manual's Purpose and Scope

The **Cannington Construction Limited** H & S Policy Handbook contains policies and procedures applicable to all workers, sub-contractors, and employees alike regarding safety, health, and environmental responsibilities on **Cannington Construction Limited** projects and for work performed for **Cannington Construction Limited** employees and sub-contractors including demolition contractors should review the sections of this manual that are appropriate to the work to be performed. This manual does not replace existing site procedures or operational specifications outlined by our Clients, Architects or Professional Engineers. Approved site-specific procedures or manufacturing instructions must be followed where applicable. This manual does not relieve employees and Contractors of their responsibility for safety, health, and environmental compliance under law, act, or regulation. Manual does not address all possible circumstances and hazard control methods and therefore it is not a definite guide to personal health and safety. Therefore, workers and supervisors must identify actual and potential hazards prior to starting the task and develop and implement adequate controls. This manual is organized as a reader friendly document that outlines work-place parties' duties and responsibilities starting with the President. In addition to duties and responsibilities of individual parties, this manual also outlines generic and specific guidelines designed to protect workers' health and safety.

General Information

Non-compliance with safety or environmental requirements is treated with highest priority and may result in work stoppage or employee removal from the premises. Willful or repeated non-compliance may result in termination. Compliance with federal, provincial, and local codes or regulations is required by law. The H & S Policy Handbook is a supplementary document to governmental rules, codes, and regulations having jurisdiction, and does not negate, abrogate, or minimize any provisions of these rules, codes, and regulations. It is intended to supplement and enforce existing requirements and to coordinate the overall safety effort. Supervisors are responsible for the safety and health of their employees, sub-contractors, consultants, vendors, suppliers, and visitors while on **Cannington Construction Limited** projects. Safety is considered an integral part of quality control, cost reduction, and job efficiency. Managers and supervisors are accountable for the safety performance demonstrated by their employees. The H & S Policy will be updated annually using addenda to the current revision. Each addendum is approved by the Health and Safety Reps, and the President.

The manual is revised and reprinted annually when necessary, as determined by management. Bound and printed copies of the H & S Policy handbook can be obtained from **Cannington Construction Limited**.

GOALS AND OBJECTIVES

The goals of the safety program are listed below:

- eliminate accidents and work-related illnesses
- achieve zero fatalities, zero permanent disabling injuries, and zero lost work-day cases
- prevent MOL orders, fines and penalties
- eliminate releases to the environment and prevent environmental harm
- continuously improve the OH&S Program by reviewing and making changes during the Annual Management Review Meeting
- encourage the rights of workers
- ensure communication and safety expectations are clear to all workers

The main objective of the safety program is to support and assist Supervisors and Workers with their responsibility to control the exposures and prevent the incidents that may cause injuries, illness, fatalities, equipment damage, fire, and damage or destruction of property.

PRESIDENT'S MESSAGE

TO: All Employees

FROM: President

SAFETY TAKES PRIORITY

Over the past several years, the construction industry has experienced a period of rapidly changing technologies and regulations.

At **Cannington Construction Limited** the safety of our workers, sub-contractors, general public, visitors, clients and the safe conditions and practices on our work sites is of the highest priority and every reasonable precaution shall be taken to provide such an environment.

All supervisors on our sites, whether working directly or sub-contractually for Cannington Construction, are expected to perform their duties and responsibilities in a manner which ensures that workers under their authority have the knowledge, training or experience to perform their job tasks in the safest manner possible. All supervisors must ensure their workers are familiar with the actual and potential hazards of the job and with an understanding of the safety standards and regulations that apply to their work.

We require that every person affiliated in any way on our work sites, abide by our Internal Health and Safety Policy Handbook, Procedures and Practices, in addition to adhering to Ontario's Occupational Health and Safety Act and its Regulations for Construction Projects. Severe penalties could be exercised against employers and employees, by our provincial government for contravention to the statutes. We welcome any suggestions on how we might improve our safety program. Safety is everybody's business. We expect everyone to work together as a team to maintain and improve our safe working environment.

Regards,

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Mr. Stephen McCrossan - President

Cannington Construction Limited

October 31ST, 2019

Date

HEALTH AND SAFETY POLICY STATEMENT

Cannington Construction Limited is committed to the protection from accidental loss of all its resources, including all workers and physical assets. We promise to continuously improve our Occupational Health and Safety Program by reviewing and updating each year to keep up with the ever-changing industry and work environment.

In fulfilling this commitment to protect both people and property, we will provide and maintain a Safe and Healthful work environment. In order to achieve this goal, Cannington Construction Limited will support its employees, sub-contractors and client safety concerns and whenever necessary, ensure that disciplinary action is taken in the case of any breach of the Health and Safety Policy. Cannington Construction Limited will enforce compliance to legislative requirements outlined in the *Occupational Health and Safety Act and Regulation for Construction Projects* and will strive to eliminate any foreseeable hazards.

Protection of employees from injury or occupational disease is Cannington's top company objective. Every worker has the right to work in a healthy and safe workplace. In addition, every worker has the right to participate in the development, maintenance, and improvement of Cannington's Health and Safety Program.

All supervisors, workers and sub-contractors will be equally responsible for minimizing accidents within our company projects. All workers must perform their jobs safely in compliance with established written procedures and operating practices as well as our clients' policies.

Safe Job practices, policies and programs are clearly defined in our *Health & Safety Policy Handbook* for all workers to follow. We are committed to work jointly with our Health and Safety Representatives to ensure our H&S Program is kept current and meeting the training needs and rights of our workforce. We believe that knowledge and training will result in a safer work environment.

Regards,

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Mr. Stephen McCrossan - President

Cannington Construction Limited

October, 2019	October, 2020
Date Issued	Review Date

ENVIRONMENTAL/ENERGY POLICY STATEMENT

At **Cannington Construction Limited** we believe that all employees, supervisors and managers shall behave in a way that protects and preserves the environment. We are committed to protecting the environment and resources in all areas affected by our activities. Compliance to environmental legislation pertinent to our activities or those of our clients is a minimum requirement and an integral part of our policy.

It is the company's policy to:

- Comply with applicable environmental laws and regulations at all levels of authority municipal, provincial and federal.
- Maintain our Ministry of the Environment Certificate of Approval for Waste Management systems.
- Protect the environment from adverse effects of production operations.
- Provide any information in our possession on the most appropriate Health, Safety and Environmental Management and waste disposal practices to be utilized.
- Promote awareness and education.
- Stay informed of any law changes and waste disposal requirements.
- Maintain all equipment, cranes and vehicles in the manner that prevents leaks, spills and discharge of petrochemical product on the soil or concrete surfaces.
- Use Energy efficient equipment whenever possible, and to always minimize energy consumption during provision of services.

Regards,

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Mr. Stephen McCrossan - President

Cannington Construction Limited

October, 2019	October, 2020
Date Issued	Review Date

VIOLENCE & HARASSMENT POLICY STATEMENT

The management of **Cannington Construction Limited** is committed to the prevention of workplace violence and harassment and is ultimately responsible for worker health and safety. We will take whatever steps are reasonable to protect our workers from workplace violence and harassment coming from all sources.

Violent behavior in the workplace is unacceptable from anyone. This policy applies to any employee of **Cannington Construction Limited** or anyone working indirectly with **Cannington Construction Limited,** including suppliers, clients, Sub-contractors. Everyone is expected to uphold the policy, outlined on page 127-128, and to work together to prevent workplace violence/harassment.

There is a workplace violence/harassment program, outlined on page 144 that implements this policy. It includes measures and procedures to protect workers from workplace violence/harassment, a means of summoning immediate assistance and a process for workers to report incidents or raise concerns.

Cannington Construction Limited as the employer will ensure this policy and the supporting program is implemented and maintained and that all workers and supervisors have the appropriate information and instruction to protect them from violence/harassment in the workplace.

Supervisors and every worker must work in compliance with this policy and the supporting program. All workers are encouraged to raise any concerns about workplace violence/harassment and to report any incidents or threats.

Management pledges to investigate and deal with all incidents and complaints of workplace violence/harassment in a fair and timely manner, respecting the privacy of all concerned as much as possible.

The workplace violence/harassment policy should be consulted whenever there are concerns about violence or harassment in the workplace.

Regards,

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Mr. Stephen McCrossan - President

Cannington Construction Limited

October, 2019	October, 2020
Date Issued	Review Date

RETURN TO WORK POLICY STATEMENT

In accordance with legislative requirements **Cannington Construction Limited** is committed to cooperate in returning an injured worker to safe and suitable employment.

Cannington Construction Limited will meet its "Duty to Accommodate" an injured worker by having an authorized representative contact the worker as soon as possible after the injury to jointly work on developing a return to work plan. The return to work plan will be based on the individual needs of each worker and will incorporate all relevant information. Any options identified will be assessed in accordance with the Workplace Safety Insurance Board (WSIB).

If an employee is unable to return to their pre-injury position as a result of a work-related injury, **Cannington Construction Limited** will consider alternate options in accordance with O. Reg. 35/08: Return to work and Re-employment – Construction Industry.

All workers will be treated fairly and consistently and are expected to participate and cooperate in the RTW program.

All Managers are expected to understand and value the importance of returning an injured or ill worker to work and must provide assistance where appropriate.

This statement reflects the views of both management and employees of **Cannington Construction Limited** and has been developed in full cooperation with the employee representatives. Any issues arising from the objectives of this statement will be monitored and evaluated annually at our Management Review Meeting.

Regards,

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Mr. Stephen McCrossan - President

Cannington Construction Limited

June, 2019	October, 2020
Date Issued	Review Date

EMERGENCY RESPONSE POLICY STATEMENT

No construction job is without risk and despite everyone's efforts to prevent accidents, we, the management of **Cannington Construction Limited** along with workers, drivers, sub-contractors, must be prepared to deal with any emergency.

Emergency response and preparedness means **Cannington Construction Limited** is ready and equipped to deal with emergency situations no matter where the workplace.

Before our workers enter a new job site, **Cannington Construction Limited's** Safety Coordinator must determine ahead of time the location and telephone number of the nearest hospital, telephone numbers for Fire, Police, Ambulance and Utility companies. This information must be posted on every job site.

In addition, all persons on the worksite with First Aid certification must be identified in the site Safety Documentation.

At a minimum, each work site should be capable of:

1. Providing Emergency First Aid or CPR to the injured.
2. Providing transportation of the injured to a hospital or to a medical facility.
3. Dealing with a Fire emergency.
4. Promptly responding to spills of materials.
5. Promptly contacting outside Emergency Services for assistance.

Cannington Construction Limited will meet, at a minimum, the legislative Emergency Procedures outlined in the OHSA Green book in section 17 of the Ontario Regulation 213/91 Construction Projects Part I: General. In addition, we vow to provide emergency procedure training to all our workers on an annual basis.

This statement reflects the views of both management and employees of **Cannington Construction Limited** and has been developed in full cooperation with the employee representatives. Any issues arising from the objectives of this statement will be monitored and evaluated annually at our Management Review Meeting.

Regards,

_____

Mr. Stephen McCrossan - President

Cannington Construction Limited

June, 2019	October, 2020
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DUTIES AND RESPONSIBILITIES OF WORKPLACE PARTIES

(Under OHSA & Regulations for Construction Projects - Ontario)

DUTIES OF CONSTRUCTOR

23. (1) A constructor shall ensure, on a project undertaken by the constructor that,

(a) the measures and procedures prescribed by this Act and the regulations are carried out on the project;

(b) every employer and every worker performing work on the project complies with this Act and the regulations; and

(c) the health and safety of workers on the project is protected.

NOTICE OF PROJECT

(2) Where so prescribed, a constructor shall, before commencing any work on a project, give to a Director notice in writing of the project containing such information as may be prescribed. R.S.O. 1990, c. O.1, s. 23.

DUTIES OF EMPLOYERS

25. (1) An employer shall ensure that,

(a) the equipment, materials and protective devices as prescribed are provided;

(b) the equipment, materials and protective devices provided by the employer are maintained in good condition;

(c) the measures and procedures prescribed are carried out in the workplace;

(d) the equipment, materials and protective devices provided by the employer are used as prescribed; and

(e) a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent, is capable of supporting any loads that may be applied to it,

(i) as determined by the applicable design requirements established under the version of the Building Code that was in force at the time of its construction

(ii) in accordance with such other requirements as may be prescribed, or

(iii) in accordance with good engineering practice, if subclauses (i) and (ii) do not apply. R.S.O. 1990, c.0.1, s. 25 (1); 2011, c. 11, s. 9.

Same

(2) Without limiting the strict duty imposed by subsection (1), an employer shall,

(a) provide information, instruction and supervision to a worker to protect the health or safety of the worker;

(b) in a medical emergency for the purpose of diagnosis or treatment, provide, upon request, information in the possession of the employer, including confidential business information, to a legally qualified medical practitioner and to such other persons as may be prescribed;

(c) when appointing a supervisor, appoint a competent person;

(d) acquaint a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent;

(e) afford assistance and co-operation to a committee and a health and safety representative in the carrying out by the committee and the health and safety representative of any of their functions;

(f) only employ in or about a workplace a person over such age as may be prescribed;

(g) not knowingly permit a person who is under such age as may be prescribed to be in or about a workplace;

(h) take every precaution reasonable in the circumstances for the protection of a worker;

(i) post, in the workplace, a copy of this Act and any explanatory material prepared by the Ministry, both in English and the majority language of the workplace, outlining the rights, responsibilities and duties of workers;

(j) prepare and review at least annually a written occupational health and safety policy and develop and maintain a program to implement that policy;

(k) post at a conspicuous location in the workplace a copy of the occupational health and safety policy;

(l) provide to the committee or to a health and safety representative the results of a report respecting occupational health and safety that is in the employer's possession and, if that report is in writing, a copy of the portions of the report that concern occupational health and safety; and

(m) advise workers of the results of a report referred to in clause (l) and, if the report is in writing, make available to them on request copies of the portions of the report that concern occupational health and safety. R.S.O. 1990, c. O.1, s. 25 (2).

Same

(3) For the purposes of clause (2)(c), an employer may appoint himself or herself as a supervisor where the employer is a competent person. R.S.O. 1990, c. O.1, s. 25 (3).

Same

(3.1) Any explanatory material referred to under clause (2) (i) may be published as part of the poster required under section 2 of the Employment Standards Act, 2000. 2009, c. 23, s. 2.

Same

(4) Clause (2) (j) does not apply with respect to a workplace at which five or fewer employees are regularly employed. R.S.O. 1990, c. O.1, s. 25 (4).

ADDITIONAL DUTIES OF EMPLOYERS

26. In addition to the duties imposed by section 25, an employer shall:

(a) establish an occupational health service for workers as prescribed;

(b) where an occupational health service is established as prescribed, maintain the same according to the standards prescribed;

(c) keep and maintain accurate records of the handling, storage, use and disposal of biological, chemical or physical agents as prescribed;

(d) accurately keep and maintain and make available to the worker affected such records of the exposure of a worker to biological, chemical or physical agents as may be prescribed;

(e) notify a Director of the use or introduction into a workplace of such biological, chemical or physical agents as may be prescribed;

(f) monitor at such time or times or at such interval or intervals the levels of biological, chemical or physical agents in a workplace and keep and post accurate records thereof as prescribed;

(g) comply with a standard limiting the exposure of a worker to biological, chemical or physical agents as prescribed;

(h) establish a medical surveillance program for the benefit of workers as prescribed;

(i) provide for safety-related medical examinations and tests for workers as prescribed;

(j) where so prescribed, only permit a worker to work or be in a workplace who has undergone such medical examinations, tests or x-rays as prescribed and who is found to be physically fit to do the work in the workplace;

(k) where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for the protection of a worker; and

(l) carry out such training programs for workers, supervisors and committee members as may be prescribed.

Same

(2) For the purposes of clause (1)(a), a group of employers, with the approval of a Director, may act as an employer. R.S.O. 1990, c. O.1, s. 26 (1, 2).

Same

(3) If a worker participates in a prescribed medical surveillance program or undergoes prescribed medical examinations or tests, his or her employer shall pay,

(a) the worker's costs for medical examinations or tests required by the medical surveillance program or required by regulation;

(b) the worker's reasonable travel costs respecting the examinations or tests; and

(c) the time the worker spends to undergo the examinations or tests, including travel time, which shall be deemed to be work time for which the worker shall be paid at his or her regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 26 (3); 1994, c. 27, s. 120 (3).

DUTY OF PROJECT OWNERS

30. Before beginning a project, the owner shall determine whether any designated substances are present at the project site and shall prepare a list of all designated substances that are present at the site.

TENDERS

(2) If any work on a project is tendered, the person issuing the tenders shall include, as part of the tendering information, a copy of the list referred to in subsection (1).

Same

(3) An owner shall ensure that a prospective constructor of a project on the owner's property has received a copy of the list referred to in subsection (1) before entering into a binding contract with the constructor.

DUTY OF CONSTRUCTORS

(4) The constructor for a project shall ensure that each prospective Demolition Contractor and trade Contractor for the project has received a copy of the list referred to in subsection (1) before the prospective Demolition Contractor or trade Contractor enters into a binding contract for the supply of work on the project.

LIABILITY

(5) An owner who fails to comply with this section is liable to the constructor and every Demolition Contractor and trade Contractor who suffers any loss or damages as the result of the subsequent discovery on the project of a designated substance that the owner ought reasonably to have known of but that was not on the list prepared under subsection (1).

Same

(6) A constructor who fails to comply with this section is liable to every Demolition Contractor and trade Contractor who suffers any loss or damages as the result of the subsequent discovery on the project of a designated substance that was on the list prepared under subsection (1). R.S.O. 1990, c. O.1, s. 30.

DUTIES OF SUPPLIERS

31. Every person who supplies any machine, device, tool or equipment under any rental, leasing or similar arrangement for use in or about a workplace shall ensure:

(a) that the machine, device, tool or equipment is in good condition;

(b) that the machine, device, tool or equipment complies with this Act and the regulations; and

(c) if it is the person's responsibility under the rental, leasing or similar arrangement to do so, that the machine, device, tool or equipment is maintained in good condition.

ARCHITECTS AND ENGINEERS

(2) An architect as defined in the Architects Act, and a professional engineer as defined in the Professional Engineers Act, contravenes this Act if, as a result of his or her advice that is given or his or her certification required under this Act that is made negligently or incompetently, a worker is endangered. R.S.O. 1990, c. O.1, s. 31.

DUTIES OF DIRECTORS AND OFFICERS OF A CORPORATION

32. Every director and every officer of a corporation shall take all reasonable care to ensure that the corporation complies with:

(a) this Act and the regulations;

(b) orders and requirements of inspectors and Directors; and

(c) orders of the Minister. R.S.O. 1990, c. O.1, s. 32.

THE INTERNAL RESPONSIBILITY SYSTEM (I.R.S.)

The Internal Responsibility System (IRS) is the concept on which the Occupational Health and Safety Act is based.

The IRS encourages addressing health and safety issues and concerns ("at the grass roots") between workers and supervisors, within the area, within the department, within the organization (this benefits both, the employer and the workers) without the intervention of the Ministry of Labour.

Through open lines of communication, objective discussions and cooperation between workers, supervisors, management and the Health and Safety Representatives, the organization's objectives of a workplace free of hazards and illness can be achieved.

Health and safety should not be "added on" to how a job is done. These principles must be integrated into all operations and work activities. It is the responsibility of the supervisor to see that this happens.

Each supervisor must be accountable for the health and safety performance in their crew just as they are responsible for quality, scheduling and service, client satisfaction or any other operational objectives.

Specific hazards identified will be relayed to you and together with your supervisor; you will determine the most effective control strategy to employ to protect your health and safety.

It is important that workers have input and actively participate in the development and implementation of specific workplace procedures that could affect their well-being.

The Employee Health and Safety Guidelines are based on the premise that the ideas and concerns that are coming from the workers must be addressed in a timely and efficient manner. For the Program to be effective, management must respond to these concerns and implement standards and procedures that are to be followed so that the job can be cone in a safe and health manner.

For the IRS to be truly effective, workers, supervisors and management must accept and share the responsibility for occupational health and safety.

How well the system works depends upon the degree of communications, cooperation and accountability for workplace health and safety.

INTERNAL RESPONSIBILITY FOR HEALTH AND SAFETY

Responsi-bilities	Workers	Supervisors	Managers	Employer
For work	**Perform job**	**Assign tasks and schedule work**	**Determine objectives**	**Establish goals and objectives.**
For people	**Direct helpers-new hires-young workers**	**Orientate and train new hires & young workers**	**Select and develop supervisors**	**Establish hiring policies. Select and develop managers**
For work performance	**Use training, knowledge and skills to perform work**	**Specify who does what and assign authority**	**Assign jobs to supervisors and delegate authority**	**Determine who does what and delegate authority**
For direction of work	**Follow safe work practices and cooperate with supervisor**	**Follow safety policies and programs**	**Implement safety policies and programs**	**Establish safety policies, programs and procedures**
For relations with people	**Follow policies, programs and procedures**	**Coordinate implementation of programs, policies and procedures on shop floor**	**Implement policies. Conduct daily business in compliance with employer's policies and legislation**	**Determine policies, procedures and programs and ensure compliance**
For facilities and equipment	**Safely use tools, equipment and machinery**	**Provide adequate tools, equipment and machinery**	**Provide supervisors with adequate resources**	**Authorize expenditures and assign adequate resources to managers**
For conditions of work	**Implement and maintain standards. Cooperate with committee**	**Implement standards and train workers. Cooperate with committee**	**Help employer develop standards. Train supervisors to implement standards. Help committee to be effective**	**Determine health and safety philosophy and policies.** **Monitor effectiveness and follow up for Continuous improvement**
For account-ability	**Inspect tools and equipment. Report hazards to supervisor**	**Inspect work areas, tools, equipment and machinery. Report problems to managers and recommend solutions**	**Develop effective solutions to problems. Accountable to employer for operations**	**Account to directors and society for safe operation of work**

RESPONSIBILITY FOR SAFETY

PRESIDENT

The President has issued a corporate health and safety message related to **Cannington Construction Limited** Health and Safety Program. The President's statement provides a commitment that the health and safety of our workers and our working environment is of the highest priority. The President may instruct annually, that changes be made in the overall program design, objectives, implementation methods, planning and control of operations and expected levels of performance. The President maintains overall control of budgets and funding for sponsored safety training and awareness programs.

SAFETY COORDINATOR

The Safety Coordinator will ensure that all aspects of our Health and Safety Program are being applied, reviewed and reviewed by the President on annual basis and that all established safety policies and procedures are administered and enforced at the administration level. The Safety Coordinator shall assist the Project Manager in the implementation and planning of our safety program such as in the establishment of guidelines and safety training pertaining to healthy work conditions and worker practices, with professional institutions, associations and consultants. The Safety Coordinator is also responsible for ensuring that new management and field personnel are given an orientation to Cannington Construction Limited Health and Safety Program within the first week of assuming their position. Safety inspection reports will be forwarded to the Safety Coordinator for review.

The Office manager shall bind all sub-contractors contractually to our corporate safety policy and program. The Office manager will follow the following procedures in the procurement of sub-contractors, Demolition Contractors:

- complete the Sub-contractor prequalification form for each sub-contractor.
- during tendering stage, ensure that all prospective sub-contractors are supplied with our health and safety agreement package.
- provide a "short list" of sub-contractors who meet our safety start-up criteria to the Project Manager for review.

Obtain necessary documentation such as:

- proof of safety competency, trade qualification and relevant safety training
- commercial liability insurance
- copy of three job references
- WSIB CAD 7 rating

OFFICE MANAGER

The Office Manager will ensure every tender has the necessary Safety information required for potential jobs and for rewarded jobs. Every tender has unique requirements surrounding safety. It is imperative that we are aware of the potential hazards before we start on any new Job site.

PROJECT MANAGER

The Project Manager will assist the Safety Coordinator by ensuring that all field operations personnel are aware, understand and are effectively practicing the safety policies and procedures as set out in our safety program. Together with the project supervisors the project manager shall insist on compliance with the Occupational health & Safety Act and Regulations, from both our own staff and of the sub-contracting companies engaged on our projects. The project manager shall also ensure any job specific safety equipment is available for supervisors before work starts.

SUPERVISOR OR HIS/HER COMPETENT REPLACEMENT

The responsibility for safe work operations of a specific project is generally that of the project supervisor or his competent replacement who, as the on-site "COMPETENT PERSON" (as defined in the Ontario Occupational Health and Safety Act for Construction Projects), carries the legal responsibility for the work site conditions and work practices. As such, the project supervisor or his competent replacement, shall insist on compliance to the Occupational Health and Safety Act and its regulations from all Cannington Construction Limited field staff, workers and sub-contractors, engaged in the work, as well as visitors to the work site. The project supervisor or his competent replacement shall ensure that safe working conditions and practices prevail on the work site, and that all supervisory personnel are familiar with the current legislation pertaining to the Occupational Health and Safety Act and its Regulations. If the project safety standards are poor or enforcement of the Act and its Regulations is not evident, the project supervisor or his/her competent replacement endangers all workers and exposes himself and the company to the possibility of legal prosecution. Cannington Construction Limited will assist with any information or training programs necessary to maintain the standards required, but ultimately it is the project supervisor or his competent replacement that must bear the burden of all things related to health and safety on his work site. It is for this reason Cannington Construction Limited insists that the project supervisor become personally involved in investigating every incident, medical aid and lost time injury to determine the underlying circumstances giving rise to the incident or accident. Our supervisors are to never permit a worker to leave the site for medical reasons without first being briefed on the situation.

QUALIFICATIONS (SKILLS & ABILITIES) REQUIRED FOR SUPERVISORS

- The construction supervisor is often the first step taken by the skilled worker who wishes to move into construction management.
- Supervisor needs excellent verbal and written communication skills, the ability to read technical documents, drawings and specifications, and business communications. Supervisor needs to be able to document crew activities, job progress, be able to use company specific procedures to request materials, personnel or other resources required to complete their assigned tasks.
- Supervisor needs the organizational skills to plan the activities of others, and to manage and participate in meetings with their workers and other personnel on site.
- The Supervisor requires a good working knowledge of the employer’s responsibilities and role for safety, employment practices, and emergency procedures.
- The ability to use computers for entering and retrieving project or crew information is a trend that is becoming increasingly more important.
- Be competent and have working knowledge of Ontario OH & S Act and Regulations for Construction Projects is a must as well as Basic of Supervision Course/Seminar/Training.

- Ability to enforce the safety requirements and apply discipline when deemed appropriate.

WORKERS

The Workers have a personal responsibility to work safely and in accordance with our corporate health and safety policy and the Occupational Health and Safety Act and its Regulations. The worker has the right to refuse work, which he feels is unsafe to perform but may, by the same right, be refused permission to work by management if he fails to perform safely and in accordance to the Occupational Health and Safety Act and its Regulations. The Worker is obligated by law to report any unsafe condition, practices, or injuries of which he is aware, to his supervisor immediately so appropriate action may be taken. The Worker also has the right to inform his safety representative of any safety issues. The Worker is expected to help new employees recognize job hazards and follow proper procedures.

QUALIFICATIONS (SKILLS & ABILITIES) REQUIRED BY WORKERS

All workers must be deemed competent (as per OHSA) and have adequate training & experience to perform work in a safe manner.

HEALTH & SAFETY REPRESENTATIVE

Where required under the Occupational Health and Safety Act, a Safety Representative shall be appointed to represent workers at the work site, and he shall be responsible for identifying situations that may be a source of danger or hazard to workers. The Safety Representative is also obligated to conduct a monthly inspection of the work areas and report his findings and recommendations to the Safety Coordinator so corrective action may be taken.

ESTABLISHING JOINT HEALTH AND SAFETY COMMITTEE ON THE PROJECT

Where 20 or more workers regularly employed for the period of three months or longer on the project supervisor or his competent replacement shall be responsible for establishing and maintaining a Joint Health and Safety Committee. **Cannington Construction Limited** project supervisor or his competent replacement for the work site shall act as the Management Safety Representative, unless otherwise designated to someone else by the President. It is expected that a **Cannington Construction Limited** worker will stand for the position of the Health and Safety Worker Representative, representing the workers, provided this is acceptable with the work site labour force. Both the Management and Labour Safety Representatives for the Joint Health and Safety Committee, shall, if the project make-up require it, become "CERTIFIED MEMBERS" as defined under the Occupational Health and Safety Act.

ESTABLISHING JOINT HEALTH & SAFETY COMMITTEE

Cannington Construction Limited will establish a Joint Health & Safety Committee when number of full time employees exceeds 20 employees. Voted members will be certified. Established J.H.S.C. will hold meetings every three months and produce report after each meeting for employees and management review.

POWERS OF JOINT HEALTH AND SAFETY COMMITTEE

For the Committee to be effective, it should deal solely with safety issues and must not be allowed to become a general complaint session. Management response and involvement will determine the overall success of the Committee. Minutes of the Committee meetings shall be posted at the workplace for all workers to review. The primary function of the Joint Health and Safety Committee is to identify hazards at the workplace and to come up with solutions to safety

concerns. Members of this committee should actively take part in the development, implementation and monitoring of all phases of the Health and Safety Program. Copies of the meeting minutes shall be distributed to the participants and the Project supervisor or his competent replacement shall forward a copy to the Project Manager and the President. The Committee shall assist in resolving work refusals and promptly investigate reports of “dangerous circumstances" at the workplace.

WORKPLACE INSPECTIONS BY HEALTH AND SAFETY WORKER REPRESENTATIVE

In accordance with the Occupational Health and Safety Act, the Health and Safety Worker Representative must perform a site inspection on a monthly basis and any circumstances that may be a source of danger to workers shall be reported to and considered by the Committee. Unsafe situations requiring prompt attention must be reported to the Project supervisor or his competent replacement immediately. Recommendations for remedial action on safety issues will be listed on the Committee meeting minutes and assigned to the responsible party. Health and Safety meetings must be held and documented quarterly and be posted for all to review.

REQUIREMENTS FOR HEALTH AND SAFETY REPRESENTATIVES AND JOINT HEALTH AND SAFETY COMMITTEES FOR THE WORKPLACE

NUMBER OF WORKERS AT A PROJECT REGULARLY	GENERAL REQUIRMENTS
5 (five) or more	**one health and safety representative [section 8(1)]**
20 (twenty) or more	**joint health and safety committee of two persons. One committee representative selected by management and one committee representative selected by the workers or if it is a unionized project, their unions. [see sections 9(2), 9(5)(a) & 9(5a)]**
50 (fifty) or more	**A joint health and safety committee of at least four persons. Two management committee representatives and two labour committee representatives. At least one labour and one management representative must be certified. (see sections 9(5f), 9(5g) and 9(8a))**
Trades Committee	**The joint health and safety committee shall cause a worker trades committee to be formed. All trade contractors and Demolition Contractors having five or more workers should have labor safety representative who shall participate in these worker trades committees.** **[see section 10]**

THE DURATION OF A PROJECT MUST EXCEED 3 MONTHS before the Joint Health and Safety Committee, Safety Representative Certification, and Worker Trades Committee requirements apply. [See sections 9(1); 9(5f) and 9(5g); and 10(1) respectively]

WORKERS' RIGHTS

The Right to Know

You have the right to know about health and safety hazards in your workplace.

This means that all hazardous materials must be properly labeled according to Ministry guidelines. You must be trained so that you learn of the potential and actual dangers of materials and how to deal with them safely.

The Right to Participate

You have the right to participate in keeping your workplace safe and healthy. You have the right to give your ideas and complaints about problems without fear of being punished. The workers must select a health and safety representative. The representative must be a worker and not a member of management. These are the duties of the representative:

- The representative inspects the overall health and safety of the workplace at least once per month.
- The representative informs the employer, the workers, and the union about unsafe conditions, and she/he also recommends changes.
- The employer must give the representative a written response within 21 days.
- The representative can ask the employer for any information about health and safety of the workplace.
- The representative receives their regular pay for time spent on health and safety matters.

If a workplace has 20 or more workers, a Joint Health and Safety Committee must be formed. If there are between 20 and 50 workers the committee will have at least 2 or more members, and if there are more than 50 workers the committee will have at least 4 or more members. The role of the Joint Health and Safety Committee is to:

- check for dangerous work situations.
- tell the employer and workers ways to improve health and safety.
- tell the employer about ways to measure the safety levels in the workplace.
- get information from the employer about dangerous materials, equipment, or ways of doing things that may be considered dangerous.
- get information on whether or not equipment and the workplace have been tested.

Whenever a workplace is tested, a worker from the Joint Health and Safety Committee must be present. At least one worker and one member of management of the Joint Health and Safety Committee must receive special training, regarding health and safety, paid for by the employer. This training will make them certified members of the committee.

The Right to Refuse

You have the right to refuse work that you think is unsafe. The right to refuse unsafe work includes the right to refuse work that will harm you or any other worker in the workplace. You can refuse work if you think the equipment or machines you are using are unsafe or being used in a way that might be harmful to you or another worker. Or, you can refuse work you think is unsafe if you think the physical condition of the workplace is a danger to you. Under the law you cannot be punished for refusing to do work that you feel is unsafe. This is the way to refuse work you think is unsafe:

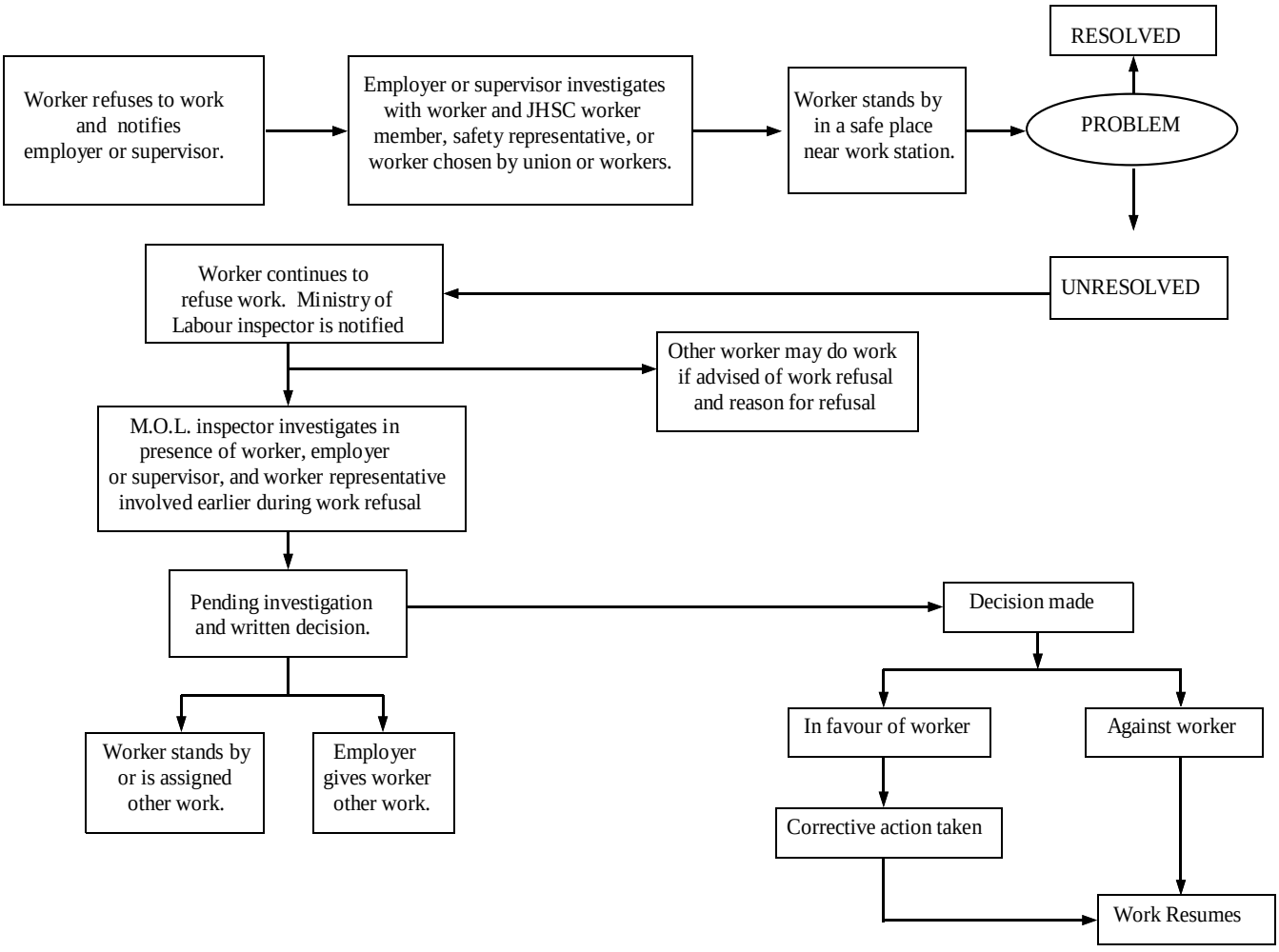
1. Tell your supervisor or H & S Representative or union steward why you think the work is unsafe and let them know it is your right under the act to refuse unsafe work. Also let your supervisor know that you would like them to look at the problem and have the employee health and safety representative accompany you.
2. Stay in a safe place near your work area, until your supervisor, has decided what to do about the problem. If your supervisor has told you to leave the workplace phone the head office immediately and ask to speak with president.
3. If you are satisfied that the problem has been taken care of you can return to work.
4. If, however, you feel that it is still unsafe to continue your work you can tell your supervisor to call the Ministry of Labour and have an inspector look at the problem.
5. If your supervisor refuses to do so, you may call an inspector yourself.
6. The inspector will investigate the problem and if it is unsafe, he will order the employer to make changes. While the investigation is being done your supervisor cannot send you home and must give you some other work to do if it is available.
7. If, however, the investigator says it is safe, but you still feel that it is unsafe, you may appeal the investigator's decision to the Office of the Adjudicator at (416) 326-6400. You have 14 days to do so.

WORK REFUSAL PROCESS WHERE HEALTH & SAFETY IS IN DANGER

Should a worker feel that the assignment given to him may place his health or safety in danger, the worker has a right to refuse, what he perceives to be unsafe work. The worker shall notify his immediate supervisor or employer of the work refusal and the supervisor and /or employer must immediately assess the situation in the presence of a Health & Safety Representative. The employer and / or supervisor has a legal responsibility to investigate and make a determination whether the work refusal is substantiated and if so, make the necessary corrections. Another worker may perform the work being refused provided he is informed that an unsafe work refusal is in process and is explained the reasons for the work refusal. If the employer and / or supervisor does not agree that a "dangerous circumstance" exists, the Ministry of Labour inspector for the area must be notified and this M.O.L. inspector will investigate the work refusal in the presence of the employer, supervisor, and H & S representative. Pending the results of the investigation, the worker refusing the work may be assigned other work during the investigation process or stands for further direction by the employer. The Ministry of Labour inspector's decision is final.

RIGHT TO REFUSE WORK WHERE HEALTH AND SAFETY IS IN DANGER

(OHSA – PART V)



SPECIFIED MANAGEMENT RESPONSIBILITIES

Management's primary responsibility is to provide a safe and healthy work environment and to ensure that the measures and procedures required by the Occupational Health and Safety Act and its regulations and our corporate safety policy are carried out on our projects. Cannington Construction Limited requires all management personnel, including sub-contractors on our projects, to ensure that:

1. All employers and employees on our projects comply with the Ontario Health and Safety Act and its Regulations.
2. POST safe work procedures and practices are in place and adhered to.
3. TSSA regulations, safe work procedures and practices are in place and adhered to.
4. MOE regulations, safe work procedures and practices are in place and adhered to.
5. MOT regulations, safe work procedures and practices are in place and adhered to.
6. TDG regulations, safe work procedures and practices are in place and adhered to.
7. The equipment and protective devices required by law are provided, maintained in good condition and used as prescribed.
8. Only competent persons, based on their knowledge, experience and training, are to be appointed as supervisors and that these supervisors are capable of safely organizing their work and its performance with an awareness of the hazards and safety laws applicable to their work.
9. Information, instruction and supervision is provided to workers for their health and safety.
10. Every precaution reasonable in the circumstances is taken to protect the health and safety of the workers.
11. Accidents and incidents are fully investigated, and the findings forwarded to senior management for appropriate action.
12. All workers are aware of any actual or potential hazards that may be present in their jobs and at the workplace.
13. All sub-contractors and employees comply with the WHMIS/GHS regulations and that all material safety data sheets/SDS and corresponding labeling are provided for all hazardous materials delivered, stored, transported, handled or used in the workplace.
14. Safety violations are dealt with in accordance to the governing safety policy and result in warnings and disciplinary action.

Notice of Project

The constructor must file a "Notice of Project" before beginning work, if one of the following conditions apply:

- The total cost of labour and materials for the project is expected to exceed $50,000;
- The work is the erection or structural alteration of a building more than two stories or more than 7.5 metres high;
- The work is the demolition of a building at least four metres high with a floor area of at least thirty square metres;
- The work is the erection, structural alteration or structural repair of a bridge, an earth-retaining structure or a water-retaining structure more than three metres high or of a silo, chimney or a similar structure more than 7.5 metres high;
- Work in compressed air is to be done at the project (i.e. under water);
- A tunnel, caisson, cofferdam or well into which a person may enter is to be constructed at the project;
- A trench into which a person may enter is to be excavated at the project and the trench is more than 300 metres long or more than 1.2 metres deep and over thirty metres long; or
- A part of the permanent or temporary work is required by the construction regulation to be designed by a professional engineer.

Cannington Construction Limited Internal Health & Safety Auditing – Management

The purpose of the Cannington Construction Limited Internal Health & Safety Auditing is to equip our firm with understanding of success rate of field level implementation of our safety program and to identify further areas of improvement. These audit protocols will examine the following queries with respect to the organization's safety and programs:

- Does the Cannington Construction Limited Management system have a Safety Program developed in accordance with latest regulations and safety management practices for our industry and/or MOL guidelines?
- Is the Safety Program fully implemented?
- Do our project Supervisors and Project Managers utilize internal safety audit program to identify, track, and resolve safety program deficiencies?
- What safety management practices exist in the areas of operations, equipment maintenance, training, inspections, employee testing, and site/project security?
- Are our clients' safety policies ignored or adhered to?

The goal of the audit program is to guide our staff through a series of safety management processes that will strengthen and hone the quality of safety practices and thus create a safer environment for our clients and employees. Senior Management Safety audit shall be conducted an annual basis as a minimum.

SPECIFIED SUPERVISOR RESPONSIBILITIES

All supervisors, including sub-contracting companies' supervisory personnel shall supervise the work of workers under their authority, either personally or by having and assistant who is a competent person, do so personally.

All supervisors must:

- Ensure all workers including sub-contractor employees are orientated to the Cannington Construction Limited Health & Safety Policy and Program.
- Ensure that all workers work in a manner that will not endanger themselves or other workers.
- Ensure that workers wear and use the proper personal protective equipment, devices or clothing that is required by the employer to prevent injury.
- Advise worker and management of any potential or actual health and safety hazard of which he may be aware.
- Provide the information, instruction, and supervision to protect the worker's health and safety.
- Take every precaution reasonable in the circumstance to protect the health & safety of workers.
- Where prescribed by law, provide oral and/or written instruction to a worker (in a language that's understood), as to the measures and procedures the worker is to follow for his/her protection.
- Hold safety meetings with the crew and provide minutes of these meetings to Cannington Construction Limited head office for review.
- Investigate all accidents/incidents promptly and provide a written report of the findings, with corrective measures to prevent a recurrence, to Cannington Construction Limited head office, immediately.
- Deal with worker safety violations in a responsible and disciplinary manner and provide documentation of the circumstances and action taken to management.

Cannington Construction Limited Violation Penalties

"Any person who violates a provision of this permit or shall fail to comply with any of the requirements thereof or shall erect, construct, alter or repair a building or structure in violation of an approved plan or directive of Cannington Construction Limited may be permanently dismissed from the project and contract terminated at the cost of the violator.

SAFETY PUBLICATIONS AND POSTINGS

Required onsite safety postings and supplies – (Supervisor to ensure)

The following information shall be posted on the safety bulletin boards:

- Notice of Project (where Cannington Construction assumes role of "constructor").
- Cannington Construction Limited Health and Safety Policy Statement
- Cannington Construction Limited Violence and Harassment Policy Statement
- Cannington Construction Limited Environmental/Energy Policy Statement
- Emergency response procedures
- Emergency contact numbers
- Route & map to the nearest hospital
- Name of first aider on the project
- WSIB poster 82 ("In the case of injury poster")
- Names of H & S Representatives
- H & S minutes of the meeting
- MOL reports/orders
- Copy of up to date OHSA & Regulations for Construction Projects (most current edition)
- MOL poster (Safe at Work)

Make available for review in construction office:

- SDS for controlled products used on the project
- Designated substance survey - report (where applicable)
- Traffic control plan (where applicable)
- Shoring/bracing drawings, trench box drawings and specifications etc.
- Any specific procedures such as: lock out – tag out, confined space entry, demolition etc.

Make available on the project:

- First aid kit adequate for number of workers (see WSIB regulation 1101)
- Adequate supply of drinking water
- Adequate number of portable toilets (1 per every 10 to 15 workers)
- Adequate number of fire extinguishers (see s. 52 of OHS Reg.)
- Emergency air horns

From trade sub – contractors obtain & keep on the project copies of:

- Registration forms (WSIB forms T – 1000)
- WSIB Clarence certificates
- Proof of required OH & S training and/or trade certification under TQAA
- Weekly tool box safety talks
- Any specific safe work procedures such as: demolition, confined space entry, fall arrest rescue procedures, fall prevention plan, hot work, electrical work, crane operations, traffic control plan, public safety etc.
- Completed JHA's, last minute risk assessments and other POST related documentation as required.

SPECIFIED WORKER'S RESPONSIBILITIES

ALL WORKERS SHALL:

- Work in compliance to the occupational health and safety act and its regulations.
- Work in compliance to the governing corporate health and safety policy.
- Wear and use any personal protective equipment/clothing that is required for his or her health and safety.
- Report any hazardous conditions or unsafe practices immediately to their supervisor.
- Work in a manner that will not endanger yourself or other workers.
- Report any near misses, incidents and accidents regardless of its severity, to his/her supervisor, without delay.
- Not remove or make ineffective any protective device required by the regulations or by the 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.
- Not engage in any prank, contest, and feat of strength, unnecessary running or rough boisterous conduct.
- Shall exercise the right to know and right to refuse work and take the necessary precautions to when working with hazardous materials in the workplace, by reviewing the material safety data sheets for the particular material in question and follow the instructions outlined in addition to any further measures, for his/her protection.
- Obtain first aid promptly and notify their supervisor of any first aid situation that becomes a medical condition, so the proper authorities can be notified.
- Not engage in acts of violence, discrimination, harassment and bullying.
- Participate in project specific safety talks and meetings.

Designated Substance Notification

Should a worker suspect or know he or she has disturbed or otherwise come into contact with a "designated substance" as prescribed under Ontario's OHSA and its regulations, the worker shall immediately report the finding or suspicious material to his or her foreman for further investigation.

UPDATED DEFINITION OF A WORKER UNDER THE OHSA

The government has announced, that the formal definition of a worker, under the Ontario Health & Safety Act and Regulations (OHSA) has changed. Under Bill 18 coverage under the OHSA has been expanded to include the following:

- Unpaid secondary school students involved in school board approved co-operative education programs
- Unpaid learners within a post-secondary institution approved program

- Unpaid trainees who are not employees for the purposes of the Employment Standards Act because they meet certain conditions.

This alteration to the definition of worker to include the above mentioned classes of unpaid workers is extremely significant. They now have the very same legal rights as paid workers, inclusive of the right to refuse or stop work when there is a danger to health and safety. This also however means they have the same responsibilities under the OHSA as paid workers. Adherence to all applicable sections within the OHSA, such as wearing protective equipment is legally mandated. In turn, employers now have the same duties and responsibilities to these unpaid workers, under the OHSA, as they do paid workers.

NEW EMPLOYEE TRAINING (LESS THAN SIX MONTHS WITH THE COMPANY – NEW EMPLOYEE)

One of the most effective methods in determining workers education and training needs is "Company Safety Orientation Session" Such session must be carried out on the first morning of the employment or day prior in order to determine workers levels of competency and related knowledge. In addition, session gives the worker opportunity to learn about the company, type of activities and Injury & Illness Prevention Program requirements. Immediate Supervisors/Foreman are responsible for ensuring this process and informing upper management if any training is required and need to be scheduled prior to worker being assigned with task. Upon discovery of lock of training immediate measures must be taken to arrange for adequate training and prevent worker from further carrying out the tasks where specific instructions or training is required or close and competent supervision not available.

YOUNG WORKERS (LESS THAN 25 YEARS OF AGE) – STUDENTS

Minimum allowable working age in construction in Ontario is 16. Where young worker or student is assigned to the crew, Supervisor/Foreman is responsible to in addition to "Company Safety Orientation Session" to closely supervise the worker either personally or by assigning the young worker to experienced and competent worker for instructions, monitoring and guidance. Do not permit inexperienced worker - under training to carry out difficult tasks or tasks involving various power tools and equipment until satisfied that worker is adequately trained and capable of carrying those tasks in safe manner. Young workers and new workers are the most vulnerable to workplace injury. A combination of inexperience, reluctance to ask questions and lack of maturity can lead young workers into lethal situations. Cannington Construction Limited is committed to educate young workers on job specific hazards and controls by assigning full-time competent supervision during project activities. Young and inexperienced workers will not be permitted to work alone or handle the task that they have not received training or instructions for.

CONSTRUCTION PROJECT INSPECTIONS AND REPORTS

PROJECT SAFETY INSPECTIONS POLICY

It is Cannington Construction Limited policy to perform work in the safest possible way, consistent with good construction practice. The Health and Safety of all members of the construction team, the general public and associated properties are the responsibility of all supervisory personnel. To ensure the safest possible conditions exist on our projects, all personnel associated to the construction team must under-stand and strictly adhere to Cannington Construction Limited health and safety policy procedures, the Occupational Health and Safety Act, and provincial / municipal regulations of construction projects.

Cannington Construction Limited reserves the right to remove anyone who causes an unsafe condition to exist, or who refuses or neglects to perform in a manner consistent with the safety statutes and our safety policy. As a means to enhance safe working conditions and practices on our projects, and to prevent accidents from happening, safety inspections shall be conducted at all Cannington Construction Limited work sites regularly. These regular safety inspections shall be conducted in accordance to legislation, internal procedures and industry safe job practices.

TRADE SUPERVISORS

Each Sub - Contractors' Supervisor shall be responsible for conducting continuous daily monitoring of their operations to ensure they are aware of the probable sources of potential injury or loss due to unsafe acts or conditions. Documented Inspections must be performed weekly by any and all Supervisors on site (GC or Sub-trades) as stated in the OHSA.

FREQUENCY OF SAFETY INSPECTIONS

Cannington Construction Limited Project Supervisor shall conduct weekly safety inspections and document those inspections using the CCL form "WORKPLACE INSPECTION CHECKLIST". More frequently – if necessary. Project H & S Representative – at least 1 time per month in documented CCL form "WORKPLACE INSPECTION CHECKLIST". Cannington Construction Limited Third Party Safety Consultant – random (frequency TBD per project) – in report form of their choice.

SAFETY INSPECTION REPORTS

The Supervisor shall initiate the completion of any of these forms, by signing them and supporting its implementation by other members of management.

INJURY RESPONSE

FIRST AID SUPPLY REQUIREMENTS

Every **Cannington Construction Limited** project must possess the proper first aid kit and supplies. The required contents of the kit are defined by FIRST AID REGULATIONS (1101) of the WORKERS SAFETY & INSURANCE BOARD, according to the size of the workforce at the particular project. Also defined is the size and contents of the room designated at the First Aid Station. Stretchers, cots, running water, sterilized instruments and the qualifications of the person in charge of such a facility, may be required, as dictated by the WSIB FIRST AID REGULATIONS, in accordance to the size of the workforce on site and the proximity to the nearest medical facility. In all cases, the employer must post a form 82 - " IN ALL CASES OF INJURY ", in accordance to the WSIB First Aid Regulations 1101, which is available from the WORKERS SAFETY & INSURANCE BOARD, on every construction project and its first aid stations. This form outlines the responsibilities and obligations of both the worker and employer, when an injury occurs at the work site.

FIRST AID RECORD

Whenever first aid is administered on the work site, a record must be made using the First Aid Record form. The record must indicate the name of the worker, the nature of the injury, date/time of occurrence, date/time injury was reported, date/time of treatment, nature of treatment rendered and the name of the person rendering the treatment. This is a confidential document and must be treated as such. A completed First Aid Record should be forwarded to **Cannington Construction Limited** Health and Safety Rep or office management for record and filing. By law it must remain filed for one year.

FIRST AID CERTIFICATION

It is **Cannington Construction Limited** policy that each project supervisor or his competent replacement possesses first aid training and certification. Where the Project supervisor or his competent replacement does not possess this certification or where the certification has expired, the Project supervisor or his competent replacement shall be responsible to ensure that one or more qualified first aid attendants (workers) are employed at the work site. Unless otherwise instructed, each Sub-Contracting company shall provide their own first aid equipment and trained first aid attendants (workers) as per the WSIB First Aid Regulations, which require all employers to provide first aid coverage.

INJURY RESPONSE PROCEDURES

INJURIES REQUIRING FIRST AID ONLY

- Have the designated first aid attendant treat the injured person and record the particulars using the First Aid Record form.
- Inform the injured person to notify his foreman or head office immediately if, due to complications, he visits his/her doctor
- If the worker visits the hospital or a doctor, they are required to provide a doctor's note saying they are fit for work or if they are not, the WSIB forms need to be completed by the medical practitioner.
- The top copy of this form should be returned to the employer by the injured worker on the next day.

INJURIES REQUIRING MEDICAL AID

- Provide immediate first aid treatment and arrange of the transportation of the injured worker to a medical facility.
- Escort the injured person to a medical facility.
- Have the injured person sign the treatment memorandum and give it to the doctor to fill out.
- Preserve the accident scene of an accident investigation.
- Phone senior management and report the circumstances.
- The supervisor must investigate the accident and report in writing to the senior management. The senior management may however, elect to follow-up with a professional investigation. The initial investigation should be completed within 24 hours. (Twenty-four)
- Follow-up attention on the injured person's progress, the WSIB claim status and rapid re-employment (modified duties) should be performed.

THEREFORE, ANY FIRST AID TREATMENT WHICH BECOMES A MEDICAL SITUATION MUST BE REPORTED BY THE INJURED WORKER TO HIS FOREMAN OR HEAD OFFICE IMMEDIATELY SO THE PROPER WSIB FORMS CAN BE PROCESSED.

CRITICAL INJURIES DEFINED

"CRITICAL INJURY" MEANS AN INJURY OF A SERIOUS NATURE THAT:

1. Places Life in Jeopardy.
2. Produces unconsciousness.
3. Results in substantial loss of blood.
4. Involves the amputation of the leg, arm, hand or foot but not a finger or a toe.
5. Involves the fracture of the leg, arm, hand, or foot but not a finger or a toe.
6. Consists of burns to major portions of the body.
7. Causes loss of sight in an eye.

NOTE: ANY TIME AN INJURED WORKER IS TAKEN BY OUTSIDE EMERGENCY SERVICES, WE WILL ASSUME THE INJURY TO BE CRITICAL IN NATURE.

PRESERVATION OF THE ACCIDENT SCENE

Where a person is killed or critically injured at the workplace, no person shall, except the First Aider, interfere with:

- Saving life or relieving human suffering;
- Maintaining an essential public service or a public transportation system
- Preventing unnecessary damage to equipment or other property

DO NOT INTERFERE WITH, DISTURB, DESTROY, ALTER OR CARRY AWAY ANY WRECKAGE, ARTICLE OR THING AT THE SCENE OF OR CONNECTED WITH THE OCCURRENCE UNTIL PERMISSION TO DO SO HAS BEEN GIVEN BY AN INSPECTOR OF THE MINISTRY OF LABOUR.

REPORTING A CRITICAL INJURY TO THE AUTHORITIES

MANAGEMENT RESPONSIBILITIES

Where a person is killed or critically injured from any cause at a workplace, the constructor if any, and the employer shall notify an inspector from the MINISTRY OF LABOUR, in addition to the safety committee, health and safety representative and trade union, if any, immediately of the occurrence by telephone, telegram, or other direct means and the employer shall within 48 hours after the occurrence, send to the director (MINISTRY OF LABOUR), a written report of the circumstances of the occurrence containing such information and particulars as the regulations may prescribe.

a) Accident Notices and Reports under Sections 51-53 of the Act

b) A written report under subsection 51 (1) of the Act respecting an occurrence in which a person is killed or critically injured shall set out,

c) the name and address of the constructor and the employer, if the person involved is a worker;

d) the nature and the circumstances of the occurrence and the bodily injury sustained by the person;

e) a description of the machinery or equipment involved;

f) the time and place of the occurrence;

g) the name and address of the person involved;

h) the names and addresses of all witnesses to the occurrence;

i) the name and address of the any legally qualified medical practitioner by whom the person was or is being attended for the injury; and

j) the steps taken to prevent a recurrence. O. Reg. 213/91, s. 8; O. Reg. 145/00, s. 6.

A notice under subsection 52 (1) of the Act respecting an occurrence involving a worker shall set out,

a) the name, address and type of business of the employer;

b) the nature and the circumstances of the occurrence and the bodily injury or illness sustained by the worker;

c) a description of the machinery or equipment involved;

d) the time and place of the occurrence;

e) the name and address of the worker involved;

f) the names and addresses of all witnesses to the occurrence;

g) the name and address of any legally qualified medical practitioner by whom the worker was or is being attended for the injury or illness;

h) the name and address of each medical facility, if any, where the worker was or is being attended for the injury or illness; and

i) the steps taken to prevent a recurrence. O. Reg. 213/91, s. 9 (1); O. Reg. 145/00, s. 7 (1).

A notice under subsection 52 (2) of the Act (information and particulars respecting a worker's occupational illness) shall contain the following information:

1. The employer's name, address and type of business.
2. The nature of the illness.
3. The worker's name and address.
4. The name and address of any legally qualified medical practitioner by whom the worker was or is being attended for the illness.
5. The name and address of each medical facility, if any, where the worker was or is being attended for the illness.
6. A description of the steps taken to prevent a recurrence. O. Reg. 145/00, s. 7 (2).

An employer shall keep in the employer's permanent records a record of any accident, explosion or fire involving a worker that causes injury requiring medical attention but does not disable the worker from performing his or her usual work. O. Reg. 213/91, s. 10 (1).

The record shall include:

1. the nature and circumstances of the occurrence and the injury sustained by the worker;
2. the time and place of the occurrence;
3. the name and address of the injured worker; and
4. the steps taken to prevent a recurrence. O. Reg. 213/91, s. 10 (2).

An employer to whom subsection (1) applies shall make the record available to an inspector upon request. O. Reg. 213/91, s. 10 (3).

The following incidents are prescribed for the purpose of section 53 of the Act:

1. A worker falling a vertical distance of three meters or more.
2. A worker falling and having the fall arrested by a fall arrest system other than a fall restricting system.
3. A worker becoming unconscious for any reason.
4. Accidental contact by a worker or by a worker's tool or equipment with energized electrical equipment, installations or conductors.
5. Accidental contact by a crane, similar hoisting device, backhoe, power shovel or other vehicle or equipment or its load with an energized electrical conductor rated at more than 750 volts.
6. Structural failure of all or part of falsework designed by, or required by this Regulation to be designed by, a professional engineer.
7. Structural failure of a principal supporting member, including a column, beam, wall or truss, of a structure.
8. Failure of all or part of the structural supports of a scaffold.
9. Structural failure of all or part of an earth- or water-retaining structure, including a failure of the temporary or permanent supports for a shaft, tunnel, caisson, cofferdam or trench.
10. Failure of a wall of an excavation or of similar earthwork with respect to which a professional engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it.
11. Overturning or the structural failure of all or part of a crane or similar hoisting device. O. Reg. 213/91, s. 11 (1); O. Reg. 85/04, s. 3; O. Reg. 627/05, s. 1.

A notice under section 53 of the Act shall set out the circumstances of the occurrence and the steps taken to prevent a recurrence. O. Reg. 213/91, s. 11 (2).

This section applies with respect to an occurrence for which a report under subsection 51 (1) of the Act or a notice under section 52 or 53 of the Act is given, if the occurrence involves a failure of all or part of,

a) temporary or permanent works;
b) a structure;

c) an excavation wall or similar earthwork for which a professional engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it; or
d) a crane or similar hoisting device. O. Reg. 213/91, s. 12 (1).

A constructor or employer who submits a report under subsection 51 (1) of the Act (notice of death or injury) or gives a notice under section 52 or 53 of the Act (notice of accident, etc.) shall also provide, within 14 days after the occurrence, a professional engineer's written opinion stating the cause of the occurrence. O. Reg. 145/00, s. 8.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM W.H.M.I.S

The Canada-wide Workplace Hazardous Materials Information System (WHMIS) is designed to ensure that all workers have access to information about Hazardous Materials used, stored, handled or disposed of in the Workplace. In order to meet the requirements of the (WHMIS) regulations, Cannington Construction Limited requires all employees, including all Sub-contractors, to be WHMIS trained, both fundamentally and specifically of the hazardous materials being used on our sites. No controlled materials shall be handled, stored, used or disposed of on our sites unless the proper labeling and Material Safety Data Sheets of such materials are on site and made readily available to the workers. On an annual basis, Cannington Construction Limited shall re-assess the WHMIS training needs of their employees and retrain if necessary.

The WHMIS System requires that all persons exposed to, likely to be exposed to or in close proximity to, hazardous materials classified as "controlled products" under WHMIS, - receive instruction and training to protect their health and safety. The three main elements to this education delivery shall consist of:

1. SDS: Safety Data Sheets - Workers to be made aware of the detailed information contained in these sheets.

2. Labels: Workers must be able to read and understand the contents of supplier and workplace container labels.

3. Education - Specific training in the use, handling, storage and disposal of WHMIS controlled products must be provided to the workers of their protection. All training whether generic or specific, should be arranged in consultation with the Joint Health and Safety Committee.

All Cannington Construction Limited project supervisors or their competent replacement shall implement the following WHMIS Compliance Plan for our projects to ensure trade Contractor supervisory and employee personnel remain compliant to Ontario's WHMIS Regulations. No worker shall be allowed to be present on our projects unless Generic WHMIS Training has been provided to every worker.

WHMIS COMPLIANCE PLAN

[WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM]

1. All workers entering the project shall carry proof of WHMIS Training.

2. All sub - contractors shall provide un-expired Material Safety Data Sheets for all WHMIS controlled products to be brought on site, to Cannington Construction Limited project supervisor or his competent replacement, before these controlled products are stored or used on the project.

3. All sub - contractors shall ensure WHMIS controlled products have their required supplier and workplace labels affixed to the outer containers.

4. All sub – contractor supervisors are to provide site-specific instruction to their workers on the storage, handling, use and disposal of any WHMIS controlled products brought on site. Cannington Construction Limited project supervisor or his competent replacement will require each sub - contractors to provide written evidence, workers have received generic and site specific instruction for their worker's safety.

5. Cannington Construction Limited project supervisor or his competent replacement will post all M.S.D.S. documents in a conspicuous area to allow unrestricted access and review to all workers on the project.

6. All sub-contractors are to use the designated storage areas provided to them by the Constructor. Any WHMIS controlled products not in use shall be kept under storage. Appropriate fire extinguisher equipment shall be provided near these storage areas.

7. Cannington Construction Limited project supervisor or his competent replacement, in consultation with the Joint Health and Safety Committee for the project, shall periodically review the suitability of the WHMIS training and practices in place by the sub-contractor on site, keeping in mind that the results of such training and instruction provided, must enable the workers to use the information in a performance based manner to protect their health and safety.

8. All sub-contractors shall have written procedures to be followed by their workers, where fugitive emissions from a controlled product, poses a risk to the worker's health and safety.

9. All sub-contractors shall also have written procedures to be followed by their workers in case of an emergency involving a controlled product.

10. Failure to follow safe work procedures in the use, storage, handling or disposal of a controlled product by a sub-contractor's employee will cause disciplinary measures to be taken against the worker and supervisor of the sub-contractor.

W.H.M.I.S. HAZARD CLASSIFICATION - CHART

All suppliers of W.H.M.I.S. controlled materials must classify their hazardous products into one of the following hazard classification symbols:

WHMIS 2015 Pictograms			
	This pictogram is used for indicating flammable gases, aerosols, liquids and solids; pyrophoric liquids, gases and solids; self-heating substances and mixtures; substances and mixtures that produce flammable gases when in contact with water; organic peroxides; and self-reactive substances and mixtures.		For hazardous products that can cause death or acute toxicity after exposure to small amounts of the products, this Pictogram is used to warn users of the potential dangers. It is placed on labels of materials with acute oral, dermal and inhalation toxicity. For instance, the pictogram can be used on containers for cleaning chemicals
	The pictogram is flame over a circle plus a distinctive red "diamond" shaped border. It is used to indicate oxidizing gases, liquids and solids.		This Pictogram is used to indicate a product that causes or is suspected of causing serious health effects. It forms part of labels of products that cause respiratory sensitivity, skin toxicity, germ cell mutagenicity, carcinogenicity, reproductive toxicity, aspiration hazard, specific target organ toxicity after single exposure, and specific target organ toxicity after repeated exposure.
	This pictogram is used to indicate the hazard of gases under pressure such as dissolved gas, liquefied gas, compressed gas and refrigerated liquefied gas.		Used for hazardous products that cause less serious health effects, the Exclamation Mark Pictogram indicates acute toxicity (oral, dermal or inhalation), skin corrosion (irritation), eye irritation, skin sensitivity, respiratory damage, and specific target organ toxicity on single exposure.
	The corrosive pictogram indicates a substance that can irritate the skin and eyes, and damage metals. It is used for hazardous products that are corrosive to metals, cause skin irritation (corrosion), and cause serious eye irritation or damage.		Indicates the presence of organisms or toxins that can cause diseases in humans and animals, The Biohazardous Infectious Materials pictogram has been retained from WHMIS 1988. The pictogram is used on labels of biohazardous infectious materials. For instance, it is used on growths of micro-organisms like E. coli or salmonella bacteria cultures.
	Used to indicate explosion or reactivity hazards, the Exploding Bomb Pictogram is placed on the labels of self-reactive substances and mixtures, and on labels of organic peroxides.		This GHS pictogram has not been integrated into WHMIS, however it stands for Environmental Hazards.

One or more of these hazard classification symbols will appear on the W.H.M.I.S. supplier label of a W.H.M.I.S. controlled product.

BILL – 168 WORKPLACE VIOLENCE AND HARASSMENT

Cannington Construction Limited is concerned about minimizing the danger of violence in the workplace. Violence in a workplace can result in injury, emotional upset, lower productivity and morale, and lost work time. Although there may be a perception that workplace violence occurs mainly outside the office environment, this is not the case. Therefore, this is a relevant issue for all workplaces. To combat workplace violence, **Cannington Construction Limited** are legally required to address workplace violence by implementing training, policies and procedures. These requirements come under the Occupational Health and Safety Act and has come into effect June 2010. Workplace Violence is specifically addressed in Part III.0.1 – Violence and Harassment of the OH&S Act. The requirements include an assessment of the workplace for potential violence, training on workplace violence, and a response plan for workplace violence.

Assessing the Workplace

Cannington Construction Limited is required to assess our workplace for existing or potential violence. We must prepare a report with the results of the assessment and a plan to address potential areas of concern. In carrying out the assessment, we should consider the nature of our work, the types of employees and clients that we work with, our work processes, and our physical environment. **Cannington Construction Limited** will involve workers in this process. The report and plan will be in writing and available to workers.

Cannington Construction Limited will cover the following points:

- a right to assistance for any person subjected to violence
- steps prior to formal reporting
- formal reporting
- no prejudicial treatment for making a complaint
- investigation
- disposition of a complaint
- confidentiality
- evaluation of the procedures
- complaint resolution alternatives

Workplace Training

Cannington Construction Limited is responsible for ensuring that our policies and procedures concerning workplace violence are understood. Training will include the following components:

- an explanation of the policy and procedures;
- a definition of workplace violence;
- how workplace violence can be prevented or minimized;
- our expectations for behavior in the workplace;
- how to respond to incidents of violence;
- how to obtain assistance; and
- how the reporting, investigating and documenting of workplace incidents will be done.

Response Plan

If there is an occurrence of workplace violence, including an incident that has the potential of causing serious injury to a worker, Cannington Construction Limited will respond by carrying out a number of steps. These steps include:

- conducting an investigation
- preparing a report that includes actions to prevent a recurrence
- keeping the report on file for two years
- ensuring the report is available for inspection by an Occupational Health and Safety Officer and workers affected by the incident.

Victims of workplace violence often require support and reassurance. If a worker is exposed to or experiences an incident of workplace violence, they should be debriefed. One of the purposes of the debriefing should be to ensure the worker understands they are not to blame for the aggressive behaviours directed at them. Cannington Construction Limited will ensure that workers are advised to consult a health professional of the worker's choice for treatment or referral.

CREW SAFETY TALKS

It is expected that supervisors shall conduct periodic safety talks with their crews and address the safety concerns brought forward. These crew safety talks shall be recorded, and copies of these minutes shall be forwarded to head office for filling. The frequency of these required crew safety talks shall be established by a collaborative decision from the project manager and project supervisor or his competent replacement.

NEW HIRE PROCESS - PROBATION

Cannington Construction Limited wants to ensure that all newly hired employees are prepared, educated and trained with regards to safety when working in the Construction industry. Most times new employees are unaware of the dangers within the construction industry, it is our duty to ensure the hazards are communicated and understood.

All New Hires will have a written contract when starting with Cannington Construction Limited outlining; Start date, Compensation, Benefits, Vacation, and probationary period. Training needs and safety orientation will be addressed using a form called New Employee Safety Checklist.

Training requirements specific to their position will be listed in the Job description provided to the new employee along with their H&S Policy Handbook.

Probation periods will vary depending on the position, feedback from supervisors and successful completion of the Petroleum Mechanic Helper training. Petroleum Mechanic Helper (PMH) is a mandatory requirement for labourers working in the petroleum industry. Permanent employment is dependant on passing the PMH exam with a minimum grade of 75%.

ANNUAL SAFETY TRAINING REVIEW – ALL EMPLOYEES/SUPERVISORS

Management is responsible to conduct annual review of all employees with regards to safety training. Where refresher training is required on annual basis such as WHMIS/GHS and POST, all workers must be notified by the Safety Coordinator and course scheduled for attendance. It is also responsibility of individual employees to inform their Supervisor or Safety Coordinator of required training expiry dates.

HEALTH AND SAFETY TRAINING

SAFETY ORIENTATION FOR SUB - CONTRACTORS

It is Cannington Construction Limited policy that each sub - contractor ensures its workers engaged on our projects, are aware of:

- Their obligations under the Occupational Health and Safety Act.
- Specific hazards to the site and of the work.
- Cannington Construction Limited safety policies and procedures.

It is Cannington Construction Limited policy during pre-award negotiations with any sub - contractor, that the sub - contractor be made aware of and become contractually bound to Cannington Construction Limited Health & Safety Policy. This process fosters the desired attitudes and reinforces Cannington Construction Limited commitment to a safe work environment. The project supervisor or his competent replacement in collaboration with the Project Manager shall ensure that all employees, direct or sub-contractual, are orientated to our safety policy and program. Personal protective skills in the proper use of safety equipment and in construction hazards recognition, specific to the project should be communicated to all employees before commencement of work.

Safety orientation for employees and new workers

It is Cannington Construction Limited policy that each employee and new worker receives safety orientation to our company policies and procedures prior to commencement of the work. The orientation shall also establish any further training that workers may need prior to carrying out their assignments.

SAFETY TRAINING TOPICS

Cannington Construction Limited objective is to deliver health and safety related training to everyone in the organization, including supervisory and management staff. Some of the safety related training courses available are:

- First Aid and Fire Safety
- Health & Safety Representative Certification Training
- WHMIS/GHS – Workplace Hazardous materials Information System Training
- Occupational Health & Safety Act & Regulations for Construction Projects Training
- Site Safety Orientation & Hazard Recognition
- Accident Investigation & Reporting Procedures
- Supervisors Safety Awareness in 5 Steps

- Workers Safety Awareness in 4 Steps
- Petroleum Mechanic Helper Certification Training
- Working at Heights
- Personal Protective Equipment
- Traffic Control & Signaler Training
- Violence and harassment (Bill 168)
- POST – Petroleum Oriented Safety Training
- Confined Space
- Trenching and Excavating
- Heavy Equipment
- Oil Burner Technician
- Distracted Driving

Additional training will be provided as needed (hazard or legislation specific)

IDENTIFYING & CONTROLLING HAZARDS

METHODS OF IDENTIFYING AND CONTROLLING HAZARDS

Supervisor must have job hazard analysis methods in place to identify and control hazards in his/her work locations. These methods include safety and health audits for unsafe conditions and unsafe behaviors and job safety analysis. The purpose of workplace analysis is to recognize existing and potential hazards, identify employees at risk, and to establish control measures. Workplace analysis is a continuous process to recognize, identify, and control workplace hazards. The frequency of analysis activities depends on site specific circumstances and the nature of occupational hazards present in each work environment.

TYPES OF INSPECTIONS / AUDITS

Weekly Inspections – by the supervisor

Monthly Inspections – by the Health & Safety Representative

Intermittent Inspections – by third party safety consultants or client

Annual COR Audit - Internal COR Auditor

Special Inspections – by supervisor and management. Necessary when new equipment or process is introduced.

Work Procedures or Practices – Continuous observation of tasks to ensure they are done in the safest manner possible. A major weakness in most safety programs is the lack of observation of unsafe work practices.

HAZARD CONTROL METHODS

Once hazards are identified, they must be controlled and or eliminated using hazard controls. Exposure to hazards should be prevented or controlled by using engineering controls wherever feasible and appropriate. When engineering controls are not feasible or appropriate, administrative controls, work practice controls and personal protective equipment must be used.

ENGINEERING CONTROLS

Engineering controls, if feasible, should be the first consideration for injury prevention. The purpose of an engineering control is to eliminate and or reduce hazards through job re-design. Many engineering controls increase productivity in addition to making the job easier. A few common examples of engineering controls include:

- Machine guarding to prevent contact with dangerous machine parts.
- Ergonomic design controls to eliminate bending and lifting from repetitive job tasks.
- Material handling equipment to eliminate manual handling of awkward or heavy materials.
- Covering loud equipment with sound dampening material to reduce noise levels at the source.

ADMINISTRATIVE CONTROLS

Administrative controls are management-dictated policies to reduce exposures to hazards and are the second line of defense against hazards. Common examples include:

- Scheduling more frequent, shorter rest breaks for repetitive tasks.
- Rotating workers more frequently through physically tiring jobs.
- Broadening or varying work tasks to offset ergonomic risk factors.
- Rotating workers more frequently to reduce exposure time to noise.

WORK PROCEDURES AND PRACTICE CONTROLS

Work procedures and practice controls reduce the likelihood of exposure to occupational hazards by altering the manner in which a task is performed. An example of work practice control includes hand washing immediately after wearing latex gloves or handling chemicals. Each supervisor must have written work practice controls specific to the job tasks performed by employees.

PERSONAL PROTECTIVE EQUIPMENT

Management enforcement and training on proper use of Personal Protective Equipment (PPE) is extremely important. When selecting PPE, CSA (Canadian Standard Association) standards are used as acceptable performance guidelines. Personal protective equipment must be provided in the appropriate size and fit. Employees and trade contractors are responsible to make sure that the equipment is properly maintained, cleaned and replaced when defective or worn out.

Examples of PPE include:

- protective headwear
- protective footwear
- safety glasses
- face shields
- respiratory protection
- aprons or gowns
- gloves and rubber boots
- hearing protection
- clothing
- fall prevention and protection equipment and devices
- reflective tear away vests

LIST OF CRITICAL TASKS

Each industry has their own Risks and Hazards that are more critical than others. Below are the Critical tasks associated with the Petroleum Construction Industry. Each of these have additional considerations to be taken and checklists to help mitigate added danger.

Cannington Construction Limited List of Critical Tasks are as follows:

- Work at heights above 1.8 m (includes excavations) / Fall Protection
- Confined Space Entry / Tankfield Sump Entry
- Lock-Out Tag-Out (LOTO)
- Hot work
- Heavy Equipment Lifting
- Vacuum Truck
- Deep Excavation

SITE PROTECTION

PROJECT SAFETY INSPECTIONS POLICY

It is Cannington Construction Limited policy to perform work in the safest possible way, consistent with good construction practice. The Health and Safety of all members of the construction team, the general public and associated properties are the responsibility of all supervisory personnel. To ensure the safest possible conditions exist on our projects, all personnel associated to the construction team must under-stand and strictly adhere to Cannington Construction Limited health and safety policy procedures, the Occupational Health and Safety Act, and provincial / municipal regulations of construction projects.

Cannington Construction Limited reserves the right to remove anyone who causes an unsafe condition to exist, or who refuses or neglects to perform in a manner consistent with the safety statutes and our safety policy. As a means to enhance safe working conditions and practices on our projects, and to prevent accidents from happening, safety inspections shall be conducted at all Cannington Construction Limited work sites regularly. These regular safety inspections shall be conducted in accordance to legislation, internal procedures and industry safe job practices.

TRADE SUPERVISORS

Each Sub - Contractors' Supervisor shall be responsible for conducting continuous daily monitoring of their operations to ensure they are aware of the probable sources of potential injury or loss due to unsafe acts or conditions. Documented Inspections must be performed weekly by any and all Supervisors on site (GC or Sub-trades) as stated in the OHSA.

Planning:

Sub - Contractors as well as Cannington Construction Limited Supervisor shall extensively plan the procedures to be followed for each operation. Personnel chosen to perform any such planned operation shall be thoroughly trained in all aspects of the procedure, including emergency actions, to be taken in the event of a mishap.

Safety Report Forms:

The Supervisor shall initiate the completion of any of these forms, by signing them and supporting its implementation by other members of management.

Site Protection, Security, Access Control, Public/Visitors Safety & Safety of Client's Staff/Employees during Cannington Construction Limited activities on the project:

- It is the responsibility of the Cannington Construction Limited and all parties contracted to perform work on our Client's Facilities/Property to provide protection to public, visitors and Client's Staff/employees.
- Separation from public way shall be achieved by installation of 1.8 m high sturdy fencing, barriers, barricades, delineators or combination of two or more devices.
- Where hazard from overhead work exists, covered way capable of resisting forces applied shall be installed and sign(s) posted "DANGER – due to overhead hazard".
- Where not practical to install permanent or temporary physical separation and overhead protection spotter or spotters shall be present in location as long as hazard exists to prevent anyone who is not directly engaged with a task from entering the area.
- Where hazard from open excavation or trench exists sign(s) must be posted "DANGER – due to excavation/trench)".
- Barrier shall be installed as soon as practical on the top of the excavation wall where depth of excavation/trench exceeds 2.4 m (8 feet).
- In addition to physical barriers or spotters, warning signs must be posted in sufficient numbers and facing the reader to warn of a specific hazard
- All visitors, public or Client's staff/employees must be safely escorted by competent person assigned by Cannington Construction Limited supervisor in charge of that area of the project whenever construction activities obstruct designated route ways, sidewalks, crosswalks etc.
- All construction operations must be conducted in the manner that is not obstructing or delaying activities of the public way, public traffic or Client's activities and those persons associated with Client's activities.

Client Employee's safety and property protection during construction activity:

Where the Client's Representative requests the separation of construction activities and Client's personnel/property, Cannington Construction Limited will be required to execute any or combination of following physical requirements when separating construction activities from Client's personnel/property.

NOTE: If type of protection chosen by construction Management and Personnel provides minimum, limited or sub-standard protection, Client's Project Manager/Representative reserves the right to stop any progressive work until adequate protection provided.

Barrier Separation

- A sturdy barrier, at least 36 – 42" (inches) high must be installed around the perimeter of the areas to be divided or where required by the hazard, hoarding, 8 feet or greater, must be installed around the perimeter of the hazardous area; e.g., an open pit.
- All separating or hoarding devices must be installed to prevent its failure due to inadequate installation or lack of structural integrity.
- All separating or hoarding devices must be removed once task is completed and hazard no longer exists.

Signage

Signs must have black lettering, at least 150 mm in height, on a red background and must be located every 20 metres, looking onto the construction area and installed as follows:

- attached to the top of the sturdy barrier
- attached directly to the hoarding
- attached to all access/egress points

The sign is required to state:

"DANGER DUE TO CONSTRUCTION - AUTHORIZED PERSONNEL ONLY"

Signaler

- Where not practical to install physical separation (short duration of the task) a signaler may be used as the alternative method of ensuring safety.
- Signaler must be competent person and equipped with all required personal protective equipment including reflective vest.
- Signaler cannot leave his post without adequate replacement and must be identified as a signaler on his hard hat.
- Signaler is prohibited from destructions such as talking to other workers in the area or Client's employees other than brief conversations regarding specific safety instructions related to that area.

SECURITY REQUIREMENTS

Where Client requests that in-house security procedures be implemented to Sub - Contractors during construction activity our management will ensure the following:

- The Cannington Construction Limited will supply a Daily Pass Registration for employees who have had Safety Orientation. Anyone wishing to access the site must be listed on the Daily Pass Registration.
- All persons engaged with the project must receive and wear identification badges upon completion of Safety Orientation Program. The identification badge is to be visible at all times while on site.
- Once task is completed on the project, the worker is to return their I.D. badge immediately. The Cannington Construction Limited Supervisor is responsible for keeping a log book of the I.D. badges and ensuring their return.
- Identification badges are the property of Cannington Construction Limited and shall be surrendered upon request.

- Access and egress from the site will be through gates designated by our Client.
- All vehicles must have a Cannington Construction Limited Vehicle Pass to park inside of the perimeter fence. Vehicles are permitted to park in designated areas only.
- Heavy duty trucks such as concrete trucks, dump trucks, and tractor trailer trucks are subject to all Site Security Procedures.
- Driver/passengers making deliveries must have proper personal protective equipment when exiting the vehicle which includes hard hats, safety boots, safety glasses and traffic vests.
- Vehicles must stop at the Gate prior to entering and exiting the site area to be recorded on the Security Gate Log.
- Inspection: every vehicle and person leaving the site is subject to an inspection by Supervisor or Client's Security Personnel. All lunch kits, bags, and vehicles may be checked.
- Cameras are not allowed on site unless pre-approved by Cannington Construction Limited Project Management. Camera operator might be accompanied at all times by a representative approved by Cannington Construction Limited Project Manager or site Supervisor.
- Personal ID Badges or Access cards are not to be shared or borrowed by anyone who is not authorized or is not identified as the person responsible for the card.

VISITOR PROCEDURES

- All visitors to Cannington Construction Limited projects/facilities must enter the construction office and advice the supervisor as to whom they wish to visit.
- All visitors going outside of the designated waiting area must be accompanied by a Cannington Construction Limited representative who underwent project safety orientation.
- All visitors must wear personal protective equipment outlined in the project safety orientation.
- All visitors must comply with all Cannington Construction Limited policies and procedures and those of the Constructor.

DOCUMENTING VIOLATIONS/DISCIPLINARY PROCEDURES

WARNING TO SUB-CONTRACTORS

Cannington Construction Limited requires all sub-contractors, vendors and/or suppliers of goods and services, to comply with the Occupational Health and Safety Act and its Regulations for construction projects (current edition). Sub-contractors are also required as part of Cannington Construction Limited sub-contractual agreement to comply with Cannington Construction Limited Corporate Health and Safety Policy and our client's safety policies and programs.

ANY HEALTH AND SAFETY VIOLATION OBSERVED AT THE WORK SITE IS TO BE DEALT WITH IMMEDIATELY BY THE PROJECT SUPERVISOR OR HIS COMPETENT REPLACEMENT OR HIS/HER AUTHORIZED REPRESENTATIVE, THROUGH A DOCUMENTED WRITTEN WARNING FORM.

AS A MINIMUM SUCH WRITTEN WARNINGS SHALL INCLUDE:

- project name and number
- sub-contractors, vendor responsible
- identity of sub-contractor's supervisor in charge of work and his acknowledgement
- names of individual violators if any
- an explanation of health and safety violation observed
- reasonable date and time as when the infraction will be rectified
- the signature of Cannington Construction Limited project supervisor & labor safety representative

In the event that a sub-contractor refuses or neglects to rectify a hazardous condition, practice or any violation, Cannington Construction Limited shall exercise the right to take immediate steps to correct the unsafe condition at the expense of the responsible parties. Cannington Construction Limited may also remove from the work site any individual whom continues to cause the unsafe condition to remain or performs in a manner inconsistent with the guidelines of the Occupational Health & Safety Act, its Regulations or our Safety Policy.

DISTRIBUTION OF SAFETY DIRECTIVES SHALL BE AS FOLLOWS:

- COPY TO THE SUPERVISOR IN CHARGE OF THE SUB-CONTRACT WORK
- COPY TO THE PROJECT SUPERVISOR OR HIS COMPETENT REPLACEMENT
- COPY TO SUB-CONTRACTOR'S COMPANY PRESIDENT

ACCOUNTABILITY

Employees of Cannington Construction Ltd, including sub-contractor's employees working on our sites, will be held accountable for their actions and any violation of this safety policy.

Violations to the following represent a serious level of neglect and Cannington Construction Limited project supervisor or his competent replacement has the right to exercise a "ZERO TOLERANCE" policy and have the violator(s) dismissed from the project. No further warnings are required or will be given:

- Fall protection violations
- Trenching violations
- Lock-out and tagging violations
- Confined space work violations
- Hot work violations
- Drug and Alcohol violations

A three phase disciplinary system will be exercised for all other violations to our policy rulings or the Occupational Health & Safety Act.

a) **CANNINGTON CONSTRUCTION LTD. EMPLOYEES**

1st	violation	- a recorded verbal warning
2nd	violation	- written warning
3rd	violation	- suspension, retraining or termination

b) **SUB - CONTRACTOR EMPLOYEES**

1st	violation	- a recorded verbal warning
2nd	violation	- written warning
3rd	violation	- dismissal from the project

c) **ARCHITECTS/OWNERS AND REPRESENTATIVES**

1st	violation	- a recorded verbal warning
2nd	violation	- written warning
3rd	violation	- dismissal from the project

These notices and penalties shall be enforced as written on all projects. Dismissal of an employee shall be reviewed with a party of three:

- Project Supervisor,
- Management Safety Representative
- J.H.& S. Safety Committee members and Labour Safety Representative member

THE CORPORATE SAFETY EVALUATION SYSTEM

- Measuring safety performance & compliance
- It is ongoing responsibility of Managers and Supervisors to evaluate the effectiveness of our corporate health and safety program.

EMERGENCY RESPONSE INFORMATION

WORK SITE ACCESS AND ROUTING

As soon as practical, during the on-site mobilization process, the project supervisor will develop an emergency access plan specific to the site with major access routes identified for emergency vehicles. The site drawing or plan shall contain the following minimum information and be posted in the site trailer and at each First Aid Station.

- Location of entrances and major access routes to site.
- Location of muster point
- Names of first aiders on the shift
- Location of Emergency Telephones.
- Location of First Aid Stations.
- Location of Fire Hydrants.
- Location of other fire protection equipment, (E.g. Fire Extinguishers).
- Location of Overhead Power Lines.
- Location and Street names of streets around site.

This emergency access plan shall be communicated to all Sub- Contractors;

Ambulatory route to nearest hospital

The project supervisor or his competent replacements must post an ambulatory route map indicating the nearest hospital to the project, with its most direct route.

Emergency contact numbers must accompany this posting.

WORK SITE EMERGENCY COMMUNICATIONS

Cannington Construction Limited Safety Coordinator or Project Manager, shall provide an EMERGENCY RESPONSE POSTER, to each site-specific safety plan which shall contain the following details, and shall be posted at each First Aid Station and contain:

- Telephone No. of the local Police
- Telephone No. of the local Fire Department
- Telephone No. of the local Hospital
- Telephone No. of the nearest Ministry of Labour office
- Telephone No. of the project supervisor
- Telephone No. of the project First Aider
- Location of nearest Hospital along with a Map

EMERGENCY RESPONSE PLANNING

The intent of this plan is to outline measures to be taken to prepare and respond to emergency situations that may arise on our projects. Cannington Construction Limited requires all project supervisor or his competent replacement, in collaboration with the Project Manager, to ensure that all Sub - Contractors and personnel make adequate preparation for an emergency on our projects.

DEALING WITH THE PRESS AND PUBLIC IN EMERGENCIES

The initial response to a catastrophic event on site will have a significant impact on the publicity, public relations and legal actions that follow. Giving some consideration now to your methods of dealing with an emergency will prevent the common errors made "in the heat of the moment". Barring reporters from site or offering a "No Comment" is the wrong way to handle publicity as it invites the press to write only what it hears and sees. This prevents favorable facts about prompt action, public safety and relief of distress to the injured from becoming part of the early public record.

The project's Press Liaison person for **Cannington Construction Limited** should be one designated person only (usually the project supervisor) to provide information to the press. Instruct all employees and Sub - Contractors not to provide information to the press but to direct them to the designated spokesperson [project supervisor]. This information should be provided at the time of hiring, transferring or mobilization. The designated Corporate Liaison spokesperson for which follow up and background information can be obtained from the press and authorities will be listed as one of our Supervisors shown on the Emergency Response Contacts Poster or Emergency Contact Phone list in the Safety Binder.

In every situation considered to be catastrophic, the following personnel are to be contacted through **Cannington Construction Limited** head office:

1. Steve McCrossan Mobile: (416) 414-2040 Office: (905) 841-0430

An alternate contact would be:

2. Erin Terveld Mobile: (416) 579-5204 Office: (905) 841-0430

DEFINITION

An EMERGENCY is general defined as any event causing loss of life, immediate property loss or an immediate threat to the public or workers. Specifically, an Emergency can be any of the following incidents as prescribe in section 11of the construction regulations for the purposes of Section 53 of the Act:

a) Any critical injury or death as defined by the Occupational Health & Safety act.

b) A worker falling a distance of three meters or more.

c) A worker who falls and is arrested by a fall arrest system.

d) A worker becoming unconscious for any reason.

e) Accidental contact by a worker or by a worker's tool or equipment with a live electrical conductor or live electrical equipment [fuses, switches, disconnects].

Contact by a backhoe, shovel, crane or similar lifting device or its load with an energized power line rated at more than 750 volts.

EMERGENCY DEFINITION … continued

f) Structural failure of all or part of false work designed by or required by the Act or its regulations to be designed by a professional engineer.

g) Structural failure of a principal supporting member, including a column, beam, wall or truss, of a structure.

h) Failure of all or part of the structural supports or a scaffold.

i) Structural failure of all or part of an earth or water retaining structure, including failure of the temporary or permanent supports for a shaft, tunnel, caisson, cofferdam or trench.

j) Failure of a wall of an excavation or of similar earthwork with respect to which a professional engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it.

k) Overturning or the structural failure of all or part of a crane or similar hoisting device.

PRIMARY CONSIDERATIONS

Stabilize the situation to the extent possible:

- ensure medical assistance is provided
- preserve the accident scene
- ensure no further damage occurs by:
  - cutting off power, gas, water lines, etc.
  - shore, brace, secure or stabilize area from further damage
  - isolate the area where it is not practical or safe to stabilize
  - insure the public and/or workers are protected

Restore access and services as soon as possible when permitted by the authority in charge – eg. Police, Fire Department, Ministry of Labour, Gas Company, Utility Company, Property Owner or Agent. Comply immediately with any instruction or order given by the authority in charge, eg. – Police, Fire Department, Ministry of Labour, Gas Company, Utility Company, Property Owner or Agent.

Press Liaison code of conduct

- Do not speculate
- Do not assess blame or fault
- Do not use unnecessarily inflammatory language when describing the situation – e.g. refer to it as an emergency not a disaster.
- Do provide the names and telephone number of the corporate designated spokesperson who will provide follow up and background information to the press and authorities.
- Do provide the designated corporate spokesperson with accurate information as soon as it becomes available. Names, ages, addresses, occupations, etc. of the injured parties. Also, all pertinent information relating to the actual situation – who, what, where, when, how. Include actions taken or planned.
- Retain all information relating to the emergency services attending the site. Service, name, rank, actions, follow up, etc….

EVACUATION CONTINGENCY PLAN

In a critical emergency (e.g.- uncontrollable fire), the evacuation plan will be as follows:

- Evacuate the site and office areas through the nearest exits (see site layout).
- Meet in a designated gathering zone as far from the fires, spills, or other hazard as necessary so a head count can be taken. Notify adjoining neighbors. This will be appropriately integrated with external authorities (police, fire department).
- Notify the head office immediately of the fire, spill or other hazard Cannington Construction Limited site supervisor will be responsible for activating the emergency responses appropriate to the event.

EMERGENCY RESPONSE WARNING SYSTEM AND EQUIPMENT

When an emergency arises, someone must start the emergency response process. This may be an individual on the project or someone in authority. It may be necessary to have a siren, horn or whistle signal to alert individuals that an emergency exists so that appropriate action is taken. In certain situations, Cannington Construction Limited supervisory personnel may have to consider the extra emergency equipment which may be required to assist ambulatory response personnel in evacuating the injured from difficult to access areas. Such equipment may consist of:

- basket stretchers equipped with four-way spreaders for removal from pits.
- approved rescue containers to raise/lower personnel via crane.

HAZARDOUS SPILLS CONTINGENCY PLAN

In the event of a hazardous spill, the following contacts should be made:

SPILLS CO-ORDINATOR: Project Manager(s) Mobile: Steve McCrossan – (416) 414-2040
Shawn Strain – (416) 562-0215
Joe Lovrics – (647) 294-5209

1. Ensure no danger to personnel - Evacuate then from the spill scene.
2. Assess the situation and notify the site spills coordinator.
3. The spills coordinator shall notify his senior management.
4. The site spills coordinator shall assess the situation and call the Spills Action Centre and provide notification and any other related information they request.

SPILLS ACTION CENTER EMERGENCY PHONE NUMBER: 1-800-268-6060

5. The spills coordinator shall begin organizing the containment and removal of the hazardous spill through the assistance of the local authorities and the Spills Action Centre Duty Officer.
6. The spill action coordinator shall contact and notify the owner of the property.
7. Clean-up efforts shall be dictated by the requirements set out by the Federal, Provincial and / or Municipal authorities.

Note: Spill Kit Requirements

For small to medium size spills our construction offices will be equipped with:

- 30 Gallon Lever Lock Kits with UN marking 1H2/X100/S to assist with compliance to HAZWOOPER Regulation 29 CFR 1919.120 (j) (1) (vii)

Contents:

- 25 pads – 16" x 20"
- 4 blue socks – 3" x 10'
- 4 Pillows – 18" x 18"
- 5 disposal bags
- 1 pair Nitrile Gloves
- 1 pair of Goggles
- Instruction sheet

EMERGENCY RESPONSE PROCEDURE – CONFINED SPACE

Competent Person shall maintain a written plan of action that has provisions for conducting a timely rescue of individuals within a confined space, should an emergency arise. The written plan shall be kept onsite where the confined space work is being conducted. All affected personnel shall be trained on the Emergency Response Plan.

RETRIEVAL SYSTEMS AND METHODS OF NON – ENTRY RESCUE

Retrieval systems shall be available and ready when an authorized person enters a permit space, unless such equipment increases the overall risk of entry, or the equipment would not contribute to the rescue of the entrant. Retrieval systems shall have a chest or full-body harness and a retrieval line attached at the center of the back near shoulder level or above the head. If harnesses are not feasible, or would create a greater hazard, wristlets may be used in lieu of the harness. The retrieval line shall be firmly fastened outside the space so that rescue can begin as soon as anyone is aware that retrieval is necessary. A mechanical device shall be available to retrieve personnel from vertical confined spaces more than five (5) feet deep.

EMERGENCY RESCUE

Prior to starting the work on any project, it is responsibility of crew supervisor to ask project supervisor if there is emergency rescue procedure in place and that all workers are made familiar with this procedure. In the case of no existing procedure by constructor, crew supervisor must inform Cannington Construction Limited Head Office immediately so that site specific procedures could be developed to protect health and safety of the workers in the event of emergency rescue.

EMERGENCY RESPONSE PROCEDURES FOR CRITICAL INJURIES OR FATALITIES

- Assess the situation calmly and take command.
- Protect the accident scene from further hazards, such as fire, live wires, traffic, operating machinery etc.
- Provide first aid to the injured, if any, as soon as possible and keep the injured party warm

- Arrange for immediate medical help: Call the Ambulance at 911, Call the Police at 911
- Call the corporate head office to advise senior management so they can immediately contact the Ministry of Labour and notify the injured person(s)' relatives.
- Notify the safety representative/safety committee and local union office (if applicable)
- Have someone meet and direct the ambulance to the accident scene
- For follow-up purposed, find out which hospital the injured will be taken to and to have someone there.
- Isolate the accident scene by barricades, rope, caution tape, etc. and post a guard to make sure nothing is tampered with until the authorities have arrived on the scene and all investigations are completed.
- Co-operate fully with all emergency response crews and Ministry of Labour Personnel

NOTE:

ONCE THE INJURED HAVE BEEN EFFECTIVELY LOOKED AFTER AND THE AUTHORITIES INFORMED, THE SITE SUPERVISOR AND HIS/HER ASSISTANTS SHOULD BEGIN THEIR OWN INVESTIGATION AND OBTAIN WITNESS STATEMENTS WITHOUT DISTURBING THE ACCIDENT SCENE AND THE MINISTRY OF LABOUR'S OWN INVESTIGATION.

NOTIFICATION PROCEDURES

A) FATALITY/CRITICAL INJURIES:

When an accident occurs and results in the critical injury or death of a worker, the following contacts must be notified immediately:

1. Cannington Construction Limited Supervisor or Competent Replacement
2. Cannington Construction Limited Project Manager
3. Cannington Construction Limited Health and Safety Representative
4. Cannington Construction Limited President
5. The nearest MOL office
6. The direct employer of injured employee
7. Cannington Construction Limited Safety Consultant

B) MEDICAL AND LOST TIME INJURIES:

When an accident occurs and results in an injury requiring medical aid to a worker, the following contacts should be notified:

1. Cannington Construction Limited Supervisor or Competent Replacement
2. Cannington Construction Limited Project Manager
3. Cannington Construction Limited Health and Safety Representative
4. Cannington Construction Limited President
5. The nearest MOL office
6. The direct employer of injured employee
7. Cannington Construction Limited Safety Consultant

C) FIRST AID INJURIES:

For minor injuries requiring First Aid, the following contacts should be notified:

1. Cannington Construction Limited Supervisor or Competent Replacement
2. Cannington Construction Limited Health and Safety Representative
3. The Supervisor of Injured Worker
4. The Employer of Injured Worker
5. Cannington Construction Limited Safety Consultant

D) NEAR MISS INCIDENTS WITH INJURY POTENTIAL or PROPERTY DAMAGE POTENTIAL:

1. The Supervisor of Worker involved in Near miss
2. The Employer of Worker involved in Near miss
3. Cannington Construction Limited Health and Safety Representative
4. Cannington Construction Limited Supervisor or Competent Replacement

RETURN TO WORK PROGRAM

It is the policy of **Cannington Construction Limited** to accommodate a worker that is temporarily disabled as a result of an accident that arose in and out of the course of employment. Our objective is to return and rehabilitate the worker to his/her maximum level of ability enabling them to be capable of effectively and efficiently performing the assigned job tasks. **Cannington Construction Limited** will uphold its responsibility for keeping the Workplace Safety and Insurance Board (WSIB) informed of the availability of modified work and of the worker's progress during the return to work and the rehabilitation process. The worker is responsible for fully co-operating with the return to work process and for ensuring that the employer is provided with such medical information and /or functional abilities information that will assist in a successful and safe return to work. This modified plan may include:

- Altered or reduced work hours
- Changes to the worker's shift
- Modifications to the regular job duties
- Alterations to rest period(s) or exercise break(s)
- Temporary re-assignment to a different job
- Matching the worker's functional abilities to a totally different job.
- Follow up with worker and workers supervisor to monitor recovery

CARE AND REHABILITATION OF WORKERS

RESPONSIBILITY ROLES:

Both the Worker and the Employer have a responsibility to co-operate in the RTW (Return to Work) Plan. These responsibilities are:

The Worker shall:

- Contact the accident employer during the recovery period. Contact must occur weekly.
- Assist in the collection of job descriptions, task analysis, etc.

- Provide such medical information, as the employer requires, for an early and safe return to work.
- Participate in the RTW Plan and immediately report any task difficulties.
- Ensure that ongoing treatment does not interfere with the RTW Plan.
- Work within the established company rules, procedures and the RTW Plan.

The Supervisor shall:

- Promote and participate in the objectives of the program and discuss objectives with the employee(s).
- Provide modified duty options as outlined in the plan.
- Assist in the collection of medical information, job description(s) for job task analysis, and the development and implementation of workplace modifications.
- Monitor the progress of all workers participating in an RTW plan and maintain records of the worker's progress and up -to-date restrictions.

Management shall:

- Promote and implement an RTW Plan and ensure the policy is up-dated, as required.
- Discuss the plan with the worker's supervisor(s) and ensure that the objective of the RTW plan is understood.
- Determine the frequency of conducting evaluations of the RTW plan and the worker's progress in the Plan.
- Ensure the worker understands and signs all formal RTW plan(s).
- Keep records of all medical documentation and WSIB forms required for the plan

SLIPS, TRIPS AND FALLS

Slips - Slips happen where there is too little friction or traction between the footwear and the walking surface. Common causes of slips are:

- wet or oily surfaces,
- occasional spills,
- weather hazards,
- loose, unanchored rugs or mats, and
- flooring or other walking surfaces that do not have same degree of traction in all areas.

Trips - Trips happen when your foot collides (strikes, hits) an object causing you to lose the balance and, eventually fall. Common causes of tripping are:

- obstructed view,
- poor lighting,
- clutter in your way,
- wrinkled carpeting,
- uncovered cables,
- bottom drawers not being closed, and
- uneven (steps, thresholds) walking surfaces.
- Poor Housekeeping

How to prevent falls due to slips and trips?

Both slips and trips result from some a kind of unintended or unexpected change in the contact between the feet and the ground or walking surface. This shows that good housekeeping, quality of walking surfaces (flooring), selection of proper footwear, and appropriate pace of walking are critical for preventing fall accidents.

HYGIENE

DRINKING WATER

- Supervisor shall ensure that adequate amount of portable drinking water is available for use of workers.
- Clearly mark containers used for drinking water and do not use them for other purposes

PORTABLE TOILETS

The constructors shall ensure that facilities are provided or arranged for workers before work has started at a project and those workers at the project have reasonable access to these facilities. O Reg. 213/91 sec. 29 (1) (3)

INFECTION PREVENTION AND CONTROL

Because we periodically work in Hospitals and Health care environments, Cannington Construction Limited is committed to making sure that workers and patients within these facilities are protected from moisture, dust, noise and fumes. Our Supervisors will ensure that our workers are following the OHSA as well as any specific Policies related to the Health Care Industry.

HOUSEKEEPING POLICY

Cannington Construction Ltd. will not tolerate an untidy worksite. It is the responsibility of each direct and sub contractual crew foreman to clean-up his respective work areas and route ways to his work areas on a daily basis or as often as necessary to maintain a clean and unobstructed condition. If for any reason such clean-up does not occur, Cannington Construction Ltd. will undertake the clean-up work on behalf of the delinquent sub - contractor and back-charge accordingly. No warnings need be given prior to such action however, our standard clean-up directive may be used initially to order sub - contractor employers of their responsibility and of our intended action.

Route ways shall be maintained at all times and appropriate measures shall be taken to isolate waste disposal areas and bins from public access.

PERSONAL USE OF COMPANY VEHICLES, TOOLS OR EQUIPMENT

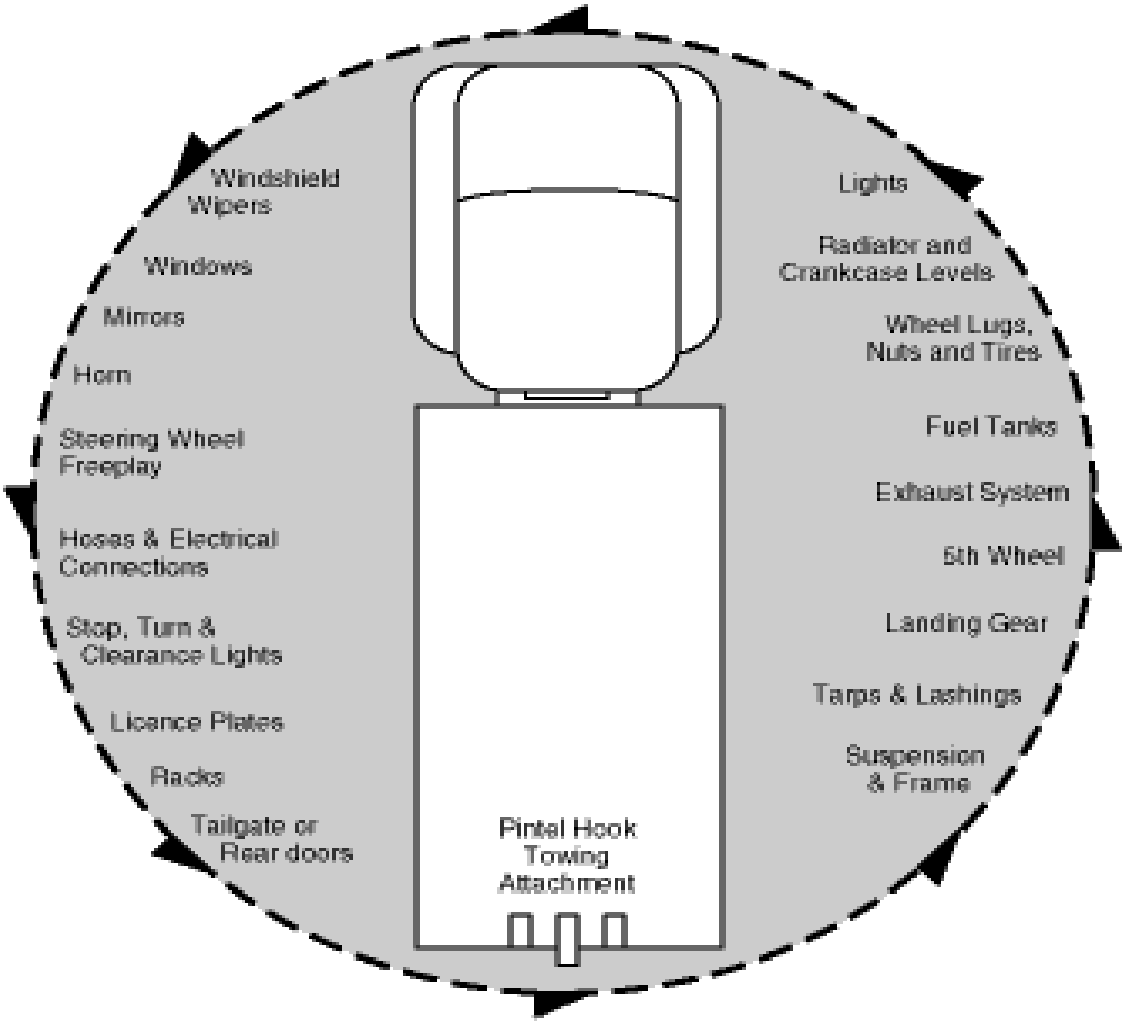
Tools, equipment and vehicles are not to be used outside of a company construction project or premise and are not to be used for personal use or loaned to anyone without the prior approval of Cannington Construction President.

Company vehicles are to be picked up from the shop each morning and returned each evening, unless the job site is geographically closer to the employee's home, or other arrangements have been made with the president.

VEHICLE START UP – THE CIRCLE CHECK

What should I do before starting a vehicle?

- Read, understand, and follow manufacturer's operating manual.
- Know how to operate the vehicle and use any related equipment or attachments safety. Be familiar with the location and function of all the controls.
- Inspect your vehicle daily.
- Develop a routine method of inspecting vehicle (e.g. start at the front on the driver's side and walk towards the back, and around past the passenger side, checking the items listed below).



What should I check before operating a vehicle?

- Adjust seat and controls.
- Make sure you have your driver's license on you.
- Fasten seat belt if tractor/loader is equipped with roll-over protection structure (ROPS).
- Check for correct operation of the following:
- Parking Brake--holds against slight acceleration.
- Foot Brake--holds, stops vehicle smoothly.
- Clutch and Gearshift--shifts smoothly without jumping or jerking.
- Steering--moves smoothly; no "play".
- Lights--headlights, warning lights, and turn signals operational.
- Dash Control Panel--all lights and gauges operational.
- All Moving Parts--no strange noises.
- Horn--operational.
- Visibility--mirrors properly adjusted; windows clean and intact.
- Wipers/washer--functioning and intact.
- Tires--pressure, tread depth or damage.
- Wheels and fasteners--no defects in rim, loose or missing fasteners.
- Seat belts--in good condition and being used.
- Vehicle back-up alarm--operational, where required.
- Hydraulic systems--no evidence of leaks and systems operate smoothly.
- On tractors, power- take off shields--in place.
- Fluid levels - oil, gas, brakes, washer fluid. Check for leaks.
- Load--secure and complying with regulations; hitch in good condition.
- Emergency equipment--installed and inspected as required by law or company policy.
- Record and report any defects to your supervisor immediately.

NOTE:

Cannington Construction Limited is supplying equipment inspection log books for all equipment operators. In addition, log books of maintenance and manufacturing instruction shall be kept on the project preferably on the equipment or in supervisor’s or operator’s vehicle.

TOOLS, EQUIPMENT & VEHICLE MAINTENANCE

EQUIPMENT MAINTENANCE AND MANAGEMENT PROGRAM

Due to the nature of our projects and the contractual relationship with our clients, there are at times major items of capital equipment owned and maintained by Cannington Construction Limited on our work sites. The Project supervisor or his competent replacement is responsible to ensure all equipment located on the work site is maintained in a safe operating condition which meets or exceeds all requirements of the Occupational Health and Safety Act and its Regulations, as it pertains to the safe operation of that equipment. The Project supervisor or his competent replacement shall monitor and control the periodic inspection, service, maintenance and testing of any machine or

equipment located on the work site, including and without limitation, the review of log books, certificates of authorization, service records and safe operating procedures, to ensure compliance with all legislative requirements.

When the Project supervisor or his competent replacement transfers or assigns equipment into the control, operation, care or authority of other authorized person(s), the Project supervisor or his competent replacement shall ensure that all applicable legislation pertaining to such equipment, is complied with before such transfer. The Project supervisor or his competent replacement shall insist that sub – contractors having equipment on our sites - meet these legislative requirements

All tools and equipment directly owned or leased by Cannington Construction Limited shall be maintained in accordance with manufacturing instructions. Defective equipment shall be tagged of repair or replacement at the judgment of the project supervisor or his competent replacement or his designate. All electrical operated tools and equipment shall be protected by ground fault interruption devices if used outdoors or in wet locations. Any and all tools, equipment or vehicles owned and/or operated by Sub-contractor companies on a work site shall be maintained if accordance with manufacturing instructions. Defective and unserviceable equipment shall be removed off site until repaired or replaced to the satisfaction of the Project supervisor or his competent replacement. Workers/operators are responsible to use tool and equipment as per training and manufacturing instructions and report and defects to their supervisors.

WORKER'S SUBSTANCE ABUSE PROGRAM

It is the policy of Cannington Construction Limited to assist any directly hired employee in dealing with substance abuse (drugs or alcohol). We recognize the inherent dangers to other workers who have to work with a worker who is impaired through substance abuse, as well as the personal problems associated with the substance abuser. All supervisors are to keep a watchful eye of any signs or symptoms associated with crew foremen and work site possible substance abuse by workers on our work sites. Workers suspected of being impaired shall not be allowed to continue working but rather shall be interviewed at the site office trailer and if necessary, escorted back home for his/her personal safety.

Our company management will follow these procedures:

The site supervisor will discuss the situation with the union Stuart (Trade Company), project labour safety representative or the Joint Health and Safety Committee representatives if committee established on the project. These people will investigate and assess the problem. Where the third party concurs that the employee is unfit for work, the employee should be taken home.

Where there is not an agreement after the third party assessment, assistance will be obtained from certified members of the Joint Health & Safety Committee.

The employee will be made to understand that our management cannot allow him/her to continue working until he/she seeks medical attention and treatment to eliminate the dependence or practice of substance abuse. The worker will be suspended from working until treatment is completed and reliance to the substance is over.

Management will assist in setting up a treatment plan in collaboration with the substance abuser's family doctor and such local substance abuse clinics as:

Addiction Research Foundation	**1-800-463-6273**
Ontario Drug and Alcohol Registry of Treatment	**1-800-565-8603**

VIOLENCE & HARASSMENT PROGRAM

Introduction

Cannington Construction Limited believes in the prevention of violence and promotes a violence-free workplace in which all people respect one another and work together to achieve common goals. Any act of violence committed by or against any member of our workplace or member of the public, is unacceptable conduct that will not be tolerated. This policy applies to all activities that occur while on firm premises or while engaging in firm business, activities, or social events. Acts of violence can take the form of physical contact. Acts of violence may occur as a single event or may involve a continuing series of incidents. Abuse in any form erodes the mutual trust and confidence that are essential to Cannington Construction Limited operational effectiveness. Acts of violence destroy individual dignity, lower morale, engender fear, and break down work unit cohesiveness.

Purpose

The purpose of the policy is to ensure that:

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

Commitment

Cannington Construction Limited accepts its legal and moral obligation to ensure that management, employees and Sub-Contractors are not subjected to discrimination, harassment, bullying or workplace violence.

Cannington Construction Limited is committed to:

- investigating reported incidents of workplace violence in an objective and timely manner;
- taking necessary action to respond to those incidents; and
- providing support for complainants.

Definitions

"Workplace violence" means the threatened, attempted, or actual conduct of a person that causes or is likely to cause physical injury, whether work related or at a work site. Examples of workplace violence include, but are not limited to:

- threatening behaviour such as shaking fists, destroying property or throwing objects;
- verbal or written threats that express an intent to inflict harm;
- physical attacks;
- any other act that would arouse fear in a reasonable person in the circumstances.

"Discrimination" means unfair or unjust treatment of or decisions affecting an individual because of their sex, race, age, marital status, transgender status, disability, age, union membership, or other personal activities.

"Harassment" means verbal or physical conduct which, because of its severity and/or persistence, is likely to create a hostile or intimidating environment which may detrimentally affect an individual's employment or education. Harassment is defined by reference to the nature and consequences of the behaviour, not the intent of the initiator.

"Sexual Harassment" means unwelcome sexual advances, requests for sexual contact and verbal or physical conduct of a sexual nature when submission to, or rejection of, such advances, requests or conduct is explicitly or implicitly a term or condition affecting employment and/or when such advances, requests or conduct have a detrimental effect on an individual's work environment.

"Bullying and Workplace Violence" means any on-going anti-social behaviour that offends, degrades or humiliates a person, and has the potential to create a risk to health, safety and wellbeing. Bullying and workplace violence refer to coercive, unethical activities that create an environment of fear.

Prohibited Conduct

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. A member of the firm that subjects another firm member, client, or business associate of the firm to workplace violence may be subject to disciplinary action commensurate to the incident, up to and including dismissal.

Management Responsibilities

For the purposes of this policy, as a supervisor or manager, you are responsible to:

- act respectfully towards other individuals while at work and participating in any work-related activity;
- develop workplace arrangements that minimize the risk of workplace violence;
- promote a non-violent workplace;
- ensure that this policy is explained to all employees that you supervise or manage;
- identify training needs for employees;
- ensure that employees understand who to contact regarding concerns about the policy or when reporting an incident;
- 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.

Employees/Workers Responsibilities

For the purposes of this policy, employee/worker, you are responsible:

- 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 supervisor or manager as the situation warrants; and
- to co-operate with any efforts to investigate and resolve matters arising under this policy

Complaint Procedure

Prior to filing a formal report of the incident, a person subjected to workplace violence (the Complainant) should let their objections to the behaviour be known to the alleged offender (the Respondent), directly or with the assistance of a third party. A Complainant may ask for support from their immediate supervisor or manager to communicate their objections to the incident and/or to prepare and submit a formal complaint if they choose. The Complainant should carefully record details of the incident including the date and time of the incident, the nature of the violence, and names of people who may have witnessed the incident. This document is the Complainant's personal record and property. The Complainant may choose to file a formal complaint that documents their concerns to the President of Cannington Construction Ltd.

Confidentiality

Strict confidentiality is required to properly investigate an incident and to offer appropriate support to all parties involved. Any individual who becomes aware of an incident of violence should not disclose the details of the incident to any third party without prior consultation with the Complainant. Gossiping about an incident seriously undermines the privacy of all parties involved and will not be tolerated. Those with questions or concerns about an incident should speak to their immediate supervisor or manager.

Non-Retaliation

All persons involved in the processing of a complaint will ensure that the Complainant is neither penalized nor subjected to any prejudicial treatment as a result of making the complaint. Disciplinary action will be taken against any person who takes any reprisal against a person who reports workplace violence.

Investigation

Upon receipt of a formal complaint of workplace violence, the immediate supervisor or manager will determine whether an investigation will be pursued, and will:

- advise the Respondent in writing of the investigation and nature and specifics of the complaint;
- advise the Complainant of the investigation; and
- assign the investigation to an internal or external person to investigate.

The investigator will:

- advise all parties to the investigation that they may have representation
- conduct the investigation in accordance with the principles of natural justice; and
- explore all allegations by interviewing the Complainant, the Respondent, and others who may have knowledge of the incident(s) or circumstances that led to the complaint or are responsible for the workplace.

The investigator may make a finding of:

- sufficient evidence to support a finding of violation of this policy,
- insufficient evidence to support a finding of violation of this policy, or
- no violation of this policy.

The investigator must prepare a written report of the investigation findings and forward that report to Management within thirty (30) working days from the Respondent being advised of the complaint.

Management should make a decision whether to dismiss or act upon the report from the investigator within thirty (30) working days of receiving the report and advise the Complainant and Respondent in writing of the outcome.

Corrective Action and Discipline

If Management decides to act on the report from the investigator the following conditions will be considered when determining corrective action:

- the impact of the incident on the Complainant;
- the nature of the incident;
- the degree of aggressiveness and physical contact;
- the period of time and frequency of the incidents;
- the vulnerability of the Complainant.

The following corrective actions may be considered depending on the particular incident and the factors in the previous paragraph:

- apology;
- training;
- referral to an assistance program;
- reassignment or relocation;
- report to a professional body;
- suspension;
- discharge; and / or
- legal action.

Record Keeping

The documents corresponding to the investigation will be kept on file in a secured location for two years from the date of the incident to be readily available for inspection by anyone directly affected by the incident, or Ministry of Labour. The investigation report should be kept in a secured location for longer than two years when it is reasonable to do so in

the circumstances. Examples of reasonable circumstances include: to wait for the expiration of a limitation period, for the program manager to evaluate the workplace violence policy, and to monitor persons of ongoing concern.

False Accusations

A person who submits a complaint in good faith, even where the complaint cannot be proven, has not violated the policy. If an investigation results in a finding that the Complainant falsely accused the Respondent of workplace violence knowingly or in a malicious manner, the Complainant will be subject to appropriate sanctions, including the possibility of termination. Such action is considered a violation of the policy, and the investigation results and any sanctions will be recorded in Cannington Construction Limited personnel records relating to the Complainant.

Complaint Resolution Alternatives

An individual affected by workplace violence has the right to pursue their concern through alternative forums such as mediation, or other forms of dispute resolution. Nothing in this policy prevents an individual from pursuing other remedies to an incident of workplace violence such as a criminal or civil action, a complaint to the Ontario Human Rights Commission, or a complaint to the Upper Law Society in Ontario.

Assistance

An employee or worker with questions, concerns or a complaint regarding workplace violence may contact their supervisor/manager for help and advice. This information will be kept confidential except in the case of an imminent physical threat in the workplace.

Evaluation

This policy will be reviewed on an annual basis to ensure that it conforms with any changes to the Occupational Health and Safety Act and its Regulations and that it continues to address the needs of Cannington Construction Limited regarding workplace violence.

Nothing in this program will be construed as excluding the jurisdiction of any external body competent to deal with alleged harassment, bullying or workplace violence. Harassment, including sexual harassment, will not be tolerated. Violation of this policy may result in immediate removal from Cannington Construction Limited project or premises.

PREVENTING AND MANAGING INCIDENTS OF VIOLENCE OR HARASSMENT

Although no incident of workplace violence is deserved, there are steps that will be taken to reduce such incidents in our workplace.

For verbal communication:

- Focus your attention on the other person to let them know you are interested in what they have to say.
- Do not glare or stare, which may be perceived as a challenge.
- Remain calm and try to calm the other person. Do not allow the other person’s anger to become your anger.

- Remain conscious of how you are delivering your words.
- Speak slowly, quietly and confidently.
- Speak simply.
- Avoid communicating a lot of technical and complicated information when emotions are high.
- Listen carefully. Do not interrupt or offer unsolicited advice or criticism.
- Encourage the person to talk. Do not tell the person to relax or calm down.
- Remain open-minded and objective.
- Use silence as a calming tool.
- Acknowledge the person's feelings. Indicate that you can see he or she is upset.

Tips for non-verbal behavior and communication:

- Use calm body language – relaxed posture with hands unclenched, attentive expression.
- Arrange yourself so that your exit is not blocked.
- Position yourself at a right angle rather than directly in front of the other person.
- Give the person enough physical space… this varies by culture, but normally 1 –2 meters is considered an adequate distance.
- Get on the other person's physical level. If they are seated, try kneeling or bending over, rather than standing over them.

Do not pose a challenging stanch such as:

- Standing directly opposite someone
- Putting your hands on your hips
- Pointing your finger
- Waving your arms
- Crossing your arms
- Do not make sudden movements which can be seen as threatening.
- Do not fight. Walk or run away. Get assistance from security or police.

Responding to a physical attack

- Make a scene, yell or scream as loudly as possible. Try shouting words like STOP, FIRE, or HELP.
- If you are being pulled along or dragged, fall to the ground and roll.
- Blow a whistle, activate your vehicle security alarm or push a building security alarm, if available.
- Give bystanders specific instructions to help you. Single someone out and send them for help. For example, "You in the yellow shirt, call the police."
- If someone grabs your purse, briefcase or other belongings, do not resist. Throw the item to the ground several feet away from the thief and run in the opposite direction, yelling "help" or "fire'. Do not chase a thief.
- Run to the nearest safe place, a safe office or an open store.
- Call security or the police immediately after the incident.
- If the attack does not warrant calling the police, inform your supervisors or the authorities at your workplace.
- File an incident report.

Be Prepared

- Take a self defense course.
- Try to imagine yourself responding successfully to different types of attacks.
- Practice your responses.

Working Off-Site

If you work away from a traditional office setting you must exercise extra caution. In many cases you have less or no ability to control your work environment. You may require special training to avoid violence by using conflict resolution and mediation tactics. Nevertheless, the following specific preventative tactics or procedures will minimize or prevent risks associated with working off-site:

- Have access to a cellular telephone or similar means of communication.
- Use an established check-in procedure that allows you to manage typical situations you may encounter off-site.
- Prepare a daily work plan so that you and others know where and when you are expected somewhere.
- Arrange to meet in a safe environment.
- Be alert and make mental notes of your surroundings when you arrive at a new or different setting.
- Use the "buddy system", especially when you feel your personal safety may be threatened.
- Determine under which circumstances unaccompanied visiting would involve unacceptable risk.
- Exercise your right to refuse to work in clearly hazardous situations.
- Disclose any feelings of discomfort or apprehension about an impending appointment to your supervisor.
- Do not enter any situation or location where you feel threatened or unsafe.
- Carry hand-held alarms, noise devices or other effective alarm devices.

When you are in unfamiliar premises:

- Check for escape routes and position yourself near an escape route.
- Mentally rehearse what you will do if an individual becomes aggressive or hostile. Decide what your best preventive tactic will be.
- Take control of the seating arrangements. If possible, seat yourself near the door.
- Maintain a "reactionary gap" between you and the person – out of reach of the average person's kicking distance. Increase the gap by sitting at a table. Be aware of the person's proximity at all times.
- Be well prepared for an appointment. Review the available information about the individual(s) you are meeting.
- Terminate the appointment in a non-confrontational manner if the individual appears to be:
  - ✓ Intoxicated
  - ✓ Under the influence of drugs
  - ✓ Emotionally disturbed and threatening or out of control
- Do not allow yourself to be backed into a corner. Leave a clear path to the exit.
- Do not venture too far into the premises e.g. remain near an exit.
- Do not turn your back on the person or enter a room first.

In addition, specific instructions shall be provided when deemed necessary to all employees regarding workplace security hazards unique to their job assignment and workplace.

SUB - CONTRACTORS GUIDELINES TO OUR SAFETY PROGRAM

Cannington Construction Limited contractual commitment with Sub - Contractors and other vendors, suppliers or service firms engaged at the work site requires their active participation in our site safety program and adherence to the rules and procedures as set out in this safety policy.

Sub – Contracting companies shall only start work when Cannington Construction Limited is in receipt of the acknowledgement sheet, (included with these guidelines) which is to be signed by the management representative of the trade Sub - Contractor. The Sub - Contractors shall ensure that any persons working on their behalf, are provided with a copy of these Sub – Contractors 'Guidelines and policy/site requirements. These guidelines include our corporate health and safety rules to assist them in reducing accidents and incidents, and in complying with Ontario's safety legislation. In addition to the Sub – Contractors' signing off on the guideline acknowledgment sheet, the Sub - Contractors shall also sign off on Cannington Construction Limited – SUB – CONTRACTORS' HEALTH AND SAFETY AGREEMENT before commencement of work on any of our projects.

Qualifications (skills & abilities) required (Sub – Contractors):

- Evidence of experience in the same type of work
- References from previous clients which are checkable
- Accident & health statistics
- Qualifications, skills and ongoing training programs including health and safety training
- How they will do the work i.e. Risk Assessments and Method Statements
- MOL orders/fines statistics
- W.S.I.B. Cad -7 rating

Sub - Contractors Responsibilities

On our projects, the Sub - Contractors shall actively promote safe work practices and procedures among their employees. All Sub - Contractors must ensure their crew supervisory personnel have received appropriate training in Health & Safety practices and legislation and that they are competent1 to perform all required work in a safe and legal manner. Sub – Contractors' supervisors are required to abide by our specified supervisory responsibilities as listed in our safety policy. All Sub - Contractors shall ensure that our corporate safety policy and guidelines are communicated and understood by their supervisors, workers, suppliers are enforced.

Training and on-site safety meetings

In addition to Sub - Contractors providing competent supervisors of their crews, workers should be oriented to the Constructor's work site safety rules and program requirements by the trade or Sub-Contractor's supervisor. All supervisors on our sites, whether working directly or under contract with Cannington Construction Limited are expected to perform their duties and responsibilities in a manner that ensures that workers under their authority have the

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Competent - refers to the definition as provided in Ontario's Occupational Health and Safety Act and Regulations for Construction Projects. (Competent persons and Competent Workers)

knowledge, training or experience to perform their job tasks in the safest manner possible. All supervisors must ensure their workers are familiar with the actual and potential hazards of the job and with an understanding of the safety standards and regulations that apply to their work.

Crew "Tool box / Safety talks"

Health and Safety crew "tool box talks" are to be held by the Sub - Contractor's supervisor at least once a week or as often as the project supervisor establishes, and records of these talks are to be submitted to Cannington Construction Limited supervisor for review. We invite you to use our policy's crew safety talk forms of recording purposes. Sub - Contractors shall attend all safety meetings and management production meetings as required by Cannington Construction Ltd.

Sub – Contractor's provision of documentation

The Sub - Contractor shall provide to Cannington Construction Limited any or all of the following:

- Copy of their health and safety policy and procedures.
- Any engineered stamp and signed design drawings and specifications required (e.g. horizontal life-line system approval, anchor approval, demolition, shoring/bracing prior to placement of concrete etc.).
- Written safe work procedures as required (e.g. fall arrest rescue and compliance plan, lock out - tag out, demolition, confined space entry etc.))
- Traffic control protection plans for both or either inside or outside of project.
- Records of training required by the safety regulations and Cannington Construction Limited safety policy.
- Any trade certifications such as (T.S.S.A.), licenses or permits, log books and operator manuals of equipment.
- All documents required by Ontario's O.H. & S. Act and its Regulations.
- Copies of Hazardous Material Safety Data Sheets and records of W.H.M.I.S./G.H.S. training.
- Signed copy of our Declaration of Supervisor Competency form.
- Provide your WSIB Clearance Certificate – account in good standing.
- Provide a copy of your most current WSIB – Cad 7 performance report.
- Registration of Constructors and Employers engaged in construction form (T 1000) (all trades and sub – trades)
- Copies of SDS for controlled product used on site.
- Copy of liability insurance

The Sub - Contractors shall maintain copies of all documentation required to be kept on the work site, in accordance to applicable legislation, prior to the commencement of work and the arrival of material/equipment arriving on site. This includes but is not limited to the above.

Notification of near misses, incidents and accidents

- Sub - Contractors are required to report all incidents, accidents or near misses to Cannington Construction Limited site supervisor
- Copies of documentation required by provisions of Ontario's Occupational Safety Act or the Worker's Compensation Act, for reporting accidents, incidents and injuries to the authorities shall be submitted to the governing authorities and Cannington Construction Limited project supervisor for review.

Investigation and reporting procedures

All Sub - Contractors must conduct a full investigation of any accident or incident causing personal injury or property loss. Near miss incidents should also be fully investigated. The investigation should identify the events leading to the accident, incident or near miss, along with the root causes, witness statements, related information and measures to be taken to prevent a recurrence. Sub - Contractors are to ensure the proper authorities are notified and the appropriate reporting forms are submitted within the prescribed time restraints as set out in legislation. Cannington Construction Limited requires to be notified within twenty-four hours of any claim made by anyone against the Constructor or a Sub - Contractors of any accident, incident or material or property damage.

Ensuring compliance on our work sites

Sub - Contractors will be held accountable to their obligations to ensure compliance to all provisions of Ontario's Health and Safety Act and its Regulations of Construction Projects, and to our own Corporate Health and Safety Policy requirements and rulings. Sub - Contractors are required to enforce the above in addition to ensuring safe work practices and work site conditions prevail on our projects. In accordance to Cannington Construction Limited – SUB – CONTRACTOR'S HEALTH AND SAFETY AGREEMENT penalties may be assessed against the Sub - Contractor of non-compliance behavior of their employers, employees and suppliers. Any remedial action having to be taken by Cannington Construction Limited for any reason, to correct Sub - Contractor work site conditions or neglect, and other reasons as per our agreement, such costs incurred by Cannington Construction Ltd. shall be back charged to the Sub – Contractor.

Trade Demolition Contractor performance review

An evaluation of any Sub - Contractor on our projects may be conducted to determine at intermittent stages of their contract and an overall rating assessed. Such assessments will be forwarded to Cannington Construction Limited management of record and review. Sub – Contractors exhibiting poor ratings may not become eligible of future contract bid considerations.

Summation

The corporate health and safety rulings below are meant as a guide to establishing safe work practices and conditions. They are not all inclusive. Trade Demolition Contractors are advised to refer to the provisions of the Ontario workplace safety statutes (legislation) and industry standards of further guidance.

Approve Sub-contractor list

Cannington Construction has an Approved List of Sub-contractors who have been cleared for work on our job sites. This list includes the following requirements:

- Current WSIB clearance certificate
- Proof of Insurance
- Valid training and trade certificates and licenses
- Pre-qualification form complete
- Sign off on our Safety guidelines and internal rules

HEALTH AND SAFETY RULES & PROJECT COMPLIANCE REQUIREMENTS

It is the policy of Cannington Construction Limited to insist that all sub-contractors and our direct workforce, understand and strictly adhere to the provisions of the Occupational Health and Safety Act of Construction Projects and its Regulations. The duties and responsibilities of the supervisor, worker and employer, legislated in the Occupational Health and Safety Act, are of particular importance. Below, are the some of the most fundamental of our Corporate Safety Rules; know them and adhere to them. Your supervisor or competent replacement, will inform you of any additional safety rules and procedures, governed by the corporate policies of the owner of our projects.

In an effort to ensure compliance to this program and all other established OHSA standards, Cannington Construction Limited hereby implements this procedure of noncompliance to all sub-contractors working on Cannington Construction Limited controlled property. This is established to promote safety and eliminate offenders and repeat offenders and may lead up to contract termination with a sub-contractor. This program may be used or may be superseded with more severe discipline based on the degree of the infraction(s). In any case Cannington Construction Limited Project Team has sole authority in the type of discipline action to include removal from the project. First offence, give a verbal warning keep written record of the offence/notify his/her supervisor Second offence, give a written warning with his/her supervision is brought into the office for a "discussion" with the sub-contractors' Supervisor and the Cannington Construction Limited Project Manager along with the Cannington Construction Limited project supervisor. A copy of the written warning is sent to the offending Workers Company's office, with a statement to the effect that if this happens again the worker will be removed from the project and could lead to a termination of the contract. Third offence the worker is removed from the project. If repeat occurrences with other crewmembers are found the supervisor of said offenders shall be subject to removal from the project.

DISCLOSURE

Along with the new Legislation surrounding legalization of Marijuana comes the necessity of Disclosure.

It is required by law that direct Cannington Construction Limited employees and Sub-Contractors disclose their use of prescription medications including Marijuana. It is critical for the safety of everyone on site that Supervisors and or Project managers are aware of use or even possible addiction issues before work commences. Disclosure can be kept confidential but shall be in written format.

Cannington Construction Limited has created an Employee Emergency Information Form that we have asked each employee to complete as preparation in the case of an emergency. This form is kept in each employee's personal file.

FOLLOWING CLIENT SPECIFIC REQUIREMENTS

Cannington Construction Limited takes our client requests very seriously. On every job site we make it a priority to accommodate and respect the specific requirements and rules required on their property. Some sites require:

- Criminal Background checks
- Site specific Safety training
- Rules surrounding access to buildings and properties
- Completed Application for access cards
- Embargo periods and No work limitations

PERSONAL PROTECTIVE EQUIPMENT (PPE)

HEAD PROTECTION

It is our policy that every worker shall wear protective headwear at all times when on a project. The protective headwear shall comply with the following:

- Hardhats may be used up to five (5) years after being manufactured
- Hardhats must be replaced after being subjected to impact
- Hardhats must be replaced if deep cuts or scratches are present
- Hardhats must not be painted, as paint can weaken the plastic
- Never remove the Styrofoam liner, as this will reduce the side impact protection
- Use chin straps when high winds are encountered or as the situation dictates.
- Wear hard hat with the rim protrusion faking forward.
- Hardhats must be CSA approved.

HEARING PROTECTION

- Hearing protection will be provided and shall be worn by workers in areas where the Noise levels exceed 85 dB's for longer than 15 minutes.
- Hearing protection must be worn in any area where air hammers, impact tools and rotary drills are in operation.
- It is also strongly recommended that hearing protection always be worn when continuous exposure to excessive noise levels is experienced.
- Your foreman/supervisor will have a supply of most types of hearing protection suitable for your project.

Hearing protection is available in 3 general types and must be CSA approved.
These include:

- Earmuffs – when properly fitted and worn, these generally provide more protection than earplugs, especially when worn in conjunction with earplugs
- Disposable earplugs – made of pliable material, one size fits all, and some can be used only once, others can have multiple uses. (cotton is NOT acceptable)
- Permanent plugs – these must be fitted to provide a good seal but can be washed and reused

Because hearing protection is in contact with a very sensitive and vulnerable part of the body, good hygiene must be stressed. Wash your hands ensuring there is no trace of a chemical or bacteria that can contaminate the earplug while being inserted into the ear.

EYE PROTECTION

- Eye protection must be worn when potential of eye injury exists.
- This will provide protection when there is a danger from chipping, drilling, grinding, cutting, flying particles of dust, acid or toxic fluids (chemical gaggles), work overhead and in any other situations where there is a risk of an eye injury.
- Workers should keep in mind that depending on the hazard, a combination of face and eye protection may be necessary.
- Eye injuries rank as one of the main caused for WSIB claims.
- The eye hazards at some projects are such that we must take particular care in choosing the correct standard eye protection.

- All protection must meet the CSA Z94.3 standards – Industrial Eye and Face Protectors.
- Besides frontal impact, the eyes are at risk from materials entering from the sides.

RESPIRATORY PROTECTION

- Where it is impractical to eliminate harmful dust, fumes, vapours or gases, every employee in the zone of contamination shall be protected in a manner that will ensure a supply of clean air.
- Wear the proper respiratory device when exposed to harmful gas vapours and dust.
- Consult the material safety data sheet (MSDS/SDS) for the proper respiratory filter, or mask to wear. If you are not able to find the information, contact your supervisor.
- Because of the vast number of respiratory protection types, sizes and configurations, a worker must be trained in the proper use, care and maintenance of the respirator equipment for the hazard(s) you are working with.
- The respirator must fit tightly and comfortably against the skin so there is no leakage into the face piece.
- For proper fit, the face must be cleanly shaven to ensure a close, protective and secure fit to the face.
- Workers must receive adequate training on safe use, maintenance and storage or respirators.
- In addition, prior to wearing the respirator for the first time each worker shall carry out medical evaluation by his/her doctor to ensure that there are no concerns.
- The respirators must be CSA approved.

HAND PROTECTION - WORK GLOVES

- Work gloves shall be worn when handling sharp objects/materials.
- Neoprene gloves shall be used when handling compressed gasses and chemical resistant gloves when handling chemicals.
- Special nonconductive gloves shall be worn by qualified electrician when working on or near
- energized surfaces.

FOOT PROTECTION

- Grade 1 Protective Footwear under CAN/CSA-Z195-M92, approved high cut (6 to 8 inches, equipped with an electric shock resistant sole) green patch safety boots that are fully laced will be allowed.
- Protective footwear must be worn at all times while on the project.

PROTECTIVE CLOTHING AND SKIN PROTECTION

- Appropriate work clothing must be worn when handling and using tools and materials which may cause injuries to your skin.
- Adequate clothing must be considered for each work season.
- During the summer months, long pants and t- shirt are minimum requirements
- Apply sun screen, cover exposed skin when working outdoors in summer time.
- In the winter to avoid frost bites wear layers of clothing.

REFLECTIVE VESTS

- Traffic control persons and signalers must wear tear away reflective vests as per OH & S Regulations.
- Also, we recommend that all workers in close proximity to heavy equipment or vehicular traffic wear reflective vests as well.

PERSONAL SAFETY RULES

For your protection on the job, do not wear:

- Loose clothing or cuffs
- Greasy or oily clothing, gloves or boots
- Torn or ragged clothing
- Finger rings, bracelets or neck chains

Other personal protective equipment, such as safety belts and full-body harnesses, respirators, reflective vests, floatation vests, ear protection devices, etc., must be worn when required by the Occupational Health and Safety Act or its regulations and your supervisor.

Non-prescription Drugs or Alcohol

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

Reporting Injuries and Accidents/Incidents

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

Reporting Unsafe Practices and Conditions

If you should notice any unsafe practice or condition on the job, you are obligated by law and by this company to report the situation immediately to your supervisor, so corrective action can be taken. Never place tools or materials near edges to openings or levels, as these items may fall onto someone below. Keep all tools and materials at least six feet back from edges and openings.

No Jumping

No person shall jump from one level to another and anyone discovered jumping will be reprimanded and subject to immediate termination from employment. Use proper means of egress and access.

Seek Assistance When Lifting Heavy Items

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

No Horseplay

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

Do Not Remove Guardrails or Coverings

Do not remove or make ineffective, any protective device, equipment or thing, required by your employer or the Occupational Health and Safety Act and its regulations. If your work requires the removal of such a protective device as a guardrail or covering, use the appropriate safety measures to protect yourself and other workers and when your work **is** finished, or you leave the area, replace the protective device immediately. Report any the presence of any missing or defective, protection device, immediately to your supervisor.

Obey our NO SMOKING Rules

Smoking is strictly prohibited near flammable or combustible gases and materials, and all storage areas. Obey all signage in areas forbidding smoking.

Know Your Limitations

Never work at heights if you are afraid to do so, or if you are ill or subject to dizzy spells. Tell your foreman. He will respect you of being honest and as sign you to other suitable work. Always work within your limitations.

Minimum Dress Code

Every employee shall wear a minimum of a full T-shirt and long pants to prevent injury from the elements and harmful substances. No shorts or tank tops allowed.

Work in Well Lit Conditions

Always work in adequately lighted conditions. Use portable lighting stations in un-serviced areas. No one should ever be allowed to work in the dark.

Avoid Working Alone

Always use the "buddy system" to avoid working alone. If it is necessary to do so, arrangements should be made to check on the worker at fifteen-minute intervals, by the worker's foreman. Confined space work, however, requires constant tendering of the isolated worker(s) and there are strictly regulated procedures to follow in this kind of situation. Check with your foreman for instructions before entering any confined space.

Access and Egress to Work Areas

Access and Egress shall be by way of ramp, ladder, stairs or runway. Workers should not climb or jump to access levels.

Use of Grinders and Cut off Saws

Abrasive wheels can cause serious injury. Proper storage use and maintenance of these wheels must be observed. Follow these guidelines:

- Familiarize yourself with the manufacturer’s operation manual before using the tool. Follow all safety instructions.

- Ensure proper guards are in place and that all necessary personal protective equipment is used for your personal safety. A face shield is recommended depending on what you are grinding/cutting.
- Never exceed the maximum wheel speed (every wheel is marked). Check the marked speed and compare it with the speed of the grinder.
- When mounting the wheels, check them of cracks and defects, ensure that the mounting flanges are clean, and the mounting blotters are used. Do not over tighten the mounting nut.
- Before grinding, run newly mounted wheels at operating speed to check of vibrations. A vibrating or defective wheel could explode causing injury.

Welding, Torch Cutting or Burning

Work involving welding, torch cutting or burning can increase the fire and breathing hazards on any job. Follow these guidelines prior to the start of work;

- Always ensure that there is adequate ventilation, natural or mechanical since hazardous fumes can be created causing respiratory harm.
- Always use the necessary personal protective equipment of your protection such as respirators, cutting goggles and protective clothing.
- Ensure there are fire extinguishing equipment nearby of immediate use.
- Check cables and hoses to protect them from slag and sparks.
- Check the work area of combustible material and possible flammable vapours before starting work. If combustible materials or sensitive equipment cannot be removed, fire blanket protection or a fire watch must be maintained.
- Never weld or cut lines, drums, tanks, etc. that have been in service without first making sure that all flushing, ventilating, purging precautions have been carried out and permits obtained.
- Never enter, weld or cut in a confined space without first conducting proper air tests and all other necessary confined space procedures and required lockout and tagging.
- When working overhead, cordon off your work zone below and post signs warning other workers to stay clear. Use fire resistant materials (fire blankets, tarps, etc.) to control or contain slag or sparks.
- Contact lenses should never be worn by anyone working near welding operations.

Use of Chain Saws

Workers must refer to the manufacturer's operation manual and now be trained in its safe use before using a chain saw. Follow these guidelines:

- Never leave a running chainsaw unattended. Shut it down.
- Use all protective equipment such as chin guards, hearing, eye, and head protection. Fuel the saw in a ventilated area and not while it is running.
- Ensure that the chain saw brake in functioning properly - stops the chain.
- To prevent chain kickback, the chain must be kept sharp, have the correct tension and be adequately lubricated.

- The correct methods of starting, holding, carrying, using and storing of the saw as directed by the manufacturer must be adhered to.
- Ensure that the saw motor is shut off while transporting.
- Ensure that your clothing is tight fitting.

Work Platforms

Work platforms shall be a minimum 18 inches wide and be designed and constructed to support and resist at least four times the anticipated load. Workers are to refrain from using spools, ladders as a support for planking, poorly constructed benches and inadequate materials as a work platform. All platforms must be suitably cross braced to provide stability.

Scaffold Erection and Use - Refer to the scaffolding guidelines in this booklet.

Use of Compressed Air Equipment

- Air powered tools in construction range from stapling guns to jack hammers. If not treated with respect, these tools can cause serious harm.
- Prior to use all hoses should be physically inspected of defects such as cuts, abrasion, bulging and other damage. Any defective hoses should be taken out of service of repair or replacement. Ensure their connections are securely wired.
- Wear personal protective equipment such as eye protection and face shields and ensure other workers in the area are made aware of or have restricted access to the hazard area.
- A proper pressure regulator and relief device must be in the system to ensure that correct desired pressures are maintained.
- The equipment must be properly inspected and maintained in accordance to the manufacturer's requirements.

Use of Hand held Electrical Power Saws

In addition to following the manufacturer's safe operational instructions, the following guidelines should be considered:

- Always unplug the saw from its power source before attempting to change its blade.
- Always keep the blade sharp.
- Before the saw is set down always ensure the retracting blade guard has fully returned to its down position.
- Ensure all cords are clear of the cutting area before starting to cut.
- Before cutting check the stock of foreign objects or any other obstruction which could cause the saw to "kick back".
- When ripping, make sure the stock is held securely in place.
- Where harmful vapours or dusts are created, approved breathing protection is to be used.
- As with all electrical tools used outdoors or in wet locations, ground fault circuit breaker interrupter devices must be used either at the power panel or at the cord.
- Avoid using gloves or other loose-fitting clothing - could catch in blade.

Defective Tools - What to look out for

If a tool is defective in some way, - **DO NOT USE IT**! Inspect all tools prior to use and ensure defective tools are repaired. Watch of problems like:

- broken or inoperative guards
- insufficient or improper grounding due to damage of double insulated tools - e.g. cracked, casings.
- no ground wire (broken ground post) on plug or frayed cords.
- on/off switch is not in good working order - e.g. jams, releases.
- improper grinding wheel speeds or chipped/cracked blades.

Powder Actuated Tools

- Only workers who have furnished evidence of training by the manufacturer shall be allowed to operate a powder-actuated tool.
- Eye and head protection shall be worn by all personnel exposed to the use of this type of tool.
- Tools shall not be loaded until just prior to use and loaded tools shall not be left unattended unless they are locked in a container.
- These types of tools are not to be used in or near an explosive or flammable atmosphere and cartridges (power source) shall be kept separated from all other material.
- Hearing protection shall be worn by the operator and any workers within the confines of an enclosed area up to 50 feet from the point of discharge and 25 feet in open outdoor locations. These tools should never be pointed at anyone, whether loaded or unloaded. Hands should be kept clear of the muzzle at all times.
- Keep cartridges stored in a suitable container. Un-discharged (misfired) cartridges should be kept in a water filled container until they can be safely disposed of.

Trenches and Excavations

- Work shall not be performed in a trench unless another worker is working above ground and in close proximity with the trench or to the means of access to it. Where personnel are required to enter a trench, proper means of access and egress must be provided within the protected area.
- Where personnel are required to enter a trench deeper than 1.2 meters (4 feet), the walls must be cut back on a one to one or a one to three gradient depending on the classification of the soil. Or be supported as prescribed in Ontario's regulations 213/91 under Excavations - Part III.
- Where the depth of the trench exceeds 6 meters (20 feet) or the width exceeds 3 meters (10 feet), the support must be designed by a professional engineer.
- Where it is not practicable or possible to cut back or shore an excavation wall, a professional soil test engineer shall determine the stability of the excavated wall and state in writing whether it is safe to work near the wall(s), along with the frequency of follow-up inspections and other precautions to be taken.

- No excavating shall commence until a determination has been made as to the possible location of any services in the area. The location of any service lines shall be marked and if said services cannot be disconnected or shut off, the utilities authority shall supervise its uncovering if the service will endanger any workers in the area.
- Materials, equipment and excavated surcharge shall be kept back at least two meters away from the edge of any excavation and a level area of at least one meter from the excavated edge shall be maintained at all times.

Wall Bracing

- Masonry walls require temporary bracing until installation of the permanent structural members. Masonry walls should not be built higher than ten times their thickness unless properly braced.

Fire Protection

Fire extinguishers must be readily accessible at adequately marked locations, properly maintained and promptly refilled after use. Also, they must be inspected of defects or deterioration at least once a month by a competent worker who shall record the date of the inspection on a tag attached to it. At least one fire extinguisher must be provided where flammable liquids are stored, handled or used, where temporary oil-fired or gas fired equipment is used, where welding or open-flame or gas fired operations exist and on each story of an enclosed building being constructed or altered and of each workshop with 300 or fewer square meters of floor area. Every fire extinguisher must be of a type whose contents are discharged under pressure and shall have an Underwriter's Laboratories of Canada 4A40BC rating.

Traffic Control

A worker who is required to direct traffic shall be a competent worker of such purposes and shall not perform other work while directing traffic. The worker shall be given written instructions in a language he can read and understand, setting out the signals he is to use; and shall have the instructions explained to him orally. The traffic control person shall wear a vest that is reflective fluorescent and colored blaze orange or red.

Trucks and Heavy Equipment Backing Up

No vehicle or equipment shall be reversing on the project unless there is no other alternative. If reversing – spotter/signaler must assist the operator. All vehicles shall be equipped with back-up beepers. Traffic control person/signaler must position himself or herself in view of the vehicle operator and assist the operator where intended path of travel is obstructed. The traffic control person/signaler and workers in the area should be made aware of the vehicle's blind spots, by the operator. “DANGER DUE TO REVERSING” signs shall be posted.

Compressed Gas Cylinders

Use compressed gas cylinders with extreme caution. Some basic safety rules are:

- only competent and authorized workers are to handle compressed gas cylinders.
- all compressed gas cylinders should be stored in a secured and upright position.
- after using a compressed gas cylinder, always ensure that the valve has been closed and that the protective valve cap is in place.

- upon discovery of a compressed gas leak from a cylinder, hose, valve or other connection, discontinue use until the problem has been rectified.
- Under no circumstances is a leaking compressed gas cylinder is to be used.
- No empty cylinders shall be left inside enclosed buildings. Take them to an outdoor compound.
- When storing compressed gas cylinders, always store empty ones separately from full or partially filled cylinders.
- Compressed gas cylinders should be stored in a designated outdoor compound, affording adequate ventilation and explosion proof characteristics.
- Always keep compressed gas cylinders at least 15 feet away from any heat generating sources.
- Overhead protection should be provided to the valves and connections to compressed gas cylinders when there is a risk of materials falling from above.

Wind Related Hazards

Strong winds and gusts pose a real risk to workers. In these conditions refrain from handling materials at heights of risk of being blown over. Walls and structures of any type are vulnerable to collapse and special bracing precautions should be taken.

Electrical Equipment

- Prior to performing any maintenance or repairs on live electrical equipment, all power sources must be locked out and disconnected. Sub-Contractor supervisors must have proper lock-out procedures of their workers to follow.
- Electrical panels and fuse boxes should not be covered or hidden by articles or clothing, materials or machinery. Keep the area in front of these services clear of obstruction and water.
- All electrical equipment must be effectively grounded and have Ground Fault Circuit Breaker Interrupter devices when used outdoors or in wet locations.

Flammable and Combustible Materials

- All flammable materials must be stored in approved containers, in well ventilated areas, with caps in place, away from heat, open-flame and ignition sources.
- Quantities of flammable materials greater that 235 liters must be stored outside in an isolated and fenced area, away from exits and entrances and with "no smoking" signs posted.
- All flammable or combustible materials must be clearly labeled as to their inherent dangers, re: WHMIS labeling requirements.
- Supervisors are to ensure their workers are aware of the volatile characteristics of the flammable and combustible materials they store, use, handle or transport.
- Be aware of vapor build-up in confined spaces and low lying areas such as pits and trenches.

Forklifts

- Daily inspection checks shall be performed by the operator in accordance to the manufacturer's recommendations.
- Only trained personnel shall operate forklifts.
- Do not drive with wet or greasy hands. You could lose steering control.
- Face in the direction of travel, look behind you before going backwards.
- Make sure that the truck is able to carry the load.

- Recheck the brakes with the first load, and when changing to heavier loads. Never drive with faulty brakes. Report faulty brakes right away.
- Avoid sudden stops, starts or turns. These could spill the load.
- When vision is blocked, stop and sound horn at doors, corners, exits, etc.
- Cross railroad tracks very slowly, on an angle if possible.
- Keep forks close to the ground (4"-6") and tilted slightly back.
- Do not drive into an area where there may be flammable or explosive dust or vapours unless the truck is designed and approved of such hazardous areas.
- Slow down or stop when your vision is blocked.
- No horse-play or stunt driving, and no passengers.
- Do not lift anyone on the forklift blades, this is strictly prohibited.
- Do not work or allow others to work under raised loads.
- Before entering elevators, check if they are empty and locked at floor level. Make sure they can carry the load. Turn off engine when in elevator and lower the forks.
- When driving up or down a slope, the load must always be uphill. Do not drive across a slope.
- When you leave the truck, lower the forks, set the brake, neutralize controls, and shut power.
- When parking the truck, do not park on a slope and do not block gangways, halls or exits.

Incidents Involving Tenants and the General Public

Contact by construction personnel with the general public and/or occupants of existing buildings must be limited and not be confrontational. All sub-contractors and Demolition Contractors must advise their employees of this requirement and to report any adverse contact with the general public or occupants to their supervisor and in turn to Cannington Construction Limited project supervisor or his competent replacement. All incidents, accidents, or near miss occurrences must be reported immediately to the site supervisor. Failure to report will result in disciplinary action by Cannington Construction Limited sub-contractors or Demolition Contractors must make Cannington Construction Limited aware of any change in their work operations, which may cause unforeseen hazards or concerns by occupants or the public. Where it is required “Information Notices” will be supplied to Occupants regarding hazards.

Cranes and Other Hoisting Equipment

- All hoisting equipment shall only be operated licensed and /or qualified personnel.
- The operator must never leave the controls unattended while the equipment is running
- If the view of the operator is obstructed, he shall request the assistance of a competent signalman.
- Hydraulic equipment must never be left unattended while any part is in a raised position.
- Loads being hoisted are not to pass over workers or handled in such a manner which might endanger a worker.
- All log books and maintenance records are to be present with the hoisting equipment and kept up to date. A thorough pre-job maintenance of the hoisting equipment shall be performed and recorded in the appropriate log books. An inspection / approval report is to be provided to the
- site supervisor and signed by the licensed mechanic, before the machine is brought on site.
- No hoist operator shall swing any loads over existing public buildings without prior approval from the building's owners.
- The operator shall perform daily inspections of his hoist equipment prior to use and record such inspection results in his daily inspection log.
- No crane or other hoisting equipment shall be loaded beyond its rated capacity.

- The operator shall ensure the hoist boom or device is kept a safe distance from all high power sources – power lines as per OH & S Regulations – maintain minimum distances.

Rigging Requirements

- All rigging equipment shall be inspected prior to each shift and as necessary during the shift to ensure safety. Damaged or defective slings shall be immediately removed from service.
- Wire rope slings shall be lubricated as necessary during use to prevent corrosion.
- Only competent workers trained in rigging and signaling shall be allowed to rig and handle loads.
- All rigging equipment shall have at least a safety factor of five.
- All rigging devices including slings shall have permanently affixed identification stating size, grade, rated capacity and the name of manufacturer.
- Wire rope slings must be padded, or softeners used to protect it from damage from sharp corners.
- Loads handled by slings shall be landed on cribbing or dunnage so that slings need not be pulled form under or be crushed by the load.

Overhead Work

All supervisors must take precautions to warn and protect fellow workers who may be endangered by overhead work. Cordoning off of the zone below the work area and the posting danger signs or a watch person is required.

***Designated Substances* - eg: Lead, Silica, Biological Agents**

- The existence of a designated substance in the workplace will require appropriate protective measures to be taken in accordance with regulatory requirements.
- The supervisor will determine the proper respiratory and clothing protection to be used by workers and ensure all workers in the area use this protective equipment. Safety Data Sheets will be made available to workers if coming into contact with harmful substances.

Hot Work Permits

Before proceeding with any open flame operation, including torch cutting or welding, all workers must check with Cannington Construction Limited supervisor for permits to determine if hot work permits are required.

Power Elevating Platforms

- All power elevated work platforms shall be thoroughly inspected and certified by a licensed mechanic as being safe to operate. The mechanic will place a service tag at the machine's controls, indicating his name and the date of the most recent inspection and approval.
- All other relevant documentation shall be physically present on the machine.
- ie - manufacturer's operational manual, certificate of authorization and maintenance records/logs.
- The supplier shall have a competent person provide instruction, demonstrations and training on the safe use of the machine to those workers who will operate it.

- Workers shall wear a full body harness & shock absorbing lanyard attached to platform during the machine's operation. When it is in motion.
- All operators shall conduct a daily maintenance and safety check prior to operating any power elevated work platform.

Temporary lighting

- All areas under worker's activity must be adequately lit. All light bulbs in the temporary lighting system must be protected by mechanical enclosure.
- Temporary electrical panels
- Temporary electrical panels must be mounted on the vertical surface, accessible, free of water and all energized parts protected.
- Dust control
- Where dissemination of the dust may pose a hazard to the workers, dust control method must be implemented.

SMOKING POLICY

The purpose of this policy is to restrict smoking in the workplace. The "Smoking in the Workplace Act "(R.S.O. 1990, cS.13) sets out clear restrictions on smoking in the workplace. "Smoking" – includes carrying a lighted cigar, cigarette or pipe and "smoke" has a corresponding meaning. "Enclosed Workplace" – means an enclosed building or structure in which an employee works and includes a shaft, tunnel, caisson or similar enclosed spaces. Although smoking will not be totally prohibited, it will be restricted to certain areas outlined below.

Smoking is NOT permitted in:

- private or enclosed offices, confined office or plant areas
- enclosed operating pulpits
- confined office or plant work areas
- excavations, trenches, caissons, tunnels
- areas of general access, i.e.: lobbies, stairways, reception areas, elevators and hallways
- training rooms, meeting rooms, and classrooms
- washroom facilities and change rooms
- lunch rooms and cafeterias
- areas designated by the Occupational Health and Safety Legislation
- other "No Smoking" areas as designated by Cannington Construction Limited and any enclosed equipment operating cabs

Smoking MAY BE permitted only in areas designated by **Cannington Construction Limited** Supervisor.

MP3 PLAYERS/PERSONAL RADIOS/EAR BUDS

MP3 players/personal radios/ear buds, may appear to cause no form of a safety hazard on a project. However, the sound levels these devices produce can exceed 90 dBa's, given the levels of background noise the sound levels (volume) may be increased to dangerously high levels resulting in hearing loss. Furthermore, the earphones don't provide any form of hearing protection from background noise, thus only adding to the risk of noise induced hearing loss. Perhaps the most significant hazard is the masking of warning sounds from fellow workers. Thus, these types of personal devices are not permitted in the construction area. As far as office use, ear buds will only be permitted if used for on-line training purposes where without use, would cause a distraction to others.

CELL PHONE POLICY

Use of cell phones during work hours is limited to the following circumstances:

- Emergency calls (911, Head Office, MOL, Supervisor etc.)
- Calls of any other nature outgoing or incoming must be handled during breaks or lunch time in designated areas where the caller/recipient is not distracted or distracting others causing unsafe circumstances to arise.

Exception to the rule is only possible upon permission of immediate supervisor or management.

FIRE PROTECTION

- Localized or minor fires may be handled by trade workers, trained in how to properly use fire extinguishing equipment.
- Fire extinguishers shall be readily available near all open-flame operations, including welding operations, fuel fired equipment, where combustible or flammable liquids are stored, handled or used, and at each workshop of 300 or fewer square meters of floor area.
- All trades to comply.
- Fire extinguishers are to be marked with their appropriate manufacturer symbols.
- Designating its class and use and its WHMIS/GHS supplier label.
- These fire extinguishers are to be routinely inspected on a monthly basis and tagged as such, indicating the date of inspection and by whom.
- 4A40BC class fire extinguishers are required.
- Each company vehicle must be equipped with fire extinguisher.
- Hot work permit must be applied and approved by supervisor to all hot work to control fire hazard.

CLASSIFICATION OF DRY CHEMICAL FIRE EXTINGUISHERS

Class A: *Ordinary combustibles such as wood, cloth, paper, rubber, and many plastics.*

Class B: *Flammable liquids such as gasoline, oil, grease, tar, oil-based paint, lacquer, and flammable gas.*

Class C: *Energized electrical equipment including wiring, fuse boxes, circuit breakers, machinery, and appliances.*

WORKING AT HEIGHTS

Ministry of Labour has introduced new standards and requirements for working at heights training for workers on construction projects. Falls from heights are a major hazard for workers and are one of the leading causes of critical injuries and fatalities in Ontario workplaces. This change focuses on the construction sector because the number of fatalities due to falls from heights on construction projects is disproportionally large compared to other workplaces. Employers, supervisors and workers will all benefit from the implementation of the working at heights training standards because they set a minimum standard for high quality, consistent training for the high-hazard activity of working at heights. The Occupational Health and Safety Awareness and Training (O. Reg. 297/13) will require employers to ensure that workers on construction projects successfully complete a working at heights training program if they use specified fall protection systems. The program must be approved by the Chief Prevention Officer (CPO) and must be delivered by a training provider approved by the CPO. As of April 1, 2015 [the new training requirements is mandatory for workers on construction projects who use any of the following methods of fall protection:

- travel restraint system
- fall restricting system
- fall arrest system
- safety net
- work belt or
- safety belt

The new requirements must be met in addition to existing training requirements for workers who use fall protection systems on construction projects, as set out in the Construction Projects Regulation (O. Reg. 213/91). Subject to the transition provisions – see question below

When do the new mandatory working at heights training requirements come into force?

The new mandatory working at heights training regulatory requirements come into force on April 1, 2015. However, a two-year transition period will apply to workers who received adequate training in the use of fall protection systems, as required by Section 26.2 of the Construction Projects Regulation, prior to April 1, 2015.

Who will need to complete the new mandatory working at heights training?

Workers on construction projects must successfully complete the training if they are required by the Construction Projects Regulation to use a:

- travel restraint system
- fall restricting system
- fall arrest system
- safety net
- work belt or
- safety belt

Workers have an additional two years to complete the new working at heights training if they received training, prior to April 1, 2015, that meets the current training requirements, in Section 26.2 of the Construction Projects Regulation. Employers would need to ensure workers who complete an approved working at heights training program also complete any training currently required by the Construction Projects Regulation. The new working at heights training requirements applies only to workers who are required by the Construction Projects Regulation to use any of the following methods of fall protection:

- travel restraint system
- fall restricting system
- fall arrest system
- safety net
- work belt or
- safety belt

Whether a particular activity is considered to be maintenance or construction will continue to be determined on a case-by-case basis, subject to specific workplace conditions and an initial assessment of the situation. The training is valid for three years from the date of successful completion of an approved program.

FALL PREVENTION & PROTECTION COMPLIANCE REQUIREMENTS

WARNING! - No worker shall be exposed to heights greater than three meters (10 feet) when near an unguarded edge to a floor, roof, platform or opening. Any person not complying shall be subjected to immediate stop work and disciplinary action. Fall protection is also required if a worker may fall into operating machinery, into water or other liquids, into or onto hazardous substances or objects regardless of height.

EQUIPMENT STANDARDS AND SET-UP

All fall protection system components used must carry a C.S.A. label and meet the C.S.A. National Standards of Canada standards as stated in Section 26.1 (3) of the Ontario safety regulations for Construction Projects - June 2010 edition. The lanyard or lifeline/lanyard combination must be secured to a permanent or temporary fixed support capable of resisting a static force 3600 to 5000 lbs for fall arrest (without a shock absorber) and 2700 lbs for fall arrest (with a shock absorber), 2700 lbs for fall restriction protection and a minimum of 900 lbs for travel restraint use. The makeup and adjustment of the fall protection system must not subject the wearer who falls, to a peak arrest force greater than 1800 lbs.

LIFELINES AND THEIR SET-UP

All lifelines shall be:

- 16 millimeters (5/8") diameter polypropylene or equivalent.
- used only by one worker at a time.
- free of any cuts, abrasions, other defects and protected against chaffing.
- long enough to reach the ground or be knotted at the end.
- connected at right angles to the worker's position.
- provided with a rope grab (cam lever) device of lanyard attachment.

TRAVEL RESTRAINT PROTECTION

This is the second preferred method of fall prevention, as this setup prevents a worker to reaching an unguarded edge, such as a typical floor slab exposure. This consists of a suitable anchorage point capable of resisting a static force load of 900 lbs. Although the applicable legislation allows for waist type belts it is the policy of Cannington Construction Limited to require all workers to wear and use - FULL BODY HARNESSES ONLY! This system must be adjusted so the worker cannot reach an exposed edge, therefore if he or she should trip or lose their balance they will fall on the work surface.

Note: All workers should set up for Travel Restraint Protection if at all possible. Fall arrest setups should only be used as a last resort.

FALL ARREST PROTECTION

In the normal course of setting up for Fall Arrest protection where a worker is not at risk of "Bottoming Out" - that is hitting an object, level or ground below the work, it is expected that a Shock Absorber Device will be part of the worker's fall arrest equipment setup. Shock absorber devices assist in limiting the peak arrest forces applied the wearer in a fall to 1800 lbs or less. However, if a risk of "Bottoming out" exists, the following applies:

EXCEPTION RULING - REMOVAL OF SHOCK ABSORBER DEVICE!

Section 26.6 (4) of OH & S Regulations states that the fall arrest system shall not include a shock absorber device, if wearing or using one could cause a worker to hit the ground, an object or level below the work. Without the use of a shock absorber device, we expect the wearer to shorten up on his or her system components in order to minimize the amount of free fall.

FALL RESTRICTION PROTECTION

This consists of an assembly of components that is attached to an adequate fixed support on the project and is designed and arranged in accordance with the manufacturer's instructions, so that a worker's fall distance does not exceed 0.6 meters [2 feet].

TEMPORARY OR PERMANENT ANCHORS

All designated anchor points must be predetermined by competent and qualified person and meet the requirements under OHSA and regulations as well as Ontario Building Code. A permanent anchor system shall be used as the fixed support in a fall arrest system, fall restricting system or travel restraint system if the following conditions are met:

- The anchor system has been installed according to the Building Code.
- It is safe and practical to use the anchor system as the fixed support.

If the conditions set out in subsection (1) are not met, a temporary fixed support shall be used that meets the following requirements:

- A support used in a fall arrest system shall be capable of supporting a static force of at least 8 kilonewtons without exceeding the allowable unit stress for each material used.

- If a shock absorber is also used in the fall arrest system, the support shall be capable of supporting a static force of at least 6 kilonewtons without exceeding the allowable unit stress for each material used.
- A support used in a fall restricting system must be capable of supporting a static force of at least 6 kilonewtons without exceeding the allowable unit stress for each material used.
- Paragraph 3 does not apply to a support that is used in accordance with the manufacturer's written instructions and is adequate to protect a worker.
- A support used in a travel restraint system shall be capable of supporting a static force of at least 2 kilonewtons without exceeding the allowable unit stress for each material used.
- Despite the requirements listed in subsection (2), the support capacity of a temporary fixed support used in a fall protection system may be determined by dynamic testing in accordance with good engineering practice to ensure that the temporary fixed support has adequate capacity to arrest a worker's fall.
- A fixed support shall not have any sharp edges that could cut, chafe or abrade the connection between it and another component of the system. O. Reg. 145/00, s. 14.

REQUIREMENTS OF THE HORIZONTAL LIFE-LINE SYSTEMS

The following requirements apply to a horizontal lifeline system:

- It shall be designed by a professional engineer in accordance with good engineering practice.
- The design may be a standard design or a custom design.
- The design shall, show the arrangement of the system including the anchorage or fixed support system, indicate the components used, state the number of workers that can safely be attached to it, set out instructions for installation or erection, and show the design loads for the system.
- The system shall be installed or erected, and maintained, in accordance with the professional engineer's design.
- Before each use, the system shall be inspected by a professional engineer or a competent worker designated by a supervisor.
- The constructor/Employer shall keep the design at the project while the system is in use.

GUARDRAIL PROTECTION

- Guardrails consisting of a top rail, middle rail and toe board must be provided around work platforms, ramps, and open areas where a worker can fall from one level to another.
- Temporary removal of a guardrail by workers in order to perform work, will require the worker(s) to protect themselves by use of either travel restraint or fall arrest protection methods and take appropriate measures to cordon off the work area and post signs warn others to stay clear.
- The guard railing must be re-installed once the work is completed.
- Temporary guard rail system must be installed in accordance with s. 26.3 of OH & S Act and Regulations.
- Guardrails shall be installed on top of excavation walls that are 1.8 m deep.

COVERINGS OVER OPENINGS

- It is generally expected that openings are to be guard railed if at all possible.
- When coverings are required however, planking laid tightly side by side shall be the material of choice, or such material suitable to support and resist all anticipated loads with a minimum live load resistance of 50 lbs per square foot.
- Treat all coverings to openings as flooring and set your supports on edge (treated like a joist). This adds strength to the covering.
- All coverings must be securely fastened, fully cover the openings and marked [INDENTIFIED AS A COVERING], to prevent accidental removal.
- All coverings should be marked "DANGER-OPENING – DO NOT REMOVE COVER".

EMERGENCY RETRIEVAL PROCEDURES FOR RESCUE OF A WORKER SUSPENDED ON A FALL ARREST SYSTEM

Generic Retrieval Plan only – must be customized to each project!

In the event a worker falls and is arrested by fall arrest system, it is imperative that the following rescue procedures be taken to retrieve this worker within 12 minutes from the time of suspension. Being suspended for prolonged durations beyond fifteen minutes could cause serious internal injury to the worker.

Communication:

All workers will be informed of these procedures and the crew foreman will organize the rescue process. Hand held radios or telephones should always be available by crew supervisors to notify the constructor of a fall arrest event.

Retrieval Procedures:

- Emergency facilities, including site safety personnel shall be immediately notified when a worker has fallen and is suspended by his/her fall arrest system.
- All work is to be suspended in the area near the fallen worker, until such time as the worker has been rescued and the fall event has been fully investigated.
- Where possible, the suspended worker is to be secured by secondary means of support (another lifeline, rope, etc.).
- One person is to be designated to remain in constant contact with the fallen worker, and shall continuously monitor the fallen worker's condition and maintain contact with the rescue team. This designated person shall be tied off through the use of appropriate fall protection equipment and shall at no time exposed herself/himself to the hazard of falling.

- The fallen worker shall NOT attempt to release, or disable the descent control device, or shall attempt self-rescue.

Power elevating work platforms:

In the event that there is a power elevating platform available on the project, (of sufficient capacity and reach) the operator will be summoned to position the power lift device directly underneath the suspended worker and raise the platform slowly so as to land the suspended worker onto the platform.

Crane with approved man basket:

- A crane equipped with an approved "man basket" may be utilized to rescue the fallen worker, provided that the rescuer is properly secured utilizing double lanyards connected to the platform of the basket.
- The rescuer should be equipped with a First Aid Kit and be a qualified first aider who can render treatment if necessary to a suspended worker.
- The worker, once he/she has been recovered, shall be immediately removed to the nearest health care facility or medical attention.
- No work may commence until all investigations have been completed, and where required, recommendations implemented to prevent a recurrence.
- All components of the fall arrest system involved in arresting the worker in the fall shall be gathered and taken out of service.
- This equipment (used in the fall arrest event), shall only be reused once it has passed the manufacturer's tests and approvals for reuse.

Ladders

In the event that there is no power elevating work platform or crane equipped with a retrieval "man basket" available on the project, an extension ladder, suitable to reach the necessary height, will always be made available at the workplace. At least two workers will be summoned by the crew foreman to assist in securely setting up a ladder beside the worker suspended on his/her lifeline. The suspended worker will be asked to mount this ladder from his suspended position and fellow workers will hold the ladder stable for this purpose.

Extreme Heights

In this situation, only a crane of sufficient capacity and reach, equipped with an approved man basket or other retrieval device, or a properly equipped fire rescue vehicle equipped with an extension ladder of sufficient reach (outside of fire rescue service authorities), is to be used. Should the heights involved cannot be reached by the equipment on site, the local Fire Department should be called in to assist in the rescue.

Rescue team co-ordination

One person must be designated as the team co-coordinator ("person in charge”) and should have a thorough understanding of the retrieval procedures to follow. All persons assisting in the rescue shall co-ordinate their efforts through the direction given by the Team Co-coordinator. There must be verification of the crane operator's knowledge and understanding of the rescue requirements, and this should apply to all crane operators working on the construction

project. Meetings should be held to convey these rescue and retrieval procedures to all persons who may possibly be involved in the rescue.

TRAFFIC CONTROL PLANNING FOR THE PROJECT

At Cannington Construction Limited projects, our project supervisors must devise a traffic control measures (plan) to address any construction activity that may:

Jeopardize workers within the project due to vehicular activity such as trucks backing up or maneuvering within the project.

- Jeopardize the public or visitors.

Such traffic control measures, including mandatory use of reflective vests should be prepared as a written plan and kept on the project for M.O.L. inspector review. Training in traffic control on public roads and in traffic signaling for trucks backing up on our projects must be provided to ensure those workers assigned to such tasks, are competent. Stop – Slow signs, two-way radios and reflective vest must be made available for traffic control personnel. All traffic control personnel must work in compliance within the training guide lines of Book 7 (Temporary Conditions, MOT) and ensure that single traffic control person controls one lane of traffic only. Local city officials need to be contacted for permits if construction traffic will delay or obstruct public way. Paid duty police officers may be notified to assist with traffic control on the city street. Critical considerations in hazard control:

- Reversing on the project must be eliminated or minimized
- Where reversing required – spotter/signal man is mandatory
- "DANGER DUE TO REVERSING" signs must be posted in locations of reversing activity and at the entrance to the project.
- Spotter/signal man must be competent/trained and wear reflective tear away vest.
- Spotter/signalman shall communicate /discuss signals with the equipment/vehicle operator prior to signaling.

ON-SITE SIGNALLING PROCEDURES

ON PROJECT

Workers could be at risk of contact by vehicular equipment such as tractor trailers and dumpster vehicles maneuvering in position.

DRIVER RESPONSIBILITY

- The necessity of vehicles having to operate in reverse on our projects will be minimized as much as possible.
- Reversing to be kept minimal
- Operators will be expected to maneuver into position in forward direction as much as practicable.
- Driver to ensure that they have a functional backup alarm system.
- No vehicular equipment operator shall back up his vehicle until he is directed by a competent signal person.
- The driver must strictly follow the direction/signals of the signaler.

COMPETENT SIGNALER – COMMUNICATION WITH DRIVER

When vehicular equipment arrives on site, the grounds attendant or another worker [who will be competent signalers] designated by the crew foreman shall contact the driver of the vehicle and discuss the situation and agree upon pre-arranged hand signals, blind spots and the maneuvering procedures necessary.

SIGNALER POSITIONING & REQUIRED RETRO-REFLECTIVE GARMENTS

- The signaler shall position himself or herself clear of the vehicle's intended path of travel and shall be in full view of the operator and shall have a clear view of the intended path of travel. The signaler shall pay particular attention to watching the part(s) of the vehicle that the operator cannot see.
- The signaler shall wear a retro-reflective vest in addition to his/her other personal protective equipment.

ESTABLISHING EYE CONTACT

All tradesmen who may be in the area, will be reminded, by the crew supervisor or signaler, to establish eye contact with the vehicular equipment operator before attempting to encroach upon the operator's travel zone and before crossing the operator's path of travel. The signaler should also be made aware of such attempts.

TRAFFIC CONTROL MEASURES

If necessary, designated route ways will be established for tradesmen or vehicle work zones will be cordoned off with caution tape and warnings signs, to alert and restrict movement of tradesmen.

HEAT STRESS – HOW TO PREVENT HEAT ILLNESS

- Supply adequate water and encourage workers who work in hot weather to drink regularly, even when not thirsty. A small amount of water every 15 minutes is recommended rather that a large amount after hours of sweating.
- Learn the signs and symptoms of heat-related illness.
- Inform workers they should avoid alcohol or drinks with caffeine before or during work in hot weather.
- Try to do the heaviest work during the cooler parts of the day.
- Adjusting to work in heat takes time. Allow workers to acclimatize. Start slower and work up to your normal pace.
- Wear lightweight, loose-fitting, light-colored, breathable (e.g. cotton) clothing and a hat.
- Allow workers to take regular breaks from the sun. Loosen or remove clothing that restricts cooling.
- Watch workers for symptoms of heat-related illness. This is especially important for non-acclimatized workers, those returning from vacations and for all workers during heat-wave events.
- If exertion causes someone's heart to pound or makes them gasp for breath, become lightheaded, confused, weak or faint, they should STOP all activity and get into a cool area or at least into the shade, and rest.

The two major heat-related illnesses are heat exhaustion and heat stroke. Heat exhaustion, if untreated, may progress to deadly heat stroke. Heat stroke is very dangerous and frequently fatal. If workers show symptoms, always take this seriously and have them take a break and cool down before returning to work. Stay with them. If symptoms worsen or the worker does not recover within about 15 minutes, call 911 and have them transported and medically evaluated. Do not delay transport.

Heat Stroke or Heat Exhaustion? - How to tell the difference.

The telling difference is mental confusion or disorientation in ALL heat stroke victims

You can ask these 3 questions: What is your name? What day is this? Where are we? If a worker can't answer these questions, assume it is heat stroke.

What are the symptoms of heat exhaustion and heat stroke?

Heat Exhaustion	Heat Stroke
• **Heavy sweating** • **Exhaustion, weakness** • **Fainting / Light-headedness** • **Paleness** • **Headache** • **Clumsiness, dizziness** • **Nausea or vomiting** • **Irritability**	• **Sweating may or may not be present** • **Red or flushed, hot dry skin** • **Any symptom of heat exhaustion but more severe** • **Confusion / Bizarre behavior** • **Convulsions before or during cooling** • **Collapse** • **Panting/rapid breathing** • **Rapid, weak pulse** • **Note: May resemble a heart attack**

What to do if someone is suffering from heat exhaustion or heat stroke?

Heat Exhaustion	Heat Stroke (medical emergency)
• Move the worker to a cool, shaded area to rest; do not leave them alone. **• Loosen and remove heavy clothing that restricts evaporative cooling.** **• Give cool water to drink, about a cup every 15 minutes.** **• Fan the worker, spray with cool water, or apply a wet cloth to their skin to increase evaporative cooling.** **• Recovery should be rapid. Call 911 if they do not feel better in a few minutes.** **• Do not further expose the worker to heat that day. Have them rest and continue to drink cool water or electrolyte drinks.**	**• Get medical help immediately, call 911 and transport as soon as possible.** **• Move the worker to a cool, shaded area and remove clothing that restricts cooling.** **• Seconds count – Cool the worker rapidly using whatever methods you can. For example, immerse the worker in a tub of cool water; place the worker in a cool shower; spray the worker with cool water from a garden hose; sponge the worker with cool water; or, if the humidity is low, wrap the worker in a cool, wet sheet and fan them vigorously. Continue cooling until medical help arrives.** **• If emergency medical personnel are delayed, call the hospital emergency room for further instruction.** **• Do not give the worker water to drink until instructed by medical personnel.**

HEAT STRESS CHECK LIST

- Does the worksite have temperature extremes (above 85 degrees in higher humidity, above 90-95 degrees in lower humidity) that may cause heat stress?
- Do employees do heavy labor or wear heavy protective clothing? (Increases heat stress conditions)
- Do employees have access to adequate drinking water at all times?
- Are employees allowed work breaks during prolonged heavy labor?
- Do workers have access to shade during breaks?
- Have employees been trained on the symptoms of heat-related illness (heat exhaustion and heat stroke)?
- Are employees trained on first aid measures for heat-related illness?

COLD EXPOSURE

CORE TEMPERATURE

The body tries to maintain an internal (core) temperature of approximately 37ºC (98.6ºF). This is done by reducing heat loss and increasing heat production. Under cold conditions, blood vessels in skin, arms, and legs constrict, decreasing

blood flow to extremities. This minimizes cooling of the blood and keeps critical internal organs warm. At very low temperatures, however, reducing blood flow to the extremities can result in lower skin temperature and higher risk of frostbite.

WIND-CHILL

Wind-chill involves the combined effect of air temperature and air movement. Wind-chill cooling rate is defined as heat loss (expressed in watts per meter squared) resulting from the effects of air temperature and wind velocity upon exposed skin. The higher the wind speed and the lower the temperature in the work environment, the greater the insulation value of the protective clothing required. Chart 1 compares the effects of air temperatures with and without wind. For example, when the air temperature is -28.9*C (-20*F) there is little danger of flesh freezing with no wind, increased danger with a wind of 8 km/h, and extreme danger with a wind of 32 km/h or more. When air speed and temperature produce a chill temperature of -32*C (-25.6*F), continuous skin exposure should not be permitted. Unprotected skin will freeze only at temperatures below -1šC (30.2*F), regardless of wind speed.

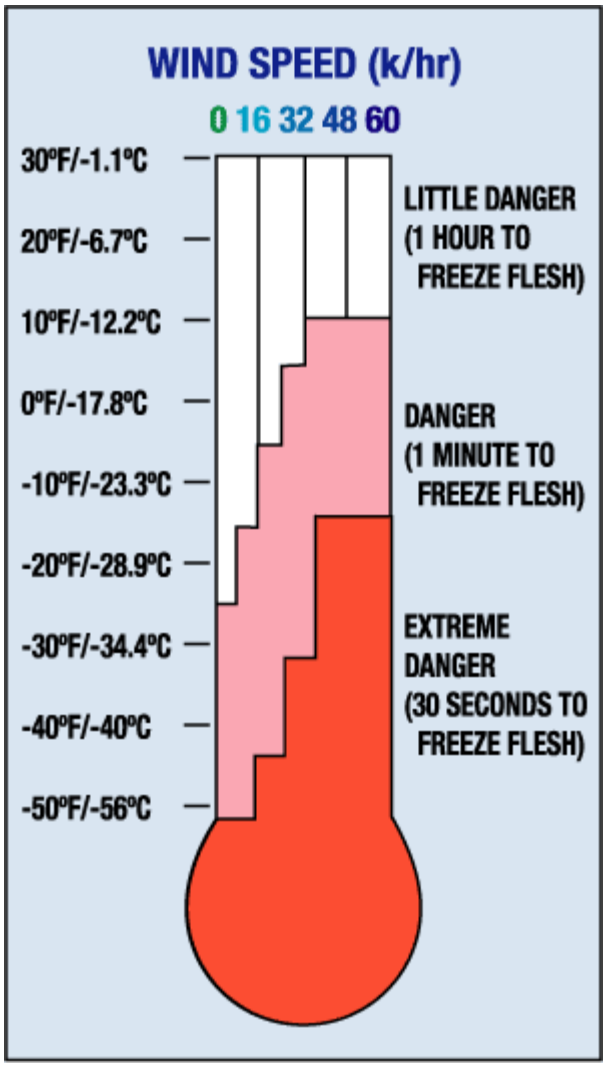


Chart 1: Wind-Chill Dangers

When weather information is not available, the following signs may help to estimate wind speeds in the field:

8 km/hr (5 mph) light flag just moves

16 km/h (10 mph) light flag is fully extended by the wind

24 km/hr (15 mph) raises a newspaper sheet off the ground

32 k/hr (20 mph) wind capable of blowing snow.

Exposure to cold causes two major health problems: hypothermia and frostbite.

HYPOTHERMIA - Signs and Symptoms

When the body can no longer maintain core temperature by constricting blood vessels, it shivers to increase heat production. Maximum severe shivering develops when the body temperature has fallen to 35ºC (95ºF). The most critical aspect of hypothermia is the body's failure to maintain its deep core temperature. Lower body temperatures present the following signs and symptoms:

- persistent shivering-usually starts when core temperature reaches 35ºC (95ºF)
- irrational or confused behavior
- reduced mental alertness
- poor coordination, with obvious effects on safety
- reduction in rational decision-making.
- In addition, acute exertion in cold can constrict blood vessels in the heart. This is particularly important for older workers or workers with coronary disease, who may have an increased risk of heart attack.

HYPOTHERMIA - Stages

Mild

Early signs of hypothermia include;

- shivering
- blue lips and fingers
- poor coordination.

Moderate

- The next stage includes
- mental impairment
- confusion
- poor decision-making
- disorientation
- inability to take precautions from the cold
- heart slowdown
- slow breathing.

Severe

In severe cases, hypothermia resembles death. Patients must be treated as though they are alive.

Symptoms of severe hypothermia include;

- unconsciousness
- heart slowdown to the point where pulse is irregular or difficult to find
- no shivering
- no detectable breathing.

HYPOTHERMIA - First Aid

- Stop further cooling of the body and provide heat to begin rewarming.
- Carefully remove casualty to shelter. Sudden movement or rough handling can upset heart rhythm.
- Keep casualty awake.
- Remove wet clothing and wrap casualty in warm covers.
- Rewarm neck, chest, abdomen, and groin--but not extremities.
- Apply direct body heat or use safe heating devices.
- Give warm, sweet drinks, but only if casualty is conscious.
- Monitor breathing. Administer artificial respiration if necessary.
- Call for medical help or transport casualty carefully to nearest medical facility.

FROSTBITE - Signs and Symptoms

Frostbite is a common injury caused by exposure to severe cold or by contact with extremely cold objects. Frostbite occurs more readily from touching cold metal objects than from exposure to cold air. That's because heat is rapidly transferred from skin to metal. The body parts most commonly affected by frostbite are face, ears, fingers, and toes. When tissue freezes, blood vessels are damaged. This reduces blood flow and may cause gangrene. Frostbite symptoms vary, are not always painful, but often include a sharp, prickling sensation. The first indication of frostbite is skin that looks waxy and feels numb. Once tissues become hard, the case is a severe medical emergency. Severe frostbite results in blistering that usually takes about ten days to subside. Once damaged, tissues will always be more susceptible to frostbite in future.

FROSTBITE - First Aid

- Warm frostbitten area gradually with body heat. Do not rub.
- Don't thaw hands or feet unless medical aid is distant and there is no chance of refreezing. Parts are better thawed at a hospital.
- Apply sterile dressings to blisters to prevent breaking.
- Get medical attention.

RISK FACTORS

- Various medical conditions can increase the risk of cold injury:
- heart disease
- asthma/bronchitis
- diabetes
- vibration/white finger disease.

- Check with your health practitioner to learn whether medications you are taking may have adverse effects in a cold environment.

CONTROLS

The best protection against cold-related health risks is to be aware and be prepared. Workers should recognize the signs and symptoms of overexposure in themselves and others. Pain in the extremities may be the first warning sign. Any worker shivering severely should come in out of the cold.

General

- Ensure that wind-chill factor is understood by workers, especially those working on bridges or out in the open on high buildings.
- Ensure that workers are medically fit to work in excessive cold, especially those subject to the risk factors highlighted above.
- Make sure that workers understand the importance of high-caloric foods when working in cold environments. Warm sweet drinks and soups should be arranged at the work site to maintain caloric intake and fluid volume. Coffee should be discouraged because it increases water loss and blood flow to extremities.
- Personnel working in isolated cold environments, whether indoors or outdoors, should have backup.
- Provide hot drinks and regular breaks under extremely cold working conditions.

Clothing

- Select protective clothing to suit the cold, the job, and the level of physical activity.
- Wear several layers of clothing rather than one thick layer. Air captured between layers acts as an insulator.
- Wear synthetic fabrics such as polypropylene next to the skin because they whisk away sweat. Clothing should not restrict flexibility.
- If conditions are wet as well as cold, ensure that the outer clothing worn is waterproof or at least water-repellent. Wind-resistant fabrics may also be required under some conditions.
- At air temperatures of 2ºC (35.6ºF) or less, workers whose clothing gets wet for any reason must be immediately given a change of clothing and be treated for hypothermia.
- Encourage the use of hats and hoods to prevent heat loss from the head and to protect ears. Balaclavas or other face covers may also be necessary under certain conditions.
- Tight-fitting footwear restricts blood flow. Footwear should be large enough to allow wearing either one thick or two thin pairs of socks. Wearing too many socks can tighten fit and harm rather than help.
- Workers who get hot while working should open their jackets but keep hats and gloves on.

Shelter

- For work performed continuously in the cold, allow rest and warm-up breaks. Heated shelters such as trailers should be available nearby.
- Encourage workers to use these shelters at regular intervals depending on wind-chill factor.
- Workers showing signs of shivering, frostbite, fatigue, drowsiness, irritability, or euphoria should immediately return to the shelter.
- Workers entering the shelter should remove their outer layer of clothing and loosen other clothing to let sweat evaporate. In some cases, a change of clothing may be necessary.

TRAINING

Before working in extreme cold, workers should be instructed in safety and health procedures. Training should cover;

- proper clothing and equipment
- safe work practices
- guidelines for eating and drinking
- risk factors that increase the health effects of cold exposure
- how to recognize signs and symptoms of frostbite
- how to recognize signs and symptoms of hypothermia
- appropriate first aid treatment, including re-warming procedures.

Hand Protection

- Manual dexterity is essential to safety and production.
- Fine work performed with bare hands for more than 10-20 minutes in an environment below 16ºC (60.8ºF) requires special measures to keep workers' hands warm. These measures may include warm air jets, radiant heaters (fuel burning or electric), or contact warm plates.
- Metal handles of tools and control bars should be covered by thermal insulating material for temperatures below -1ºC (30.2ºF).
- Workers should wear gloves where fine manual dexterity is not required and the air temperature falls below 16ºC (60.8ºF) for sedentary, 4ºC (39.2ºF) for light, and -7ºC (19.4ºF) for moderate work.
- To prevent contact frostbite, workers should wear insulated gloves when surfaces within reach (especially metallic surfaces) are colder than -7ºC (19.4ºF). Warn workers to avoid skin contact with these surfaces.
- Tools and machine controls to be used in cold conditions should be designed for operation by gloved hands.

LADDER SAFETY

INSPECTION

When should you inspect ladders?

- Inspect new ladders promptly upon receipt.
- Inspect ladders before each use.
- Check the condition of ladders that have been dropped or have fallen before using them again.
- What should you look for when inspecting any ladder?
- missing or loose steps or rungs (they are loose if you can move them by hand)
- damaged or worn non-slip feet
- loose nails, screws, bolts or nuts
- loose or faulty spreaders, locks, and other metal parts in poor repair
- rot, decay or warped rails in wooden ladders
- cracks and exposed fiber glass in fiber glass ladders

- cracked, split, worn or broken rails, braces, steps or rungs
- sharp edges on rails and rungs
- rough or splintered surfaces
- corrosion, rust, oxidization and excessive wear, especially on treads
- twisted or distorted rails. Check ladders for distortion by sighting along the rails. Using a twisted or bowed ladder is hazardous.
- missing identification labels

What other things should I look for when inspecting stepladders?

- wobble
- loose or bent hinges and hinge spreaders
- broken stop on a hinge spreader

What should you look for when inspecting extension ladders?

- loose, broken or missing extension locks
- defective locks that do not seat properly when ladder is extended
- sufficient lubrication of working parts
- defective cords, chains and ropes
- missing or defective pads or sleeves

What should you do after inspecting any ladder?

- Tag any defective ladders and take them out of service.
- Clean fiber glass ladders every three months. Spray lightly with a clear lacquer or paste wax.
- Protect wooden ladders with a clear sealer or wood preservative.
- Replace worn or frayed ropes on extension ladders.
- Lubricate pulleys on extension ladders regularly.

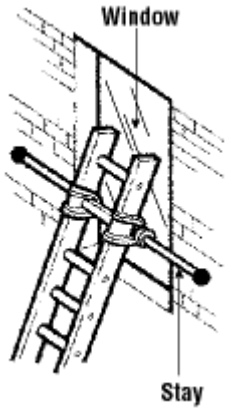
What are some things you should <u>not</u> do after inspecting ladders?

- Do not make temporary or makeshift repairs.
- Do not try to straighten or use bent or bowed ladders.

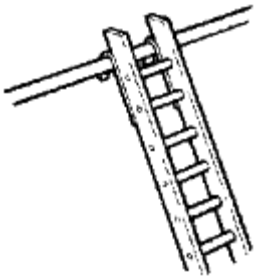
SECURING

How do you secure portable ladders?

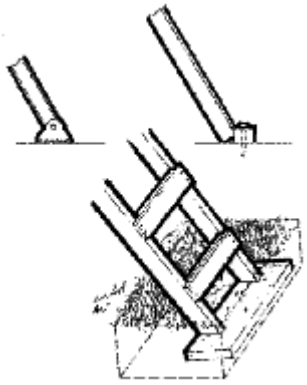
1. Rest the top of the ladder against a solid surface that can withstand the load.
2. Attach a ladder stay across the back of a ladder where a surface cannot stand the load. Extend the stay across a window for firm support against the building walls or window frame.
3. Guard or fence off the area around a ladder erected in an area where persons have access.
4. Secure the ladder firmly at the top to prevent it from slipping sideways or the foot from slipping outwards.
5. Station a person at the foot of a ladder when it is not possible to tie at the top or secure it at the foot. This is effective only for ladders up to 5 m (16 ft.) long.



6. Ensure that the person at the foot of the ladder faces the ladder with a hand on each side rail and one foot resting on the bottom rung.
7. Attach hooks on top of ladder rails where ladder is to be used at a constant height.



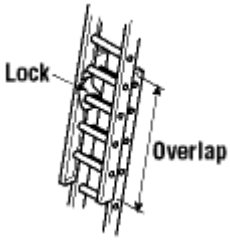
8. Do not rest a ladder on any rung. Only the side rails are designed for this purpose.
9. Secure the base of a ladder to prevent accidental movement. Securing a ladder at the foot does not prevent a side slip at the top.
10. Use ladders equipped with non-slip feet. Otherwise nail a cleat to the floor or anchor the feet or bottom of the side rails.



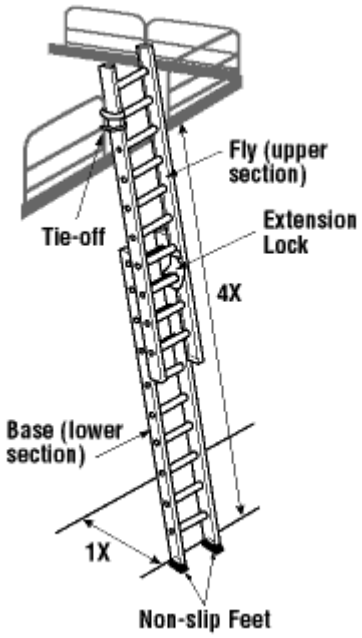
LADDERS – EXTENSION

What should you do to secure safety when using extension ladders?

1. Place ladders on a firm, level surface and ensure the footing is secure.
2. Erect extension ladders so that the upper section rests on (e.g., in front of) the bottom section. This means the bottom section "faces" a wall or other supporting surface (see figures below).
3. Place the ladder feet so that the horizontal distance between the feet and the top support is ¼ of the working length of the ladder. The ladder will be leaning at a 75° angle from the ground.



4. Raise and lower ladders from the ground. Ensure that locking ladder hooks are secure before climbing.
5. Erect ladders so that a minimum of 1 m (3 ft) extends above a landing platform. Tie the top at support points.
6. Where a ladder cannot be tied off at the top, station a person at the foot to prevent it from slipping. This method is only effective for ladders up to 5 m (16 ft) long. The person at the foot of the ladder should face the ladder with a hand on each side rail and with one foot resting on the bottom rung.
7. Leave all tie-off devices in place until they must be removed before taking the ladder down.
8. Maintain the minimum overlap of sections as shown on a ladder label. Refer to safety regulations.



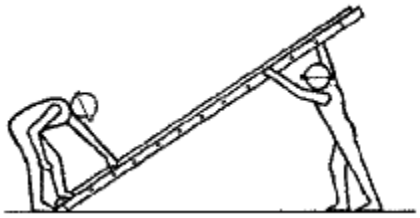
What should you avoid when using extension ladders?

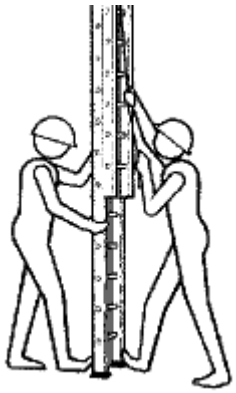
- Do not use ladders near electrical wire.
- Do not set up or take a ladder down when it is extended.
- Do not overextend. Maintain minimum overlap of sections.
- Do not climb higher than the fourth rung from the top of a ladder.
- Do not use ladders on ice, snow or other slippery surfaces without securing ladders' feet.
- Do not extend top section of a ladder from above or by "bouncing" on a ladder.
- Do not leave ladders unattended.

What should you do to avoid overexertion while setting up an extension ladder?

When setting up an extension ladder, use the following method to avoid straining muscles or losing control of a ladder. With ladders weighing more than 25 kg (55 lbs), or where conditions complicate the task, have two persons set up a ladder, step by step, as follows:

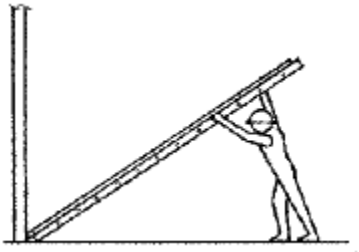
- Lay a ladder on the ground close to intended location.
- Brace ladder base using helpers' feet.
- Grasp the top rung with both hands, raise the top end over your head and walk toward the base of a ladder. Grasp the centre of the rungs to maintain stability.
- Move the erect ladder to the desired location. Lean it forward against the resting point.

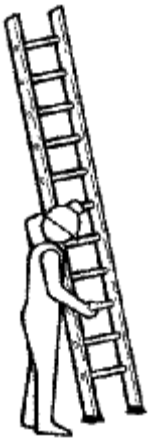




One person can erect a short ladder, step by step as follows:

- Place the bottom of a ladder firmly against the base of a building or stationary object.
- Lift the top of ladder and pull upwards to raise a ladder to a vertical position.
- Transfer a ladder to its required position when it is erect.
- Keep a ladder upright and close to the body with a firm grip.





The method for lowering any ladder is the reverse procedure of erecting it.

LADDERS – FIXED

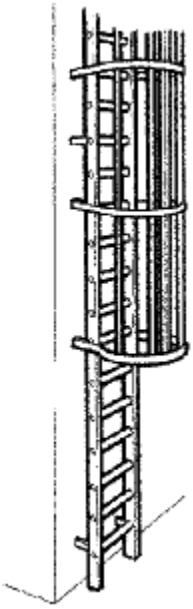
When should you inspect fixed ladders?

- Inspect the fixed ladder before each use.
- Inspect fixed ladders periodically, once every three months.
- Report any defect promptly.
- Keep the record of every inspection.

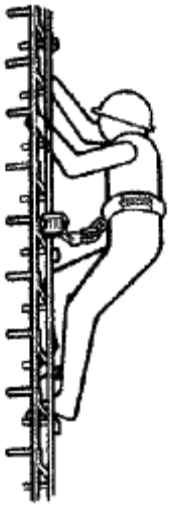
What should you check for when inspecting access ladders?

- loose, worn and damaged rungs or side rails
- damaged or a corroded cage
- corroded guard, bolts and rivet heads
- damaged or corroded handrails and brackets on platforms
- broken or loose anchorages
- weakened or damaged rungs on brick or concrete slabs
- defects in climbing devices, including loose or damaged carrier rails or ropes
- slippery surfaces from oil and ice
- clutter obstructing the base of ladder or platform

What should you do when climbing a fixed ladder?



1. Wait until the other person has exited before ascending or descending.
2. Use the appropriate safety devices (e.g., restraint belt, traveling fixture).
3. Maintain three-point contact by keeping two hands and one foot, or two feet and one hand on a ladder always.
4. Face ladder and use both hands to grip the rungs firmly.
5. Place feet firmly on each rung.
6. Wear footwear with heels. Ensure that footwear is in good condition.
7. Clean muddy or slippery boot soles before mounting a ladder.
8. Rise or lower tools and materials using a hand-line.



NOTE: FIXED LADDERS ARE REGULATED UNDER OH & S ACT AND REGULATIONS FOR INDUSTRIAL ESTABLISHMENTS. FIXED LADDERS ARE MENT TO PROVIDE ACCESS/EGRESS FOR MAINTENANCE PERSONELLE AND NOT CONSTRUCTION PERSONELLE. IF INJURY OCCURS BY FALLING OFF OF FIXED LADDERS, MOL INSPECTORS COULD ENFORCE FINES FOR FAILURE TO PROVIDE ADEQUATE ACCESS/EGRESS TO/FROM ROOF AREAS SUCH AS PORTABLE LADDERS, TEMPORARY OR PERMANENT STAIRS.

What should you avoid when climbing a fixed ladder?

- Avoid climbing with wet soles
- Do not carry tools or materials in your hand while climbing. Carry small tools in a tool pouch.
- Do not jump from a ladder. Check footing before descending a ladder.
- Do not hurry up or slide down a ladder.

LADDERS – PORTABLE

What should you know about portable ladders before using them?

Falls from portable ladders are a major source of serious injury. Be aware of the hazards and take proper precautions to prevent falling.

What should you do before using a portable ladder?

- Inspect the ladder before and after each use.
- Reject and tag any ladders that have defects. Have faulty ladders repaired or thrown out.
- Use a ladder designed for your task. Consider the strength, type, length and the Canadian Standards Association (CSA) approval.
- Get help when handling a heavy or long ladder.
- Keep ladders away from electrical wires.
- Tie off ladders at the top and secure bottom to prevent them from slipping.
- Set up barricades and warning signs when using a ladder in a doorway or passageway.
- Before mounting a ladder, clean the boot soles if they are muddy or slippery. Avoid climbing with wet soles. Ensure that footwear is in good condition.
- Face the ladder when going up or down and when working from it.
- Keep the center of your body within the side rails.
- Refer to safety regulations for specific measurement requirements.

What should you avoid when using a portable ladder?

- Do not use a ladder in a horizontal position as a scaffold plank or runway.
- Do not carry objects in your hands while on a ladder. Hoist materials or attach tools to a belt.
- Do not work from top three rungs. The higher a person goes on a ladder, the greater the possibility that the ladder will slip out at the base.
- Do not use items such as a chair, barrel or box as a makeshift ladder.
- Do not use a portable ladder when other equipment is available. Replace a ladder with a fixed stairway or scaffold.
- Do not join two short ladders to make a longer ladder. Side rails are not strong enough to support the extra load.

- Do not paint wooden ladders. Defects may be hidden by the paint. Wood preservatives or clear coatings may be used.

How should you set up the ladder?

- Place the ladder feet ¼ of the ladder's working length (e.g., foot to top support point) away from the base of the structure (e.g., for every 4 feet high, the base of the ladder should be out 1 ft; that means one horizontal foot from the support point).
- Extend the ladder at least 1 m (3 ft) above the landing platform.
- Place the ladder on a firm, level footing. Use a ladder with slip-resistant feet or secure blocking, or have someone hold the ladder.
- Rest both side rails on the top support and secure ladder to prevent slipping.

What should you know about climbing portable ladders?

- Check for overhead electrical wires before setting up a ladder.
- Clear area around base and top of the ladder of debris, tools and other objects.
- Tie off yourself with a safety harness when working 3 m (10 ft) or more off the ground or when working with both hands.
- Ensure that only one person is on a single-width ladder. Only one person is allowed on each side of a double-width ladder.
- Maintain three-point contact by keeping two hands and one foot, or two feet and one hand on the ladder at all times.
- Grasp the rungs when climbing a ladder, not the side rails. If your foot slips on a ladder, holding onto rungs is easier than holding onto the side rails.

3 Point Contact

- Wear protective footwear with slip-resistant soles and heels.
- Ensure that all electrical equipment used during ladder work is in good condition and properly grounded.
- Rest frequently to avoid arm fatigue and disorientation when the work requires you to look up and reach above your head.
- Drape your arms over a rung and rest your head against another rung or side rail if you become dizzy or panicky. Climb down slowly.

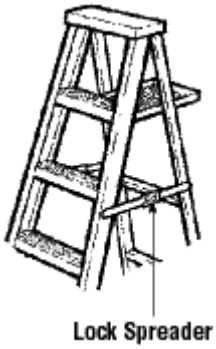
What should you avoid when climbing portable ladders?

- Do not use a ladder in passageways, doorways, driveways or other locations where a person or vehicle can hit it. Set up suitable barricades or lock the doors shut.
- Do not place a ladder against flexible or moveable surfaces.
- Do not straddle the space between a ladder and another object.
- Do not erect ladders on boxes, carts, tables, scaffold or other unstable surfaces.
- Do not use ladders on ice.
- Do not stand a ladder on any of its rungs. Ladders must rest on both side rails.
- Do not allow anyone to stand under a ladder.
- Do not overreach from a ladder; move as required.
- Do not use any type of ladder near electrical wires**.**

LADDERS – STEP

What should you do when using a stepladder?

- Use a stepladder that is about 1 m (3 ft) shorter than the highest point you have to reach. This gives a wider, more stable base and places shelf at a convenient working height.
- Open the stepladder spreaders and shelf fully.
- Check stability. Ensure that all ladder feet are on a firm, level and non-slippery surface.
- Place a stepladder at right angles to the work, with either the front or back of the steps facing the work.
- Keep the stepladder close to the work.

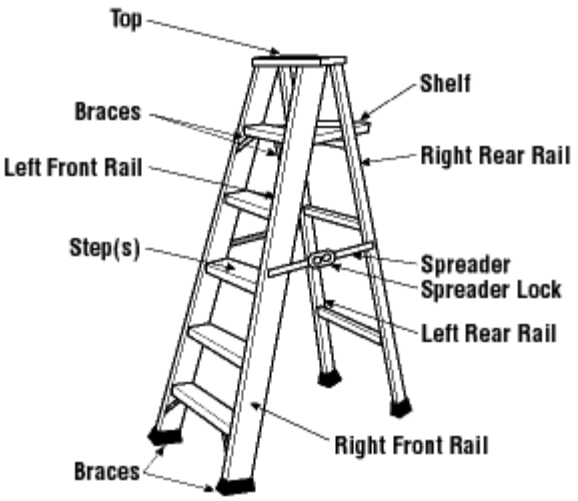


- Avoid pushing or pulling stepladders from the side. Repeated sideways movement can make ladders wobbly since they are weaker or less stable in those directions.
- Face the stepladder when climbing up or down. Keep your body centered between side rails. You have climbed too high if your knees are above top of the stepladder or if you cannot maintain a handhold on the ladder.
- Maintain a firm grip. Use both hands when climbing.

What should you avoid when using a stepladder?

- Do not overreach. Move a stepladder when needed.
- Do not “shift” or “walk” a stepladder when standing on it.
- Do not stand, climb, or sit on the stepladder top or pail shelf.
- Do not overload. Stepladders are meant for one person.
- Do not use a stepladder as a brace or as a support for a work platform or plank.

- Do not climb a stepladder that is leaning against a wall. Use a straight ladder instead.
- Do not use stepladders on slippery surfaces
- Do not use stepladders on soft ground where one leg may sink farther into the ground than others.
- Do not place stepladders on boxes, unstable bases or on scaffolds to gain additional height.
- Do not climb the back of a stepladder.
- Do not push or pull stepladders sideways.
- Do not use ladders in passageways, doorways, driveways or other locations where a person or vehicle can hit it. Set up suitable barriers or lock doors shut.



*** Do not climb the ladder next to protective guardrail system or edge of unguarded opening unless full body harness worn, equipped with lanyard and lanyard secured to adequate anchor/fixed support.**

SCAFFOLDING COMPLIANCE GUIDELINES

- The erection, alteration and dismantling of scaffolds must be carried out under the supervision of a competent person.
- Scaffolds must be supported on solid or compacted surfaces.
- Have footings, sills, or supports that are sound, rigid and capable of supporting two times the maximum anticipated load without settlement or deformation of the scaffold.
- Be tied (secured) to the building at vertical intervals, not exceeding twice the least lateral dimension of the scaffolding. If this is not possible, 'GUY' lines shall be used.
- Have all fittings, including foot plates, screw-jack legs, coupler pins, castors, braces installed with accordance to the manufacturer's instructions and design drawings.
- Have all work platforms equipped with guardrails consisting of a top rail, middle rail, and a toe board. All openings to platforms are to be securely guard-railed or covered.
- Be provided with secured ladder access to each level of work platforms.
- Scaffold platforms shall consist of rough sawn (2" X 10") planking of sound No. 1 grade spruce quality boards and be secured from slippage by cleating them or by other means.
- Load all cubes of masonry brick directly over framing.
- Have clean platforms and grounds, free of ice, snow, oil, debris and other slippery material to prevent tripping hazards.
- Workers shall wear and use full-body harnesses/lanyards attached to the project when erecting or dismantling scaffolding, above three meters in height.
- Scaffold platforms must be at least 18 inches wide and if they are over eight feet above the floor base, they must consist of planks laid tightly side by side, the full width of the scaffold frame.
- Wheel and castors on rolling scaffolds must be equipped with breaking devices on each castor or wheel and have the brakes applied when a worker is on the scaffold.

- Tarping of the scaffold in the winter must be engineered and approved drawing detail kept on the project.
- Set up of standard frame scaffolds over 15 meters (50 feet) in height and tube and clamp system scaffolds 10 meters (30 feet) in height must be designed by a professional engineer and erected as per drawings.

SAFE EXCAVATION GUIDELINES

- Know the regulations applicable to the work prior to any excavation being done, Cannington Construction Limited management, the excavation supervisor and machine operators, shall review the safety regulations pertaining to trenching and excavations. Re: Part III of Ontario's Occupational Health & Safety Regulations - O. Reg. 222 through to Reg. 240.
- All workers having to work in such excavations shall be orientated to and be made to understand the potential and actual hazards of the work and the laws applicable to the work.
- Ensure all underground services are located and staked out.
- All supervisory and operator personnel shall ensure all necessary precautions are taken to avoid contact with underground services such as gas and water lines, electrical conduits, cable, etc. Adhere to all clearances requirements and do not dig if you are in doubt of what is underneath!

Classification of soil types and protection measures

The soil to be dug shall be appropriately classified as per Section 226 and 227 and the appropriate slope cut- backs or support systems shall be used. The foreman and / or supervisor must be knowledgeable about soil type classifications found on a project. This includes awareness that soil types and conditions can change over very short distances. The foreman must know what protection support measures is best for the job at hand, to protect his workers.

Excavation checklist

Prior to any excavation or trench work, the Excavation Checklist on the next page of this safety manual, shall be used to assist the excavation supervisor in ensuring that adequate safety precautions are taken.

Emergency egress

Emergency egress has been provided so worker can get out of a trench or excavation in a hurry if necessary. Provide a secured ramp or ladder egress from the protected (shored) area of a trench or excavation.

Working near overhead power lines

Extreme caution must be taken when working around overhead power lines. Equipment such as an excavator or backhoe must not be moved closer than one boom length to an overhead power line of more than 750 volts unless a signal person is stationed to warn the operator when any part of the machine, boom or load approaches the minimum distance specified in the construction regulations.

Written emergency procedures for the project

Written emergency procedures should be devised by foreman to address responses for worker injuries, accidental service contact, and other incidences that may occur on the project such as cave-ins, fire, flooding, etc.

DEFINITIONS OF COMMONLY USED TERMS IN EXCAVATING

- Benching: means protecting workers from cave-ins by excavating the sides of an excavation to form one or a series of horizontal steps, usually with vertical surfaces between levels
- Caisson: means a casing below ground or water level whether or not it is designed to contain air at a pressure greater than atmospheric pressure'
- an excavation, including water-well but not a well within the meaning of the Petroleum Resources Act, drilled by an auger and into which the person may enter
- Competent Person: means person capable of identifying existing and predictable hazards in the work area person with authority to take prompt corrective action to eliminate the hazards
- Cross Braces: means horizontal members of a shoring system installed perpendicular to the sides of the excavation, the ends of which bear against either uprights or vales
- Excavation: means the hole that is left in the ground, as a result of removing material
- Excavation depth: means the vertical dimension from the highest point of the excavation wall to a point level with the lowest point of the excavation
- Excavation width: means the least horizontal dimension between the two opposite walls of the excavation
- Faces or Sides: means the vertical or inclined earth surfaces formed as a result of excavation work
- Protective System: means a method of protecting workers from trench collapse. This includes sloping, shoring, trench boxes or other systems of protection
- Ramp: means an inclined walking or working surface that is used to gain access to one point from another and is constructed from earth or from structural materials such as wood or steel
- Shoring: means a structure such as a metal hydraulic, mechanical or timber shoring system that supports the side of an excavation and which designed to prevent cave-ins
- Sloping: means a method of protecting workers from cave-ins by excavating all sides of an excavation to a stable incline. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads
- Support System: means a structure such as underpinning, bracing, or shoring the sides of excavation
- Trench: means an excavation where the excavation depth exceeds the excavation width
- Shaft: means an excavation with a longitudinal axis at an angle greater than 45 degrees from the horizontal that is used to pass people or materials into or out of a tunnel or that leads to a tunnel or that is used as an access to a boring or auguring operation

- Sheathing: means the members of shoring that are placed up against the walls of an excavation to directly resist the pressure exerted from the walls of excavation.
- Strut: means transverse member of shoring that directly resists pressure from wale
- Wale: means longitudinal member of the shoring that is placed against the sheathing to directly resist the pressure from the sheathing

SAFE PROCEDURES FOR GAS LINE EXCAVATION

Cannington Construction Limited management and supervisory personnel have included the following safety procedures in their corporate safety program, regarding excavation operations to ensure a safe workplace and to eliminate any risk of accidental contact and disturbance of underground services.

Location and uncovering of services: (gas lines)

Before any excavation is to begin, the excavating contractor, its operator and Cannington Construction Limited supervisor of the workplace, shall review policy procedures and Ontario's excavation safety regulations applicable to work. Prior to excavating contractor performing the excavating task is responsible for the work must contact the utility owner and request the locates of any services within 1 meter of the area of the proposed dig. Reference will be made from survey or plan drawings. The excavator should not work outside of the area covered by the locate stake-out information without obtaining an additional stakeout by the utility owner. Where the service cannot be located within the locate stakeout limits, the utility owner should be contacted to assist with the locate. Mechanical excavation equipment should not be used within the boundary limits of the locate without first digging a hole or holes using the procedure below to determine the service's exact center line and elevation:

a) machine excavate immediately outside the boundary limits and then hand dig laterally until the gas line is found: or
b) hand dig perpendicular to the center line of the locate in cuts of at least 1 foot deep;
c) use mechanical equipment to carefully widen the hand-dug trench to the depth of the hand-dug excavation.
d) repeat steps b and c until the pipeline is located.

Note: Center line locates should be provided and test holes dug where:

- alignment changes are identified by gas company representatives; or
- changes in elevation are identified by gas company representatives.

If the gas line cannot be shut off and disconnected, the owner of the utility service shall be requested to supervise the uncovering of the service. Where gas pipelines may need support or where they may shift because of a disturbance of surrounding soil due to excavation, guidelines for excavation and support should be obtained from the gas company.

EXPLANATION OF LOCK-OUT PROCEDURAL SEQUENCE

1. Receive work assignment.
2. Locate the area and identify the equipment or machinery to be worked on.
3. Identify all power sources affecting the equipment or machinery, such as electrical, pneumatic, hydraulic, steam, gravity or momentum.
4. Determine whether lockout is required to perform the work assignment.
5. Locate and identify all power source components on equipment or machinery.
6. Determine whether it is physically possible to lock out each power source.
7. If lockout is required, check with qualified operations personnel before proceeding.
8. Have qualified personnel shut down the equipment or machinery. Install your personal safety lock with tag indicating name, employer, time/date and work location.
9. Any power or product remaining in the equipment or machinery must be discharged or disconnected by qualified personnel.
10. With extreme caution, try to start the equipment or machine manually.
11. Look of any movement or functions.
12. If none observed, try to restart again.
13. Look of any movement or functions.
14. If none observed, confirm that all power sources are at a zero energy state.
15. Carry out work assignment.
16. When work is complete and area ready to resume operations; remove all locks, tags, and lockout devices. Check that all personnel are clear of the equipment or machinery.
17. Have qualified personnel restart the equipment or machinery.
18. Assignment complete once equipment or machinery is operating satisfactorily.

Note: Each employee shall be responsible of hanging their own lock and tag on the equipment before starting work. No employee or other Demolition Contractor may remove a lock or tag belonging to another employee. Each employee involved with lockouts shall have his/her own personal lock with & key. No locks with duplicate or master keys shall be used. If more than one employee is required to lockout and tag a circuit or piece of equipment, a multiple padlock device shall be used. Any employee who removes a tag or lock belonging to another employee or person, or overrides a tag or lock in any way, shall be subject to immediate reprimand or termination.

WORKING IN CONFINED SPACES

The Program Manager is responsible for managing the Confined Space Program, and shall:

- Ensure that a list of confined spaces at all Cannington Construction Limited worksites is maintained.
- Ensure that cancelled permits are reviewed for lessons learned.
- Ensure training of personnel CONFINED SPACE

The purpose of Cannington Construction Limited confined space program is to set procedures that will ensure workers safe entry into confined spaces and permit-required confined spaces to perform routine tasks associated with their employment. A confined space is defined as fully or partially enclosed space that is not both designed and constructed for continuous human occupancy and in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it. Note: If you have a space that is fully or partially enclosed, the two conditions – (a) and (b) above – must both apply before the space can be considered a "confined space".

Examples of confined spaces include: manholes, stacks, pipes, storage tanks, trailers, tank cars, pits, sumps, hoppers, and bins. Entry into confined spaces without proper precautions could result in injury, impairment, or death due to:

- an atmosphere that is flammable or explosive;
- lack of sufficient oxygen to support life;
- contact with or inhalation of toxic materials; or
- general safety or work area hazards such as steam or high pressure materials.

CONFINED SPACE ASSESMENT

The only way to determine if a "space" meets the definition for a "confined space" is to evaluate it. Consider the following 3 questions:

1. Is the space fully or partially enclosed?
2. Is the space not both designed and constructed for continuous human occupancy?
3. Might an atmospheric hazard occur?

If you have fully or partially enclosed space:

Is it designed and Constructed for Continuous Human occupancy?	**Might an atmospheric Hazard occur?**	**Is it confined space?**
Yes	**Yes**	**No**
Yes	**No**	**No**
No	**Yes**	**Yes**
No	**No**	**No**

PRIOR TO ENTRY

Before any worker enters a confined space, adequate assessment of the hazards related to the confined space must be carried out by competent worker and written plan developed and communicated to all parties affected. Also enquire with client/constructor if more than one employer will be entering confined space and if coordination document has been prepared.

THE ASSESMENT

The assessment shall be recorded in writing and shall consider:

- The hazards that may exist due to the design, construction, location, use or contents of the confined space; and
- The Hazards that may develop while work is done inside the confined space.

The assessment shall contain the name of competent worker who carries out the assessment and competent person must be knowledgeable, trained and experienced. Proof of competency must be kept on company files.

CONFINED SPACE CRITICAL CHECKLIST DOCUMENT

Before any worker enters the confined space, the constructor shall prepare a Confined space / Tankfield Sump entry Critical Checklist document to ensure that duties imposed on employers with regards to confined space, are performed. The copy of this document shall be provided to each employer of workers who perform work in the same confined space and J.H.S.C. or health and safety representative if any.

ENTRY PERMIT

Entry permit must be issued prior to entry and all requirements of the permit met.

ASSIGNMENT OF RESPONSIBILITY

In administering this Confined Space Program, Cannington Construction Limited will:

- Monitor the effectiveness of the program.
- Provide atmospheric testing and equipment as needed.
- Provide personal protective equipment as needed.
- Provide training to affected employees and supervisors.
- Provide technical assistance as needed.
- Preview and update the program on at least an annual basis or as needed.

PROGRAM MANAGER

- Coordinate with outside responders.
- Ensure that equipment is in compliance with standards.
- Ensure that the Responsible Person in charge of confined space work shall:
    - Ensure requirements for entry have been completed before entry is authorized.
    - Ensure confined space monitoring is performed by personnel qualified and trained in confined space entry procedures.

- Ensure a list of monitoring equipment and personnel qualified to operate the equipment is maintained on file.
- Ensure that the rescue team assembled at the project has simulated a rescue in a confined space
- Know the hazards that may be faced during entry, including the mode (how the contaminant gets into the body), signs or symptoms, and consequences of exposure.
- Determine the entry requirements and fill out a permit.
- Require a permit review and signature from the authorized Entry Supervisor.
- Notify all involved employees of the permit requirements.
- The permit does not need to be posted near entry but must be made readily available to every person involved with confined space.
- Renew the permit. A separate entry permit must be issued each time work is to be performed in a confined space and before any worker enters confined space.
- Determine the number of Attendants required to perform the work.
- Ensure all Attendant(s) know how to communicate with the entrants and how to obtain assistance.
- Post any required barriers and signs.
- Remain alert to changing conditions that might affect the conditions of the permits (i.e., require additional atmospheric monitoring or changes in personal protective equipment).
- Ensure periodic or continuous atmospheric monitoring is done according to permit requirements.
- Ensure that personnel doing the work and all support personnel adhere to permit requirements.
- Ensure the permit is cancelled when the work is done.
- Ensure the confined space is safely closed and all workers are cleared from the area.
- Coordinate with outside responders.
- Ensure that equipment is in compliance with standards.

ENTRY SUPERVISORS

Entry Supervisors shall be qualified and authorized to approve confined space entry permits. The Entry Supervisor(s) shall be responsible for:

- Determining if conditions are acceptable for entry.
- Authorizing entry and overseeing entry operations.
- Terminating entry procedures as required.
- Serving as an Attendant, as long as the person is trained and equipped for that role.
- Ensuring measures are in place to keep unauthorized personnel clear of the area.
- Checking the work at least twice a shift to verify and document permit requirements are being observed (more frequent checks shall be made if operations or conditions are anticipated that could affect permit requirements).
- Ensuring that necessary information on chemical hazards is kept at the worksite for the employees or rescue team.
- Ensuring a rescue team is available and instructed in their rescue duties (i.e., an onsite team or a prearranged outside rescue service).
- Ensuring the rescue team members has current certification in first aid and cardiopulmonary resuscitation (CPR).

ATTENDANTS

Attendant(s) must be stationed outside of the confined workspace and shall:

- Be knowledgeable and able to recognize potential confined space hazards.

- Maintain a sign-in/sign-out log with a count of all persons in the confined space, and ensure all entrants sign in and out.
- Monitor surrounding activities to ensure the safety of personnel.
- Maintain effective and continuous communication with personnel during confined space entry, work, and exit.
- Order personnel to evacuate the confined space if he/she observes a condition which is not allowed on the entry permit;
- notices the entrants acting strangely, possibly as a result of exposure to hazardous substances;
- notices a situation outside the confined space which could endanger personnel;
- notices a hazard within the confined space that has not been previously recognized or taken into consideration;
- must leave his/her work station or
- must focus attention on the rescue of personnel in some other confined space that he/she is monitoring.
- Immediately summon the Rescue Team if crew rescue becomes necessary.
- Keep unauthorized persons out of the confined space, order them out, or notify authorized personnel of an unauthorized entry.

RESCUE TEAM

The Rescue Team members shall:

- Complete a training drill using mannequins or personnel in a simulation of the confined space prior to the issuance of an entry permit for any confined space.
- Respond immediately to rescue calls from the Attendant or any other person recognizing a need for rescue from the confined space.
- In addition to emergency response training, receive the same training as that required of the authorized entrants.
- Have current certification in first aid and CPR.

ENTRANTS/AFFECTED EMPLOYEES

Employees who are granted permission to enter a confined space shall:

- Read and observe the entry permit requirements.
- Remain alert to the hazards that could be encountered while in the confined space.
- Properly use the personal protective equipment that is required by the permit.
- Immediately exit the confined space when:
- they are ordered to do so by an authorized person;
- they notice or recognize signs or symptoms of exposure;
- a prohibited condition exists; or
- the automatic alarm system sounds.
- Alert Attendant(s) when a prohibited condition exists and/or when warning signs or symptoms of exposure exist.

TRAINING

Cannington Construction Ltd. will provide training so that all employees whose work is regulated by this Confined Space Program acquire the understanding, knowledge, and skills necessary for the safe performance of their duties in confined spaces. Training shall include the recognition of hazards and safe work practices and up to date written records showing who provided the training, when and who received the training must be maintained.

The training shall establish employee proficiency in the duties required in this program, and shall introduce new or revised procedures, as necessary, for compliance with this program.

HAZARD RECOGNTION AND OTHER GENERAL TRAINING

All employees who will enter confined spaces shall be trained in entry procedures. Personnel responsible for supervising, planning, entering, or participating in confined space entry and rescue shall be adequately trained in their functional duties prior to any confined space entry. Training shall include:

- Explanation of the general hazards associated with confined spaces.
- Discussion of specific confined space hazards associated with the facility, location, or operation.
- Reason for, proper use, and limitations of personal protective equipment and other safety equipment required for entry into confined spaces.
- Explanation of permits and other procedural requirements for conducting a confined space entry.
- A clear understanding of what conditions would prohibit entry.
- Procedures for responding to emergencies.
- Duties and responsibilities of the confined space entry team.
- Description of how to recognize symptoms of overexposure to probable air contaminants in themselves and co-workers, and method(s) for alerting the Attendant(s).

Refresher training shall be conducted as needed to maintain employee competence in entry procedures and precautions.

PLAN - SPECIFIC TRAINING

Training for atmospheric monitoring personnel shall include proper use of monitoring instruments, including instruction on the following:

- proper use of the equipment;
- calibration of equipment;
- sampling strategies and techniques; and
- exposure limits (PELs, TLVs, LELs, UELs, etc.).

All workers or personnel assigned to confined space task must follow written plan.

Training for Attendants shall include the following:

- procedures for summoning rescue or other emergency services; and
- proper utilization of equipment used for communicating with entry and emergency/rescue personnel.

Training for Emergency Response Personnel shall include:

- rescue plan and procedures developed for each type of confined space that is anticipated to be encountered;
- use of emergency rescue equipment;
- first aid and CPR techniques; and
- work location and confined space configuration to minimize response time.

IDENTIFICATION OF HAZARDS AND EVALUATION OF CONFINED SPACES

SURVEY

Competent Person shall ensure a survey of the worksite is conducted to identify confined spaces. This survey can be partially completed from initial and continuing site characterizations, as well as other available data (i.e., blueprints and job safety analyses). The purpose of the survey is to develop an inventory of those locations and/or equipment Cannington Construction Limited that meet the definition of a confined space. This information shall be communicated to personnel, and appropriate confined space procedures shall be followed prior to entry. The initial surveys shall include air monitoring to determine the air quality in the confined spaces. The potential for the following situations shall be evaluated by Competent Person;

- flammable or explosive potential;
- oxygen deficiency; and
- presence of toxic and corrosive material.

PRE – ENTRY HAZARD ASSESMENT

A hazard assessment shall be completed by Competent Person prior to any entry into a confined space. The hazard assessment should identify:

- the sequence of work to be performed in the confined space;
- the specific hazards known or anticipated; and
- the control measures to be implemented to eliminate or reduce each of the hazards to an acceptable level.

No entry shall be permitted until the hazard assessment has been reviewed and discussed by all persons engaged in the activity. Personnel who are to enter confined spaces shall be informed of known or potential hazards associated with said confined spaces.

HAZARD CONTROLS

Hazard controls shall be instituted to address changes in the work processes and/or working environment. Hazard controls must be able to control the health hazards by eliminating the responsible agents, reduce health hazards below harmful levels, or prevent the contaminants from coming into contact with workers. The following order of precedence shall be followed in reducing confined space risks.

ENGINEERING CONTROLS

Engineering controls are those controls that eliminate or reduce the hazard through implementation of sound engineering practices. Ventilation is one of the most common engineering controls used in confined spaces. When ventilation is used to remove atmospheric contaminants from a confined space, the space shall be ventilated until the atmosphere is within the acceptable ranges. Ventilation shall be maintained during the occupancy if there is a potential for the atmospheric conditions to move out of the acceptable range. When ventilation is not possible or feasible, alternate protective measures or methods to remove air contaminants and protect occupants shall be determined by Competent Person prior to authorizing entry. When conditions necessitate and can accommodate continuous forced air ventilation, the following precautions shall be followed:

- Employees shall not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.

- Forced air ventilation shall be directed to ventilate the immediate areas where an employee is or will be present within the space.
- Continuous ventilation shall be maintained until all employees have left the space.
- Air supply or forced air ventilation shall originate from a clean source.

WORK PRACTICE (ADMINISTRATIVE) CONTROLS

Work practice (administrative) controls are those controls which eliminate or reduce the hazard through changes in the work practices (i.e., rotating workers, reducing the amount of worker exposure, and housekeeping).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

If the hazard cannot be eliminated or reduced to a safe level through engineering and/or work practice controls, PPE should be used. Competent Person shall determine the appropriate PPE needed by all personnel entering the confined space, including rescue teams. PPE that meets the specifications of applicable standards shall be selected in accordance with the requirements of the job to be performed.

ENTRY PERMITS

The Confined Space Entry Permit is the most essential tool for assuring safety during entry in confined spaces with known hazards, or with unknown or potentially hazardous atmospheres. The entry permit process guides the supervisor and workers through a systematic evaluation of the space to be entered. The permit should be used to establish appropriate conditions. Before each entry into a confined space, an entry permit will be completed by Competent Person. The Competent Person will then communicate the contents of the permit to all employees involved in the operation and post the permit conspicuously near the work location. A standard entry permit shall be used for all entries.

KEY ELEMENTS OF ENTRY PERMITS

A standard entry permit shall contain the following items:

- Space to be entered.
- Purpose of entry.
- Date and authorized duration of the entry permit.
- Name of authorized entrants within the permit space.
- Means of identifying authorized entrants inside the permit space (i.e., rosters or tracking systems).
- Name(s) of personnel serving as Attendant(s) for the permit duration.
- Name of individual serving as Entry Supervisor, with a space for the signature or initials of the Entry Supervisor who originally authorized the entry.
- Hazards of the permit space to be entered.
- Measures used to isolate the permit space and to eliminate or control permit space hazards before entry (i.e., lockout/tagout of equipment and procedures for purging, ventilating, and flushing permit spaces).
- Acceptable entry conditions.

- Results of initial and periodic tests performed, accompanied by the names or initials of the testers and the date(s) when the tests were performed.
- Rescue and emergency services that can be summoned, and the means of contacting those services (i.e., equipment to use, phone numbers to call).
- Communication procedures used by authorized entrants and Attendant(s) to maintain contact during the entry.
- Equipment to be provided for compliance with this Confined Space Program (i.e., PPE, testing, communications, alarm systems, and rescue).
- Other information necessary for the circumstances of the particular confined space that will help ensure employee safety.
- Additional permits, such as for hot work, that has been issued to authorize work on the permit space.

PERMIT SCOPE AND DURATION

A permit is only valid for one shift. For a permit to be renewed, the following conditions shall be met before each re-entry into the confined space:

- Atmospheric testing shall be conducted, and the results should be within acceptable limits. If atmospheric test results are not within acceptable limits, precautions to protect entrants against the hazards should be addressed on the permit and should be in place.
- Competent Person shall verify that all precautions and other measures called for on the permit are still in effect.
- Only operations or work originally approved on the permit shall be conducted in the confined space.
- A new permit shall be issued, or the original permit will be reissued if possible, whenever changing work conditions or work activities introduce new hazards into the confined space. Competent Person shall retain each cancelled entry permit for at least one (1) year to facilitate the review of the Confined Space Entry Program. Any problems encountered during an entry operation shall be noted on the respective permit(s) so that appropriate revisions to the confined space permit program can be made.

PRIOR TO ENTRY

The entire confined space entry permit shall be completed before a standard entry. Entry shall be allowed only when all requirements of the permit are met, and it is reviewed and signed by an Entry Supervisor. The following conditions must be met prior to standard entry:

- Affected personnel shall be trained to establish proficiency in the duties that will be performed within the confined space.
- The internal atmosphere within the confined space shall be tested by Competent Person with a calibrated, direct-reading instrument.
- Personnel shall be provided with necessary PPE as determined by the Entry Supervisor.
- Atmospheric monitoring shall take place during the entry.

If a hazardous atmosphere is detected during entry:

- personnel within the confined space shall be evacuated by the Attendant(s) or Entry Supervisor until the space can be evaluated by Competent Person to determine how the hazardous atmosphere developed; and
- controls shall be put in place to protect employees before re-entry.

OPENING A CONFINED SPACE

Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent anyone from falling through the opening. This barrier or cover shall protect each employee working in the space from foreign objects entering the space. If it is in a traffic area, adequate barriers shall be erected.

ATMOSPHERIC TESTING

Atmospheric test data is required prior to entry into a confined space. Atmospheric testing is required for two distinct purposes: (1) evaluation of the hazards of the permit space, and (2) verification that acceptable conditions exist for entry into that space. If a person must go into the space to obtain the needed data, then Standard Confined Space Entry Procedures shall be followed. Before entry into a confined space, Competent Person shall conduct testing for hazardous atmospheres. The internal atmosphere shall be tested with a calibrated, direct-reading instrument for oxygen, flammable gases and vapours, and potential toxic air contaminants, in that order. Testing equipment used in specialty areas shall be listed or approved for use in such areas by Competent Person. All testing equipment shall be approved by a nationally recognized laboratory, such as Underwriters Laboratories or Factory Mutual Systems.

EVALUATION TESTING

The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity. The analysis shall identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed, and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data and development of the entry procedure should involve a technically qualified professional (i.e., consultant, certified industrial hygienist, registered safety engineer, or certified safety professional).

VERIFICATION TESTING

A confined space that may contain a hazardous atmosphere shall be tested for residues of all identified or suspected contaminants. The evaluation testing should be conducted with specified equipment to determine that residual concentrations at the time or testing and entry are within acceptable limits. Results of testing shall be recorded by the person performing the tests on the permit. The atmosphere shall be periodically retested (frequency to be determined by Competent Person to verify that atmospheric conditions remain within acceptable entry parameters.

ACCEPTABLE LIMITS

The atmosphere of the confined spaces shall be considered within acceptable limits when the following conditions are maintained:

- oxygen: 19.5 percent to 23.5 percent;
- flammability: less than 10 percent of the Lower Flammable Limit (LFL); and
- toxicity: less than recognized American Conference of Governmental Industrial Hygienists (ACGIH) exposure limits or other published exposure levels [i.e., OSHA Permissible Exposure Limits (PELs) or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs)].

ISOLATION AND LOCK-OUT/TAG-OUT SAFE GUARDS

All energy sources that are potentially hazardous to confined space entrants shall be secured, relieved, disconnected, and/or restrained before personnel are permitted to enter the confined space. Equipment systems or processes shall be

locked out and/or tagged out as required by the Occupational Health & Safety Act and Regulations for Construction Projects prior to permitting entry into the confined space. In confined spaces where complete isolation is not possible, Competent Person shall evaluate the situation and make provisions for as rigorous isolation as practical. Special precautions shall be taken when entering double-walled, jacketed, or internally insulated confined spaces that may discharge hazardous material through the vessel's internal wall. Where there is a need to test, position, or activate equipment by temporarily removing the lock or tag or both, a procedure shall be developed and implemented to control hazards to the occupants. Any removal of locks, tags, or other protective measures shall be done in accordance with the Occupational Health and Safety Act and Regulations for Construction.

ACCESS/EGRESS SAFE GUARDS

Means for safe entry and exit shall be provided for confined spaces. Each entry and exit points shall be evaluated by Competent Person to determine the most effective methods and equipment that will enable employees to safely enter and exit the confined space. Appropriate retrieval equipment or methods shall be used whenever a person enters a confined space. Use of retrieval equipment may be waived by the Competent Person if use of the equipment increases the overall risks of entry or does not contribute to the rescue. A mechanical device shall be available to retrieve personnel from vertical confined spaces greater than five (5) feet in depth.

WARNING SIGNS AND SYMBOLS

All confined spaces that could be inadvertently entered shall have signs identifying them as confined spaces. Signs shall be maintained in a legible condition. The signs shall contain a warning that a permit is required before entry. Accesses to all confined spaces shall be prominently marked.

EMERGENCY RESPONSE

Competent Person shall maintain a written plan of action that has provisions for conducting a timely rescue of individuals within a confined space, should an emergency arise. The written plan shall be kept onsite where the confined space work is being conducted. All affected personnel shall be trained on the Emergency Response Plan.

SAFE DRIVING LOADING & UNLOADING

Loading and unloading can be dangerous. Machinery can seriously hurt people. Heavy loads, moving or overturning vehicles and working at height can all lead to injuries or death.

This guidance should be followed to help avoid problems.

Guidance

Loading and unloading areas should be:

- Clear of other traffic, pedestrians and people not involved in loading or unloading.
- Clear of overhead electric cables so there is no chance touching them, or of electricity jumping to 'earth' through machinery, loads or people.
- Level. To maintain stability, trailers should be parked on firm level ground,
- spread as evenly as possible, during both loading and unloading. Uneven loads can make the vehicle or trailer unstable.

- secured, or arranged so that they do not slide around. Racking may help stability.

Additionally;

- Safety equipment must be considered. Mechanical equipment and heavy moving loads are dangerous.
- Guards or skirting plates may be necessary if there is a risk of anything being caught in machinery.
- There may be other mechanical dangers and safety procedures to be considered.
- Ensure the vehicle or trailer has its brakes applied and all stabilizers are used. The vehicle should be as stable as possible.
- Drivers should not remain in their cabs if this can be avoided. No-one should be in the loading/unloading area if they are not needed.
- Vehicles must never be overloaded. Overloaded vehicles can become unstable, difficult to steer or be less able to brake.
- Always check the floor or deck of the loading area before loading to make sure it is safe. Look out for debris, broken boarding, etc.
- Loading should allow for safe unloading.
- Loads must be suitably packaged. When pallets are used, the driver needs to check that:
- They are in good condition
- Loads are properly secured to them.
- Loads are safe on the vehicle. They may need to be securely attached to make sure they cannot fall off.
- Tailgates and sideboards must be closed when possible. If over-hang cannot be avoided, it must be kept to a minimum. The over-hanging part of the load must be clearly marked.
- If more than one company is involved, they should agree in advance how loading and unloading will happen. For example, if visiting drivers unload their vehicles themselves, they must receive the necessary instructions, equipment and co-operation for safe unloading. Arrangements will need to be agreed in advance between the hauler and the recipient.
- Some goods are difficult to secure during transport. Haulers and recipients will need to exchange information about loads in advance so that they can agree safe unloading procedures.
- Checks must be made before unloading to make sure loads have not shifted during transit and are not likely to move or fall when restraints are removed.
- There must be safeguards against drivers accidentally driving away too early. This does happen and is extremely dangerous.
- Measures could include:
  - ✓ Traffic Control Person or Signaler.
  - ✓ The use of vehicle or trailer restraints.
  - ✓ The person in charge of loading or unloading could keep hold of the vehicle keys or paperwork until it is safe for the vehicle to be moved.
  - ✓ These safeguards would be especially effective where there could be communication problems, for example where foreign drivers are involved.
  - ✓ Protect the public way as per TCP training.

EQUIPMENT SAFETY – GENERAL SAFETY PRECAUTIONS

TOOL SELECTION/MAINTENANCE

- Select the tool that is most suitable for you to do the task safely (i.e., select the right tool for the job).
- Use spark-resistant tools if working near highly flammable materials (gas, liquid or vapor).
- Inspect your tools daily - make sure that tools are in good repair.
- Ensure all guards and shields for your equipment are in place and properly maintained.
- Ensure that handles are tight and fastened securely. Repair or replace worn or damaged handles; ensure that the handle surfaces are smooth and sliver-free.
- Keep cutting tools and equipment sharp. Dull tools are more hazardous than sharp ones.
- Protect the cutting edges of the tools and equipment. Store tools and equipment, especially if they are transported regularly from job to job, in a way that prevents the cutting edges from being dulled or damaged.
- Label damaged tools and remove them from the work site.
- Stand on a non-slippery and in a non-cluttered area. It's important to keep a secure footing and your balance when using tools.
- Use tools on a stable work surface. Use a vice or clamps to stabilize your work if necessary.
- Work in a well-lit area.
- Direct saw blades, knives, etc. away from aisle areas and from co-workers working nearby.
- Avoid standing in awkward positions. Avoid unnecessary strains on your wrists, arms, shoulders and/or back from poorly designed tools.
- Give yourself enough space to work and keep your body at a comfortable angle to the work. Adjust the tool position or the angle of the work surface to minimize bending, reaching or twisting.
- Carry tools properly.
- Use a tool belt, but don't make it too heavy causing strain on your lower back and hips. Carry only what is necessary for that particular task.
- Block machinery securely so it cannot roll or shift when repairs are being made.
- Use a piece of cardboard to test hydraulic hoses for leaks. Always shut off the engine before servicing a hydraulic system.
- Never inspect hydraulic hoses with your bare hands. Even pinhole leaks have enough force to penetrate skin with hydraulic fluid. Get medical attention immediately if this happens.

Storage:

- Put tools away when the job is finished; removing dirt and ensuring they are dry will help prevent tools from rusting.
- Store tools and equipment in a safe, organized manner so that workers can access them easily and without injury; if stored in a truck, van, etc. they should be stored securely so they do not fall or shift position during transport.
- While tools are not in use, place them where other workers cannot be hurt by them (for example, do not leave rakes on the ground with the tines pointing up; do not leave tools on a ladder or scaffold).
- What are general safety tips for using electric powered hand tools?
- Read, understand and follow the manufacturer's operating manual.
- Use only approved electrical tools (e.g., approved by CSA, UL or other recognized certification organization).
- The OSH Answers document Powered Hand Tools - Basic Safety for Electric Tools has additional information.

What are some general tips for fueling equipment?

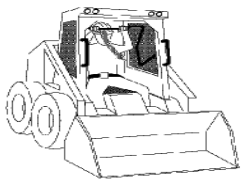
DO:

- Fill the fuel tank before starting a job.
- Shut off the engine and allow it to cool before refueling the tank. Do not smoke when refueling!
- Remove the fuel cap slowly, holding it at the semi-locked position until the pressure is released.
- Position yourself comfortably so that you can fuel without slipping or falling.
- Use a funnel to prevent fuel spillage on the engine when refueling. Fuel up outdoors, then wipe up all spills.
- Allow the nozzle to empty by keeping it in the filler opening for a few moments after the fuel flow is shut off.
- Check that any vents are not clogged. Replace the fuel cap.
- Restart engine at least 8 meters (25 feet) from where you refueled to avoid igniting vapours.
- Store fuel in sturdy, approved containers identified according to WHMIS requirements. Store gasoline safely - outside and away from any heat source.
- Have fire extinguishers and other firefighting equipment nearby**.**

DO NOT:

- smoke or have an open flame while fueling. Gas fumes are heavier than air and will drift downward from the container. It is the vapor, not the liquid, which burns.
- spill any fuel on equipment. If you do, wipe up and allow any residue to dry before starting the engine.
- run if your clothing catches fire. Stop, drop and roll. Quickly remove the blazing garment, or drop to the ground and roll slowly, or wrap yourself in a blanket.

LOADERS



What should I check before starting the engine?

Check the following before starting the engine:

- fuel and oil levels,
- hydraulic fluid level,
- cooling system fluid,
- operator cab, seat belt and seat bar,
- lift arm and cylinder pivot points,
- tires
- Follow the manufacturer's recommendations about how often to lubricate all the "lube" points.

What should I do when using a loader?

Set-up:

- Read, understand, and follow instructions in the manufacturer's operating manual and safety decals on the loader.
- Know how to load, tie-down, transport, and unload the loader safely.
- Use only manufacturer-approved attachments and buckets.
- Always ensure the attachment locking devices are in place, even if you are switching attachments for only a few minutes. If not locked, an attachment could break free and roll down the loader arms or fall onto a bystander.
- Wear hearing and head protection.
- Remain alert at all times when operating the loader.
- Ensure all required safety shields are on the tractor and in good condition.
- Use the safety treads and grab handles to get on and off the loader.

Operation:

- Keep your feet on the pedals when operating the loader.
- Keep other people away from work area.
- Drive with caution and check behind you before backing up.
- Travel with the bucket or attachments as close to the ground as possible to maintain equipment stability and give the operator an unobstructed view.
- Load the bucket evenly (i.e. weight should not be lop-sided) and do not load beyond the limits or rated capacity of the equipment. You can lose stability and steering control.
- Load, unload, and turn on level ground.
- Lower the bucket when not using the loader.
- Go straight up and down slopes, keeping the heavy end of the loader pointing uphill - back down slopes slowly. Avoid driving forward when going downhill with a loaded bucket.
- Look out for holes, rocks or obstructions which may cause a roll-over or loss of control.
- If you become confused about operation of controls from having to perform too many functions at once, remove hands and feet from the controls. All machine functions should stop when pressure on the controls is released.

Repairs:

- Turn off the engine before attempting any repairs or adjustments.
- Lower the bucket and set the parking brakes before getting off the seat.
- If the equipment is going to be left unattended for some time, remove the ignition key.
- When checking for leaks in the hydraulic system, use a piece of paper or cardboard - never use your hands since oil from a pin-hole leak under high pressure can penetrate the skin. If this does happen, get immediate medical attention.

What should I avoid when operating a loader?

- Do not operate loader if you are ill, over-tired or on medication causing drowsiness.
- Do not use loader without an approved roll-over protection (ROP) and falling object protection (FOP) cab.
- Never remove the ROP structure. Keep side screens in place.
- Never exceed rated operating capacity.
- Never attempt to repair, adjust or unplug equipment with the Power Takeoff (PTO) engaged.

- Never attempt to operate steering levers or any other hydraulic controls while standing outside of the cab.
- Do not carry passengers.
- Do not use the loader as a lift for people, as a fence post puller, or as a work platform.
- Do not make sharp, fast turns or move bucket controls abruptly.
- Do not travel or turn with lift arms up.
- Do not leave loader with engine running or with lift arms up.
- Do not travel across a slope: go straight up or down slopes with the "heavy" end of the loader pointed uphill.
- Do not approach overhead wires.

How should I go up and down a slope with a full bucket?

Keep the heavy end pointing up the slope!

Loader going up

Loader going down

How should I go up and down a slope with an empty bucket?

Keep the heavy end up pointing up the slope!

Loader going down

Loader going up

What kind of loaders does this information apply to?

This information applies to smaller, front-end loaders or skid steer loaders. "Smaller" is a relative term; compact is another name for smaller loaders. Different manufacturers may rate their loaders up to 40 - 80 horsepower (or about 30 - 40 kW) as compact loaders. Some manufacturers use the term "compact loader" to mean what is usually called a skid steer loader or skid-steer loader used in landscaping. More commonly, "compact loader" refers to an articulating wheel loader; i.e., a loader that has two sections connected by a flexible joint and that can be steered by "bending" at the joint. Although many of the main safety principles for skid steer and compact front-end loaders apply to articulating wheel loaders, there are additional safety practices that relate to the operation and maintenance of articulated vehicles that are not covered in this OSH Answers document.

DUMP TRUCK – TIP OVER

The Hazard

In the last couple of years, one fatality and at least one serious injury have resulted when dump trucks tipped over. Statistics on the frequency of tip-overs are not available because the occurrences are not reported unless injuries result.

Stability

The main hazard is related to the stability of the end-dump unit when the box is in the raised position. When the center of gravity of box and load is not roughly between the frame rails of the unit, there is a risk of tip-over (see diagram).

A slight slope can be enough to cause tipping if material sticks in the top of the box. Stability is adversely affected by one or more of the following factors:

- the unit is not on a level surface when dumping
- a large amount of material is in the upper portion of the raised box
- material does not flow out of the top portion of the box, or does not flow out of one side of the top portion
- the rear wheels settle unevenly as the load moves to the rear during dumping
- wind may exert lateral loads, especially if the box is long, as is the case with end-dump semi-trailers.

- Stability may also be affected by the unit's mechanical condition:
- poor rear suspension systems on one side of the vehicle
- uneven tire pressures in rear wheels
- worn or inadequate components of the lifting system such as pins
- worn or inadequate lifting cylinders.

Hazard Control

- Because of stability problems with semi-trailers, they should not be used for haulage to rough grading or fill areas where surfaces are often uneven or loosely compacted.
- Straight trucks or straight trucks and pup trailers are more appropriate for highway haulage to these dump areas.
- Where haulage and dumping are all on site, straight trucks or off-highway vehicles are even better choices.
- Where aggregates are being spread for road construction, belly-dump semi-trailers are more appropriate than end-dump semi-trailers.
- Cold weather may cause materials to freeze to the box and stick when dumping. Using heated boxes will reduce the problem.
- During winter, loads should not be left in dump boxes overnight.

Maintenance

- Maintenance can play an important role in preventing tip-overs.
- Check tire pressures daily. Tire pressures should be equal on each side of the vehicle.
- Examine and lubricate pins and bushings regularly.
- Inspect suspension systems under load to ensure that they work properly and provide even suspension. Weak suspension systems should be replaced immediately.
- Inspect hoist cylinders regularly. Worn cylinders should not be replaced with smaller cylinders or with cylinders rated at lower operating pressure.
- Make sure that repairs to boxes leave bottom and sides clear and unrestricted. Rough patchwork repairs near the top of the box can catch and hold sticky materials.

Loading

- Loading of the box front-to-back must meet allowable gross weight and axle weight limitations set by the Ministry of Transportation.
- From side to side it is best to load as evenly as possible.
- If material is likely to flow poorly, lighten up the load in the top end of the box.
- A slightly smaller load will be better than a full load that causes a tip-over.
- Box liners will help most materials flow more efficiently during dumping. Liners also help to keep the box in good condition.

Dumping

- Operators should be trained to recognize areas hazardous to dumping, such as soft or uneven surfaces and inadequately compacted fill.
- Before dumping, operators should ensure that the tailgate is unlocked and that the vehicle is on a reasonably level surface.
- Dumping on surfaces that are not level is one of the main causes of tip-overs.
- Before spreading material by dumping it from a moving truck, make sure that the entire length of travel is reasonably level.
- Trucks should not dump when they are parked side by side with another vehicle.
- When a dump unit tips over, it is often the operator in the adjoining vehicle who is injured. Dumping operations should be spread out.
- Other personnel such as dozer operators, surveyors, and spotters should be warned not to work near a dumping truck in case it tips over.
- Workers on foot should not congregate in areas where dumping is under way.

Making Contact with Power Lines

- Drivers and workers must be made aware of overhead power line hazards and know what safe limits of approach to adhere to.
- Caution should be taken not only when lifting the dump truck box – but also when lowering this to avoid unexpected contact with overhead power lines.
- Drivers and workers must be made aware of overhead power line hazards and know what safe limits of approach to adhere to.
- “DANGER DUE TO” signs shall be posted indicating the voltage and safe approach distances. In addition, labels shall be posted in the cabins of the operators providing identical information as danger due to signs.
- Caution should be taken not only hen lifting the dump truck box – but also when lowering this to avoid unexpected contact with overhead power lines.
- In the event that your vehicle comes in contact with a power line – A driver can be electrocuted if he/she attempts to leave the truck. Warn others to ‘Stay Back!’
- If someone were to touch the side of the truck, they would be electrocuted by the energized dump truck
- In addition, the ground around an energized vehicle will carry electricity for up to 35 feet.
- In the event of a power line call 911 or the Local Distribution Company (Electrical Utility) to ensure that power on the power line is disconnected

RIGGING & HOISTING

- The equipment operator must use assistance of the signaler.
- Signaling methods shall be discussed between operator and signaler prior to starting work.
- Operator must follow signals from designated signaler only.
- The signaler must be careful not to order a move until he has received the “all-ready” signal from each member of the crew engaged in rigging task.
- Each rigger must be sure he’s in the clear before he gives an “all-ready” to the signaler.
- Once sling or choker in position, release it, if possible, before giving “all-ready” signal.
- If sling or choker must be held in position, ensure your hand is clear of pinch points.
- Watch out for the roll or swing of the load, always try to hook the loads at the centre of the load.
- Never place yourself between material, equipment or any stationary object and the load swing.
- Monitor wind conditions and obstructions in the area.
- Use guide ropes when required and never stand under the load.
- When lowering or settling the load, be sure your feet and all other parts of your body are out from under.
- Set the load down easily and slowly so that if it rolls on the blocking, it will be a slow shift that you can get away from.
- In addition to protective footwear and headwear, signaler shall be wearing reflective vest.

CRITICAL LIFT PLAN & CRANE PERMIT

Permits must be posted at the lift site until lift is complete. Permits must be reissued if conditions (equipment, weather, and/or ground) or scope of work has changed. A Critical Lift Plan & Crane Permit including all supporting documents must be submitted and approved prior to any of the following types of lifts. Describe the crane overall weight, height, maximum reach etc.

- Two or more cranes are used to lift
- Lifts =/> 24,000 pounds
- Crane will lift personnel
- Crane will “Walk” with load
- Load will be upended and weighs > 10,000 pounds
- Loads =/> 75% of rated load capacity

SAFE LIFTING PRACTICES – HOISTING

- Evaluation of the Load - determine the weight of the object or load prior to a lift to make sure that the lifting equipment can operate within its limitations.
- Balancing of the Loads - estimate the center of gravity or point of balance. The lifting device shall be positioned immediately above the estimated center of gravity.

- Hoisting Hook - Hoisting hooks must be equipped with safety catch unless design of the hooks, permit safe levels of safety or better than those assured by safety catch and approved for that particular application.
- Landing the Load - Prepare a place to land the load, lower the load gently and make sure it is stable and secured prior to releasing hoisting hooks or slings or chains.

REMEMBER

- Use only approved rigging and NEVER exceed the working load limits set out by manufacturer or professional engineer.
- Ensure the hoist or crane is positioned directly over the load.
- Use slings/chains of proper reach.
- NEVER shorten a line by twisting or knotting – with chain slings
- NEVER use bolts or nuts.
- NEVER permit anyone to ride the lifting hook or the load.
- Ensure all personnel stand clear from the load being lifted.
- NEVER work under suspended load.
- NEVER leave a load suspended when the hoist or crane is unattended.

SIGNAGE

Warning signs containing word "DANGER" must be placed:

- adjacent to hoisting area
- where hazardous vapours, fumes or dusts present
- below overhead work
- at confined space entrance
- on top of protective covering
- where covering is missing

MATERIAL HANDLING/LIFTING

Whenever practical, 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 or hand patches and required when handling sharp, rough, heavy or hot material.
- Never carry a load so large that it obstructs vision or is too heavy to be safely lifted without assistance.
- If steps and handrails are provided, use them.
- Walk only on sturdy clear paths.

COMPRESSED GAS SAFETY

- always handle compressed gases with extreme caution. Compressed gas cylinders may only be transported or hoisted on site where a suitable crib, secured from movement, is used.
- only competent authorized and trained workers are to handle compressed gas cylinders.
- use, store and transport all compressed gas cylinders adequately secured in an upright position. Storage cages or racks must be made available in a safe location away from work areas, 25 feet from the outside of the building.
- after using a compressed gas cylinder, ensure the valve has been closed. Cylinder valves must also be covered with their appropriate screw on caps.
- upon discovery of a compressed gas leak from a cylinder, hose, valve or other connection, discontinue use, remove from work area (if safe) and report immediately. Under no circumstances, is a leaking compressed gas cylinder to be used
- empty containers of compressed gases should be stored separately from full or partial containers. Flammable materials should be stored separately from oxidizers. Only a day's supply or less of compressed gas is to be stored indoors, at any time
- store cylinders in upright condition unless design permits otherwise when not in use
- ensure that all gauges, hoses, fittings are in good condition. Damaged equipment shall be taken out of service immediately and replaced or repaired
- no part of cylinder shall be subject to temperature higher than 55*C
- transport in accordance with TDG

WEATHER CONDITIONS - LIGHTNING

Who should be concerned about lightning?

Lightning kills more Canadians than hail, wind, rain and tornadoes combined, making lightning an important safety consideration. This fact is especially true for people who make a living working outdoors. While the odds of getting struck by lightning are less than one in a million, Environment Canada says lightning kills six to twelve people every year in this country and seriously injures another sixty or seventy people. Knowing what to do when lightning is close is especially important for people who work outdoors (for example, construction workers, road crews, landscapers and farm workers). Employers need to recognize the hazards associated with electrical storms and, where appropriate, have safe procedures and work systems in place, to minimize the risk of injury or harm to employees, and should review these policies seasonally.

Having a preparedness plan and taking some basic safety measures can prevent many lightning deaths and injuries.

What should I know about lightning?

A lightning bolt is a million times more powerful than household current, carrying up to 100 million volts of electricity. When someone is struck by lightning, an electrical shock occurs that can cause burns and even stop the person's

breathing. Although thunder and lightning can occur occasionally during a snowstorm, April to October are the prime thunderstorm months in Canada. Thunderstorms occur most often in late afternoon or evening, and around sunrise.

Knowing how lightning behaves can help you plan for an approaching storm. It tends to strike higher ground and prominent objects, especially materials that are good conductors of electricity, such as metal. Thunder can be a good indicator of lightning - loud crackling means it's close, whereas rumbling means the storm is further away. Because light travels faster than sound, you will see lightning before you hear the thunder. Each second between the flash and the thunderclap represents about 300 metres. As a rule of thumb, if you can count less than 30 seconds between the lightning strike and the thunder, the storm is less than 10 km away. There is an 80% chance that the next strike will happen within that 10 km, and if you can hear thunder, you are within striking distance. Immediately go to the nearest well-constructed building or a fully enclosed, metal-topped vehicle... there is NO safe place to be outside in a thunderstorm.

What steps should people take to protect themselves?

Protection from lightning begins before the storm. Paying attention to weather conditions and forecasts allows time to plan for threatening weather and to react appropriately.

The safest place to be during a thunderstorm is in a well-constructed building. A well-constructed building is one that is fully enclosed with a roof, walls and floor with electrical wiring, plumbing, telephone line, or antennas to ground the lightning should the building be hit directly. Even when inside the building, there are safety precautions to take:

- Keep as many walls as possible between you and the outside. Stay away from doors, windows, and fireplaces.
- Stay away from anything that will conduct electricity such as radiators, stoves, sinks and metal pipes.
- Use battery operated appliances only. Avoid handling electrical appliances and regular telephones (cordless phones and cell phones do not increase the risk of a lightning strike).
- The next best place for shelter is an enclosed metal car, truck or van but NOT a tractor, golf cart, topless or soft-top vehicle. Make sure the vehicle is not parked near trees or other tall objects that could fall over during a storm. When inside a vehicle during a lightning storm, roll up the windows and sit with your hands in your lap and wait out the storm. Don't touch any part of the metal frame or any wired device in the vehicle (including the steering wheel or plugged-in cell phone). A direct strike to your car will flow through the frame of the vehicle and usually jump over or through the tires to reach ground.
- Be aware of downed power lines that may be touching your car. You are safe inside the car, but you may receive a shock if you step outside.
- Unsafe shelters are buildings or structures without electricity or plumbing to ground the lightning, as they do not provide any lightning protection. Shelters that are unsafe include covered picnic shelters, carports, tents, baseball dugouts as well as other small non-metal buildings (sheds and greenhouses).

What should you do if you cannot find shelter?

- There is no safe place to be outdoors during a thunderstorm. However, there are areas that might be less dangerous -- and help reduce the risk of being struck by lightning when outside.
- Stay away from things that are tall (trees, flagpoles or posts), water, and other objects that conduct electricity (tractors, metal fences, lawn mowers, golf clubs).

- You do not want to become a prime target by being the highest object on the landscape. Take shelter in low-lying areas such as valleys or ditches but watch for flooding.
- If you are with a group of people in the open, spread out several meters apart from one another.
- If you get caught in a level field far from shelter and you feel your hair stand on end, lightning may be about to hit you. Crouch down on the balls of your feet immediately, with feet together, place your arms around your knees and bend forward. Be the smallest target possible, and at the same time, minimize your contact with the ground. Don't lie flat.

What should you do if someone has been hit by lightning?

Lightning victims are safe to touch. Bystanders shouldn't hesitate to save a life by calling for help. If breathing has stopped, administer mouth-to-mouth resuscitation. If the victim is not breathing or they do not have a pulse, a trained rescuer should administer cardio-pulmonary resuscitation (CPR).

What do they mean by the "30-30 Rule"?

Remember...

When you can count 30 seconds or less between lightning and thunder, head for safe shelter.

Remain sheltered for 30 minutes after the last thunder. When Environment Canada issues a storm warning, or if you can already hear thunder, remember to take shelter from the storm and protect yourself. There are also commercially available personal lightning detection devices that can be carried on a person to help warn about how close a storm is. Preparedness for a storm is essential. Listen to your local forecast for the possibility of thunderstorm activity. Keep an eye on the sky. If the sky suddenly darkens, be prepared to take shelter.

UNDERGROUND STORAGE TANK INSTALLATIONS, REMOVAL AND DECOMMISSIONING

These procedures do not provide step by step actions for every operation or specific instruction eg: Confined Space, Fall Prevention etc. A site specific Confined Space program and Fall Arrest Rescue Plan shall be developed prior to any work carried out.

Get to Know Your Site:

The project supervisor must examine the site prior to commencing work. This will identify any specific hazards and obstructions that may identify addition work requirements including but not limited to:

- Site and neighborhood traffic – this will include both vehicular and pedestrian traffic
- Any overhead hazards – electrical wires/ canopies – machinery must be 3 meters (10 feet) away from any powerlines – O. Reg. 213/91 s. 188 (2) Table
- Protection of neighboring properties/buildings – a slope on, or at the edge of, the property that must be protected so that spilled product, soil or material will not be carried off-site
- Environmentally sensitive areas nearby
- Space for operating equipment and truck movement

- Space for stockpile of soil
- Disposal of soil, concrete and asphalt rubble
- Potential for impacted soil
- Disposal of residual fuel
- Disposal of sludge

Obtain Utility Locates:

It is important that utilities in the work are be identified and located. This could involve locates by local utilities or their subcontracted locating service and locates by a private locating contractor. The Petroleum Contractor may decide to own/rent and operate his own utilities locating equipment. All utility locating work is carried out with the primary objective of reducing liability related to damage to essential services. The utilities involved include:

- Natural gas – electrical supply
- Electrical branch lines to site fixtures
- Telephone, cable, water, sewer, traffic signalization

Hazard Evaluations

The safety of site personnel and the general public must be paramount. Hazard assessment shall include:

- Heavy equipment operations
- Lifting equipment operations
- Toxic and flammable vapour emissions
- Possibility of excavation collapse
- High water table and excavation flooding
- Tank stability (rolling, sudden uplift)
- Working at heights

Site Safety Meetings

Before any on-site work begins, a safety meeting with all workers shall be held. Safe work permits are to be reviewed and signed off. Any meetings shall be recorded and rostered and kept on site for reference. – Daily tool box talk shall be held if required for awareness to hazards associated with the task. A site communication system is required; established emergency alarm and response plan.

Personal Protective Equipment (PPE)

The personal protective equipment must be worn at all times while on site:

- Hard Hat – O. Reg. 213/91 s. 22(1)
- Safety Boots – O. Reg. 213/91 s. 23 (1) – Grade 1 toe protection with sole protection in accordance with Canadian Standards Association (CSA) Z195-M1984
- Reflective tear away vest
- Safety Glasses
- Gloves
- Respiratory protection as required by S.D.S or specific request

Petroleum Orientated Safety Training (P.O.S.T)

Major oil companies require that all personnel on a fenced construction site obtain a POST Certification. Post outlines the responsibilities of the Owners, Supervisors and Workers including required documentation and PPE. All relevant documentation required (i.e. JSA's and checklists) is included.

Site Control

- Ensure that unauthorized personnel and non-essential workers be kept as far as practicable from construction operations.
- Establish traffic control for equipment on-site and trucks moving on and off site. A trained flag-person (written and oral training shall be provided) shall be used for directing traffic on and off municipal street.
- A signal person that is competent to signal trucks and any equipment on site that is reversing onto the site or anywhere in the site.

Environmental Assessments

- TSSA, Ministry of the Environment and applicable municipalities must be notified of a tank removal and a qualified person (consultant) must submit a report.
- Qualified Person – A Professional Geoscientist (P. Geo), a Professional Engineer (P. Eng), Chartered Chemist, Agrologist etc.

UNDER GROUND STORAGE TANK INSTALLATIONS

Planning the Excavation:

The soil type shall be determined prior to any excavation is to begin. Soil is classified as Type I, Type 2, Type 3 or Type 4. As per section 226 of O. Reg. 213/91 it states:

Soil Types

226. (1) For the purposes of this Part, soil shall be classified as Type 1, 2, 3 or 4 in accordance with the descriptions set out in this section. O. Reg. 213/91, s. 226 (1).

(2) Type 1 soil,

(a) is hard, very dense and only able to be penetrated with difficulty by a small sharp object;

(b) has a low natural moisture content and a high degree of internal strength;

(c) has no signs of water seepage; and

(d) can be excavated only by mechanical equipment. O. Reg. 213/91, s. 226 (2).

(3) Type 2 soil,

(a) is very stiff, dense and can be penetrated with moderate difficulty by a small sharp object;

(b) has a low to medium natural moisture content and a medium degree of internal strength; and

(c) has a damp appearance after it is excavated. O. Reg. 213/91, s. 226 (3).

(4) Type 3 soil,

(a) is stiff to firm and compact to loose in consistency or is previously-excavated soil;

(b) exhibits signs of surface cracking;

(c) exhibits signs of water seepage;

(d) if it is dry, may run easily into a well-defined conical pile; and

(e) has a low degree of internal strength. O. Reg. 213/91, s. 226 (4).

(5) Type 4 soil,

(a) is soft to very soft and very loose in consistency, very sensitive and upon disturbance is significantly reduced in natural strength;

(b) runs easily or flows, unless it is completely supported before excavating procedures;

(c) has almost no internal strength;

(d) is wet or muddy; and

(e) exerts substantial fluid pressure on its supporting system. O. Reg. 213/91, s. 226 (5).

- Excavations shall be kept 1.5 meters (5 feet) from any building foundation wall unless a technical review has been done on the foundation and the soil.
- An access/egress shall be established for the workers in the excavation. A means of exit must be available every 7.5 meters (25 feet)

TANK HANDLING AND PLACEMENT

- All underground storage tanks are to be externally inspected for damage
- Follow manufacturer instructions for installation directions
- Equipment must be suitable for lifting, moving and lowering the underground storage tanks without dragging; excavators, backhoes are not stable enough to lift, rotate and move and therefore should not be used.
- Ensure that the lifting equipment operator and workers are trained and have an established set of hand signals for communication.
- If the underground storage tank is to be stored on site before installation in the excavation, it should be placed on the bedding material recommended by the manufacturer and wooden blocks used to prevent it from rolling.
- When workers are in the excavation placing the backfill, this may be considered a confined space requiring the appropriate permit, harness, life line, atmospheric testing, method of egress, stand-by workers, safe work permit procedures, emergency response procedures etc. must be in place.

REMOVAL OF UNDERGROUND STORAGE TANKS

- Flammable vapours can be removed from the underground storage tanks by either purging or inerting.

- Purging is the removal of petroleum vapours from the underground storage tank internal atmosphere by using an eductor to draw air through the tank or a blower to force air through the tank. The contractor must control sources of ignition and ensure all air moving equipment is bonded and grounded with the underground storage tank. This action removes the ignition side of the fire triangle.
- Inerting is the removal of oxygen from the underground storage tank's internal atmosphere, and some of the petroleum vapours by introducing dry ice or liquid carbon dioxide from a siphon cylinder into the tank. This action removes the oxygen side of the fuel triangle.
- Follow all MOE and federal, provincial and any legislative requirements for proper disposal of tanks.

CHECKLIST - UNDERGROUND STORAGE TANK REMOVAL IN ACCORDANCE WITH

ONTARIO REGULATION 213, THE FUEL OIL CODE B139-00 AND ENVIRONMENTAL PROTOCOLS FOR OPERATING FUEL HANDLING FACILITIES IN ONTARIO, GA1/99

UST REMOVAL

- ✓ All underground storage tanks (USTs) must be removed by a qualified PM-2 Contractor licensed by the TSSA's Fuel Safety Division under Ontario Regulation 216.
- ✓ Project Managers Contact the Ontario Petroleum Contractors Association to locate a licensed
- ✓ Petroleum Contractor in your area. www.opcaonline.org if work is sub – contracted by
- ✓ Cannington Construction Limited to a sub – contracting company.
- ✓ Technicians are TSSA (Technical Standards and Safety Authority) Certified with OTB3 & OTB2 licenses.
- ✓ Technicians are TSSA (Technical Standards and Safety Authority) Certified with OTB3 & OTB2 licenses.
- ✓ MTO – MP3 Dangerous goods transportation licensed and Insured
- ✓ Master Petroleum Mechanic (PM1) on staff
- ✓ Certified Oil Burner Technician (OBT-1) on staff

ENVIRONMENTAL ASSESSMENT AND REPORTING

- ✓ Upon the permanent removal of a UST, the owner of the property must have an assessment report completed which delineates the full extent of any petroleum product that has escaped to the environment.

- ✓ All environmental assessment activities must be completed in accordance with the requirements specified in the TSSA Fuel Safety Division's "Environmental Protocols for Operating Fuel Handling Facilities in Ontario, GA1/99".
- ✓ Following removal of the UST, the base and sidewalls of the excavation must be examined for visual and olfactory evidence of petroleum impacts and screened for the potential presence of volatile organic compounds (VOCs) using a real-time, organic vapor analyzer.
- ✓ Confirmation soil samples must be collected from locations with the highest detected VOCs concentrations directly into the laboratory supplied sample containers. The completely filled sample containers (i.e., no headspace) must be immediately placed on ice inside of a sample cooler and delivered for laboratory analyses of total petroleum hydrocarbons (fractions F1 through F4) as well as benzene, toluene, ethylbenzene and xylenes.
- ✓ The number and locations of confirmation soil samples must be selected in accordance with the procedures specified in Appendix A of the TSSA Fuel Safety Division's "Environmental Protocols for Operating Fuel Handling Facilities in Ontario, GA1/99" (i.e., a minimum of 2 floor samples and 2 sidewall samples).
- ✓ If groundwater is encountered at the base of the excavation or there is evidence of potential petroleum impacts to groundwater, confirmation groundwater samples must be collected and placed directly into the laboratory supplied sample containers. The completely filled sample containers (i.e., no headspace) must be immediately placed on ice inside of a sample cooler and delivered for laboratory analyses of total petroleum hydrocarbons (fractions F1 through F4) as well as benzene, toluene, ethylbenzene and xylenes.
- ✓ Complete additional activities, as necessary, to delineate the full extent of any petroleum product that has escaped to the environment.
- ✓ All environmental laboratory analyses must be completed by an accredited environmental laboratory in accordance with methods and procedures specified in Ontario Regulation 153.
- ✓ All environmental assessment information must be kept in a clear, organized technical report format. The report must include a comparison of the confirmation soil analytical data to the appropriate MOE soil cleanup standards specified in the document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act".
- ✓ The report must be signed by a Qualified Person (e.g., Professional Engineer) in accordance with the requirements specified in Ontario Regulation 153.

NOTIFICATION

- ✓ Notification must be provided to the TSSA Fuel Safety Division within 90 days following decommissioning and removal of a UST.
- ✓ The MOE must be notified immediately should it be determined during the environmental assessment activities that environmental conditions at a site contravene the applicable sections of the Environmental Protection Act or the Ontario Water Resources Act.

REMEDIATION/MANAGEMENT OF PETROLEUM IMPACTED MEDIA

- ✓ Remediation or management of any associated petroleum impacted soil or groundwater must be completed in accordance with the requirements of Ontario Regulation 347.

- ✓ Any petroleum impacted soil or groundwater transported from a site for treatment and/or disposal must be characterized in accordance with Ontario Regulation 558.
- ✓ All petroleum impacted soil or groundwater must be properly manifested and transported by a qualified waste transporter licensed under Ontario Regulation 347 for treatment and/or disposal at an appropriate waste disposal facility also licensed under Ontario Regulation 347.
- ✓ All environmental laboratory analyses must be completed by an accredited environmental laboratory in accordance with methods and procedures specified in Ontario Regulation 153 and/or Ontario Regulation 558, as appropriate.

REMOVAL OF UNDERGROUND FUEL STORAGE TANKS AND PIPING

Permits and Regulations

The Excavating Contractor is responsible for obtaining all utility locates. All work shall be performed in accordance with the provisions of the Ontario Regulation 631/94 relating to Construction Projects under the Occupational Health and Safety Act.

Comply with:

- Ontario Fuel Oil Regulation 213/01, established in law by the Ontario TSSA, 2000. The Fuel Oil Regulation adopts the Fuel Oil Adoption Document, which adopts the National Standards of Canada Installation Code for Oil Burning Equipment (CSA B139-00), published in April 2000;
- Ontario Liquid Field Regulation 217/01, established in law by the TSSA. The Liquid Fuels Regulation adopts the Liquid Fuels Handling Code issued by the TSSA, published in August 2001.
- In addition, comply with the TSSA draft document.
- Read and be familiar with “Environmental Management Protocol For Fuel Handling Sites in Ontario, 2011. Prepared by Fuel Safety Program, TSSA”.
- Read and be familiar with C.P.C.A. (Canadian Petroleum Contractors Association recommended guidelines for:
    - ✓ Aboveground Storage Tanks
    - ✓ Leak and Spill Prevention
    - ✓ Piping and Fittings
    - ✓ Underground Storage Tanks
- Comply with registration for removal of liquid wastes.
- Transport, and dispose of solid and liquid waste in accordance with Regulation 558 September 2000, Regulation to amend Regulation 347 of the Revised Regulations of Ontario, 1990 made under the Environmental Protection Act, under the Environmental Protection Act (General-Waste Management).
- The Contractor performing the UST removal shall be licensed with the TSSA and have a valid PM2 certificate for UST removal.
- The receiver of contaminated soils or water have a valid Certificate of Approval for operating a waste management facility issued by the MOE. Provide copies of all weigh bills and manifests to the Engineer.

Instruction and Training

Before commencing work, provide satisfactory proof that each worker involved in the UST removal has had instruction and training in the hazards involved in activities pertaining to UST removal, contaminated site cleanup, personal hygiene and work practices, and in the use, cleaning, and storage of protective clothing and personal protective equipment.

Instruction and training shall be related to:

- Limitations of the equipment;
- Inspection and maintenance of the equipment;
- Fitting of the equipment; and
- Emergency response.

Worker Protection:

The project manager and project supervisor are responsible to have and execute a formal project specific Health and Safety Plan in accordance with OHSA. As a minimum, each worker shall be provided with:

- Safety glasses,
- full body type coveralls,
- safety boots certified by Canadian Standards Association (CSA),
- construction hard hats and appropriate safety gloves.

Atmospheric Monitoring:

Upon first exposing the UST, the competent worker assigned by supervisor shall monitor the work area for combustible gases using a combustible gas detector to determine whether concentrations are above 20% of the lower explosive limit (LEL), and if so, the competent worker shall cease operations and notify the supervisor. Do not continue work until conditions are consistently below 20% LEL.

Personal Protective Equipment:

- respiratory protection
- gloves
- over boots resistant to petroleum products and vapours, as determined through inspection and organic vapour monitoring.
- Eating, drinking, chewing, and smoking are not permitted in the work area.
- Use of the "Buddy system" is strongly emphasized; at no time during the course of the work should a worker be within the work area alone.
- Unauthorized Persons and Demarcation
- Provide construction fence and signs around the UST work area.
- Provide appropriate security measures to prevent unauthorized persons from entering the UST work area.

EQUIPMENT AND PRODUCTS

The Contractor shall supply and operate all necessary equipment for safe and expeditious removal of the UST(s) and associated petroleum products and any contaminated soils.

The main equipment requirements specified in this Section are for reference purposes and not intended to be an exhaustive representation of all equipment required.

Excavating and Lifting Equipment

The Contractor shall supply and operate excavating equipment, such as a backhoe or front-end-loader or crane of sufficient capacity to safely and efficiently exhume the UST and lift it onto transportation equipment for removal off-site.

Compaction Equipment

The Contractor shall supply and operate compaction equipment capable of compacting any materials backfilled into the cavity to at least 95% of their Standard Proctor dry density.

Polyethylene Sheeting

The Contractor shall supply and install temporary polyethylene sheeting of at least 6-mil thickness for stockpiling any contaminated soil and placement over open surface drain inlets in order to prevent drain clogging by excavated soils.

UST Evacuation Equipment

The Contractor shall supply and operate a liquid waste transporter truck capable of evacuating the excavation of any petroleum impacted groundwater by vacuum pumping.

Waste Transportation Equipment

- The Contractor shall supply and operate waste transportation vehicles suitable for transportation of the exhumed UST, liquid waste, and any contaminated soils excavated.
- All solid waste haulage containers shall be of the open top type with no side doors and have sealed tailgates and appropriate tarping mechanisms to ensure that no spillage will occur.
- All haulage vehicles shall have appropriate pleading as required.

Acceptable Backfill Materials

- OPSS Granular "A”: Granular paving material conforming to the OPSS gradation range defined as Granular "A" compacted to 98% SPMDD.
- OPSS Granular "B”: Granular paving material conforming to the OPSS gradation range defined as Granular "B" compacted to 98% SPMDD.
- Inert Fill: Earth or rock fill that contains no putrescible materials or soluble or decomposable chemical substances approved for use by the Engineer.
- Fill material to match native soil type and permeability and be free of organic or deleterious substances. Compact to 95% SPMDD.

EXECUTION

The contractor shall be responsible for the execution of the project and shall co-ordinate all site activities with the Engineer and follow the suggested methods of work below;

- Locate all underground utilities such as gas lines, electrical cables telephone/TV cables, water mains, sewer and drain pipes on the site and stake or mark them with clearly visible spray paint on the ground.
- Measure the clearance to buildings, structures, and overhead power lines or cables, and confirm that they will not interfere with the excavation and UST removal operations.
- Ensure that there are no ignition sources such as generators in the work area.
- Prior to starting any activities on the site, the workers shall be briefed on potential hazards and on safety and emergency measures and PPE.
- Cut and remove any asphalt or concrete cover over the UST, allowing sufficient clearance to access the sides of the tank.
- Asphalt and concrete removed from the work area shall be removed from the site.
- Carefully uncover by excavation the top and sides of the tank and place the excavated soils beside the cavity on polyethylene sheeting.
- Confirm the adequacy of personal protective equipment by scanning the area above the uncovered UST for noxious petroleum vapours, if any, using a portable combustible gas detector, and if so, notify the Engineer and outfit workers and visitors with enhanced personal protective equipment accordingly.
- Piping attached to the UST shall be emptied of product by allowing it to drain back into the tank prior to the UST cleaning.
- All residual product and sludge shall be evacuated from the UST and the UST satisfactorily cleaned to meet the requirements for haulage and disposal.
- Under no circumstances shall any worker endeavour to enter into the UST.
- Ensure that proper grounding procedures have been provided to avoid possible ignition.
- Slope back the sides of the cavity no steeper than 45o (1:1) to facilitate close inspection.
- The Engineer will examine the exhumed UST for corrosion holes or cracks.
- If necessary, remove by scraping any soils or roots that adhere to the tank until a clean metal surface is revealed. (Tanks have been known to develop holes or cracks along the welding seams or at pipe fittings.)
- Carefully lift the tank from the cavity and properly support the tank at grade level.
- Check the UST for any remaining products or sludge in the tank.
- Remove all exterior and interior piping from the UST.
- Rupture openings on the sides of the UST to render it unfit for future liquid storage.
- The UST shall then be transported to a waste facility by a licensed waste transporter together with associated piping (fill vent, supply and gauge) and valves.
- The Engineer will, in the presence of the Contractor, inspect the tank cavity for signs of contamination in the form of soil staining, or petroleum hydrocarbon odours. If none of these are observed, the Engineer will collect grab samples from the bottom and at least two opposite walls of the cavity for confirmation purposes and submit them to an accredited laboratory for analyses.
- Do not commence backfilling until directed to do so by Engineer.

- Where soil contamination is encountered in the UST cavity (i.e. petroleum odours and/or grey or black discoloration) such soils shall be excavated and temporarily stockpiled to the limits prescribed and approved by the Engineer.
- The Engineer will conduct soil sampling for waste classification and verification of the limits of excavation.
- The Engineer will provide the results of the TCLP analysis under Ontario Regulation 558.
- The Contractor shall proceed to notify the appropriate disposal facility approved by the Engineer, and shall remove, transport and dispose of all the contaminated soils generated in accordance with applicable regulatory requirements.
- Upon receipt of the results of verification testing by the Engineer the Contractor shall proceed to backfill the UST cavity with approved soils in lifts not greater than 300 mm and compact using appropriate vibratory compaction equipment.
- The compaction effort shall achieve a minimum of 95% of the Standard Proctor dry density of the fill material.

ENVIRONMENTAL INSPECTION AND TESTING

- The Engineer will perform environmental inspection and testing during the course of the work.
- The Engineer will monitor, inspect and direct the work to ensure compliance with environmental legislation and other regulations.
- The Engineer will examine the soils in the UST cavity to assess and document the soil type, groundwater and environmental conditions.
- The Engineer will prescribe and verify the limits of excavation of the UST cavity in the field through an ongoing and on site assessment of physical conditions.
- The Engineer will perform verification sampling and testing as required to verify the cleanup and delineate the extent of contamination.
- The Contractor shall provide copies of all manifests and weigh bills verifying the volumes or tonnage and classifications of the wastes removed, and location(s) where materials were disposed off-site.

INTERNAL FORMS & CHECKLISTS

- ✓ Accident / Incident Investigation Report
- ✓ First Aid Record
- ✓ Violence and Harassment Risk Assessment Questionnaire
- ✓ Violence and Harassment Incident Report
- ✓ Sub-Contractor Pre-Qualification form
- ✓ Workplace Inspection Checklist
- ✓ New Employee Safety Check List
- ✓ Worker/Supervisor/Contractor Acknowledgment & Agreement Form
- ✓ Employee Annual Survey
- ✓ Employee Annual Performance Review
- ✓ POST Documents and Critical Tasks Checklists

INTERNAL DOCUMENTS

- ➢ Cannington Construction Company Rules (Grab and Go)
- ➢ Cannington Construction Company Job Descriptions
- ➢ Cannington Construction Company Procedures
- ➢ Cannington Construction Company Hazard Analysis
- ➢ Cannington Construction Company Pre-Filled JSA's
- ➢

EXTERNAL RELATED DOCUMENTS

- o Occupational Health and Safety Act and Regulations for Construction Projects (January 2018)
- o CPCA / OPCA Recommended Guidelines (Version 3-2011)
- o TSSA Code Books and Training Manuals
- o

*ALL OF THE ABOVE MENTIONED ARE SUBJECT TO CHANGE AT ANYTIME WITHOUT WARNING. UPDATES WILL BE COMMUNICATED IMMEDIATELY AND HANDBOOK WILL BE UPDATED ANNUALY.

ACCIDENT/INCIDENT INVESTIGATION REPORT

Determine if this is an Accident or Incident. (Circle one)

Accident = CCL's definition of Accident is when someone is Injured, damage to health, or fatality.

Incident = CCL's definition of Incident is when there is damage to property but no Injury, illness, damage to health, or fatality.

Employee's Name: _____

Address: _____

Phone #: _____

Alternative Contact #: _____

Occupation: _____

Years of Experience: _____

Birth date of Employee: _____

Employer: _____

Address: _____

Employer's Phone #: _____

Employers Email: _____

Address of Accident / Incident (job site location):

_____

Constructor: _____

Phone #: _____

Date of Accident/Incident: _____

Time of Accident/Incident: _____ am/pm

Name of Supervisor or Person of authority on site to whom this Accident/Incident was reported:

_____

Time and date this Accident/Incident was reported to supervisor:

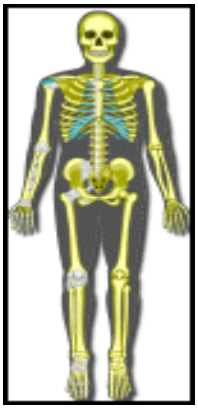
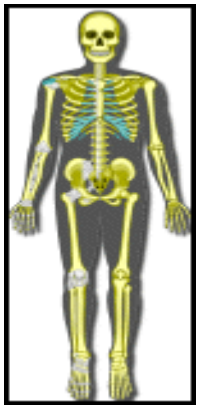
_____

Conditions at location: (weather, housekeeping, lighting)

_____

_____

_____

Indicate area of injury below.	Use this area to provide additional information regarding Accident/Incident. (Location and Layout) *Attach Photos if available
  **Right** **Left**	

DESCRIBE THE ACCIDENT / INCIDENT: Detail all equipment, objects, condition of tools events, and circumstances that lead to the accident. Indicate property damage, size and weight of equipment or material involved, person in most control of object, equipment, or substance. Indicate position of witnesses. Obtain measurements and measure distances. (Attach any documentation available)

_____

_____

_____

_____

_____

_____

_____

_____

_____

LOST TIME INJURY INFORMATION ONLY:

How long will the worker be off work? _____

Date and hour last worked: Date: _____

Time: _____ am/pm

Normal working hours in week: (Include OT) _____ hrs /wk

Normal working hours on date of accident: _____

Start and finish times of shift: Start time: _____ Finished time: _____

Was anyone else directly involved in the accident (third parties)? Y _____ N _____

If yes, detail actions; give addresses and phone numbers. IMPORTANT: Remember to get their written account (statement) of the accident! Voluntary witness statements

1. **Name: _____**

   Position: _____

   Address: _____

   Phone #: _____

Voluntary witness statement attached? Y_____ N _____

2. **Name: _____**

   Position: _____

   Address: _____

   Phone #: _____

Voluntary witness statement attached? Y_____ N _____

Name, address and phone number of attending physician, surgeon or walk-in clinic.

Name: _____

Family Physician? Y _____ N _____

Address: _____

Phone #: _____

Did anyone accompany the worker to medical treatment? Y _____ N _____

If yes, name of the escort? _____

If no, why not? _____

If no, did you contact physician to confirm modified duties clearance? Y _____ N _____

Is there any further information that you are aware of, which would assist in the investigation of this Accident? Please include written statements of witnesses, co-workers, foremen, etc. and ensure that accompanying statements are signed and dated.

_____

_____

_____

_____

Is this a reportable Accident to the Ministry of Labour/WSIB? Y_____ N _____

If yes, time and date it was reported to the MOL. Time: _____am/pm Date: _____

Name of MOL Representative who took the call: _____

List the PPE or devices the worker(s) used at the time of the accident:

1. **_____**
2. **_____**
3. **_____**
4. **_____**

What protective equipment or PPE should have been used for the worker's health and safety?

1. **_____**
2. **_____**
3. **_____**
4. **_____**

What protective measures have been taken to prevent a recurrence?

_____

_____

_____

Has the employee had similar disability previously? Y_____ N_____

If yes, when? _____

Did the employee collect compensation? Y _____ N _____

Name of the employer at the time of previous disability:

Name: _____

Address: _____

Phone #: _____

Email: _____

Was there any serious or willful misconduct involved? Y _____ N _____

Any neglect of company safety rules? Y _____ N _____

Any neglect in reporting the accident immediately? Y _____ N _____

If YES, what was it?

_____

Are you aware of any underlying health conditions which could aggravate the duration of disability or could have contributed to the accident? Y _____ N_____

If YES, what is it? _____

Do you feel any need for any further investigation of this claim? Y _____ N _____

If YES, give detail for the reason:

_____

_____

_____

Was this report completed with the injured employee present? Y_____ N _____

Was the investigation of this claim conducted immediately? Y_____ N _____

If NO, why not?

_____

_____

_____

Time and date investigation was conducted: Time: _____ am/pm Date: _____

Name of person who conducted the investigation:

_____

Name of person who completed this form:

_____

Supervisor's Signature: _____

Employee's Signature: _____

Date: Year _____ / Month _____ / Day _____

Any other supporting documentation to this report? Y_____ N_____

If YES, please indicated the total pages attached to this report: _____

FIRST AID RECORD

Project Location: _____

Date of Injury: _____ _____

D M Y TIME AM PM

Date Injury Reported: _____ _____

D M Y TIME AM PM

Name of injured worker: _____

Name of Employer: _____

Position of worker (type of work): _____

Description of injury:

_____

_____

_____

Cause of injury:

_____

_____

_____

Type of first aid provided:

_____

_____

Name of first aider: _____

First Aid Supplies used:

_____

_____

Location of Kit to replace items used: _____

Injured Worker's Statement:

_____

_____

_____

_____

_____

_____

_____

_____

Voluntary Witness Statement:

Name: _____ Date of Statement_____

Address of Witness: _____

Telephone Number: ( ) _____ (must be provided)

Alternate Contact Number: ( ) _____ Your Position: _____

Employer: _____ Time of Statement: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Signature: _____

Witness: _____

VIOLANCE AND HARASSMENT RISK ASSESSMENT QUESTIONNAIRE

1. a) Have you ever experienced verbal abuse while a member of this organization? ___ Yes ___ No

b) If yes, did you report the incident(s)? ____ Yes ____ No ____Verbally ____ In Writing

c) If no, why did you not report?

_____
_____

e) What was your relationship with the person involved in the incident?

___ Co-worker ___ Client ___ Member of the public ___ Supervisor ___ Other (please specify)_____

f) Where did the incident occur?

_____
_____

g) When did the incident occur?

_____

2. a) Have you experienced a threat of physical violence while a member of this organization? ___ Yes ___ No

b) If yes, did you report the incident(s)? ___ Yes ___ No ___Verbally ___ In Writing

c) If no, why did you not report?

_____
_____

e) What was your relationship with the person involved in the incident?

___ Co-worker ___ Client ___ Member of the public___ Supervisor ___ Other (please specify)_____

f) Where did the incident occur?

_____
_____

g) When did the incident occur?

_____

3. a) Have you experienced a physical assault or attack while a member of this organization?

___ Yes ___ No

b) If yes, did you report the incident(s)? ___ Yes ___ No ___Verbally ___ In Writing

c) If no, why did you not report?

_____
_____

e) What was your relationship with the person involved in the incident?

___ Co-worker ___ Client ___ Member of the public ___ Supervisor___ Other (please specify)_____

f) Where did the incident occur?

_____
_____

g) When did the incident occur?

_____

4. Did you miss any time from work as a result of the incident? ___ Yes ___ No

If yes, please indicate the length of absence from work. _____ days/weeks/months

5. Do you:

a) Work alone or with a small number of co-workers? ___ Yes ___ No

b) Work late at night or early in the morning? ___ Yes ___ No

6. Are you concerned about your safety while at work? ___ Yes ___ No

If yes, what is the source of your concern?

_____
_____
_____

7. Do you believe that such a possibility is: ___ High Risk ___ Medium Risk ___ Low Risk

The completion of this section is voluntary. Information gathered from this section will only be used for statistical analysis and to identify trends in workplace violence. Complete individual confidentially will be maintained.

___ Male ___Female

Length of service:

___ 1 year

___ 1 – 3 years

___ 3 –5 years

___ 5 – 10 years

___ more than 10 years

VIOLANCE AND HARASSMENT INCIDENT REPORT FORM

Complainant Information:

Full Name: _____

Phone Number: _____

Date of Incident: _____

Time of Day: _____AM / PM

Relationship: ____ Co-worker ____ Client ____ Supervisor ____ Member of the Public____Other (Please specify)_____

Respondent Information:

Full Name: _____

Phone Number: _____

Name(s) of Witness and/or those providing assistance:

Full Name: _____

Phone Number: _____

____ Co-worker ____ Client ____ Supervisor ____ Member of the Public____ Other (Please specify)_____

Full Name: _____

Phone Number: _____

____ Co-worker ____ Client ____ Supervisor ____ Member of the Public____ Other (Please specify)_____

Give a thorough description of the incident (what happened, where it occurred, what led up to the incident, who else was present, what action was taken at the time, what impact the incident had on you).

_____

_____

_____

_____

_____

Medical Attention Required? ____ Yes ____ No

The purpose of this form is to document your claim to assist in a thorough investigation of the complaint.

Name of person reporting incident: _____

Signature of person reporting incident: _____

Date: _____

Upon completion, please forward to: _____

SUB-CONTRACTOR PREQUALIFICATION FORM

Name of Company: _____

Address of Company: _____

Website Address: _____

Please use the 3 most recent years to fill in the number of WSIB cases for each year.

Year _____ # _____ Year _____ # _____ Year _____ # _____

How many OH&SA violations has your Company received in the last 3 years?

Year _____ # _____ Year _____ # _____ Year _____ # _____

Please give a brief description of the violation(s) – use additional paper if necessary

_____

_____

_____

Any employee fatalities in the past 3 years? Yes _____ No _____

If YES, please give a brief description of the circumstances:

_____

_____

_____

Do you have a qualified person responsible for safety within your Company? Yes_____ No _____

Does this person do safety inspections for all your projects? Yes _____ No _____

If yes, at what frequency? _____

Does your company have a substance abuse policy? Yes_____ No _____

If YES, please indicate which are included in the policy:

Pre-Hire/Initial _____

Post Accident/Incident _____

Random / Periodic _____

Have you ever implemented 100% fall protection? Yes _____ No _____

If requested, can you provide a site-specific program addressing the fall hazards? Yes _____ No _____

Do you have a return to work/light duty program? Yes _____ No _____

Do you require documented safety meetings from your employees? Yes _____ No _____

Indicate which, and how often.

Field Supervisors Yes _____ No ____ Frequency _____

New Hires Yes _____ No ____ Frequency _____

Employees Yes _____ No ____ Frequency _____

Does your company provide safety training for all employees? Yes _____ No _____

If yes, please check those that apply:

- ☐ WHMIS
- ☐ Transportation of Dangerous Goods
- ☐ First Aid
- ☐ Working at Heights
- ☐ Electrical Safety (Lockout/Tagout)
- ☐ Heavy Equipment
- ☐ Violence and Harassment
- ☐ Traffic Control
- ☐ Confined Space
- ☐ Trenching and Excavating
- ☐ Welding or Cutting
- ☐ Fire Protection
- ☐ _____
- ☐ _____

Does your Company have a disciplinary program in place for safety violations? Yes _____ No _____

Does your Company conduct accident /incident investigations? Yes _____ No _____

Please attached your Certificate of General Commercial Insurance including Pollution Liability

The undersigned warrants and represents the data provided is accurate in all respects.

Prepared By: _____ Position/Title: _____

Signature: _____ Date: _____

WORKPLACE INSPECTION CHECKLIST

Site/Contractor Name:		Date:	
Location:		No of Employees:	
Conducted By:			

Item Inspected	OK	Not OK	NA	Requires Immediate Action
1. SITE ACCESS				
Clean, level ground	☐	☐	☐	
Adequate ramps	☐	☐	☐	
Adequate stairs	☐	☐	☐	
Other	☐	☐	☐	
2. HOUSEKEEPING				
Clear walkways	☐	☐	☐	
Clear work areas	☐	☐	☐	
Clear access routes for the public	☐	☐	☐	
Facility for waste removal or waste storage	☐	☐	☐	
Other	☐	☐	☐	
3. PERSONAL PROTECTIVE EQUIPMENT				
Head protection	☐	☐	☐	
Foot protection	☐	☐	☐	
Eye protection	☐	☐	☐	
Hearing protection	☐	☐	☐	
Respiratory protection	☐	☐	☐	
Fall protection (plan, rescue)	☐	☐	☐	
Mfg Requirements being followed/Inspected	☐	☐	☐	
Other	☐	☐	☐	
4. LADDERS				
Secured	☐	☐	☐	
Proper angle (extension ladders)	☐	☐	☐	
Proper size and type	☐	☐	☐	
Safe, usable condition	☐	☐	☐	
Properly used	☐	☐	☐	
Non-slip bases	☐	☐	☐	
Other	☐	☐	☐	

Item Inspected	OK	Not OK	NA	Requires Immediate Action
5. SCAFFOLDS				
Properly erected (all parts used)	☐	☐	☐	
Properly secured	☐	☐	☐	
Proper access to platform	☐	☐	☐	
Acceptable loading	☐	☐	☐	
Other	☐	☐	☐	
6. POWER TOOLS, EQUIPMENT				
General condition	☐	☐	☐	
Proper guards, cords, PPE	☐	☐	☐	
Tagging as DEFECTIVE	☐	☐	☐	
Other	☐	☐	☐	
7. STAIRWELLS & RAMPS				
Proper filler blocks in metal stairs	☐	☐	☐	
Proper cleats on ramps	☐	☐	☐	
Adequate lighting in stairwells	☐	☐	☐	
Proper handrails or guardrails	☐	☐	☐	
Other	☐	☐	☐	
8. TRAFFIC CONTROL				
Trained traffic controllers	☐	☐	☐	
Properly located	☐	☐	☐	
Clean, regulation sign	☐	☐	☐	
Properly dressed (including vest)	☐	☐	☐	
Other	☐	☐	☐	
9. PUBLIC WAY PROTECTION				
Properly located (within 4.5 m)	☐	☐	☐	
Entrances clearly marked	☐	☐	☐	
Covered where required	☐	☐	☐	
Proper rails and lighting where required	☐	☐	☐	
Other	☐	☐	☐	
10. FALL PROTECTION				
CSA approved	☐	☐	☐	
Properly worn	☐	☐	☐	
Safe, usable condition	☐	☐	☐	
Unprotected openings and edges	☐	☐	☐	
Other	☐	☐	☐	

Item Inspected	OK	Not OK	NA	Requires Immediate Action
11. GAS CYLINDERS				
Properly located	☐	☐	☐	
Properly secured	☐	☐	☐	
Properly moved or lifted	☐	☐	☐	
Properly hooked up	☐	☐	☐	
Other	☐	☐	☐	
12. CONFINED SPACES				
Proper access	☐	☐	☐	
Air testing before entry	☐	☐	☐	
Rescue equipment/person readily available	☐	☐	☐	
Safety harness, lifeline properly anchored	☐	☐	☐	
Outgoing air monitored	☐	☐	☐	
Entry permit where required	☐	☐	☐	
Other	☐	☐	☐	
13. FIRST AID REQUIRMENTS				
Adequate qualified first aiders on jobsite	☐	☐	☐	
First aid kits: Adequate number	☐	☐	☐	
Adequate contents	☐	☐	☐	
First Aid Kit accessible to worker	☐	☐	☐	
Other	☐	☐	☐	
14. FIRE PROTECTION				
Master emergency plan	☐	☐	☐	
Extinguishers where required	☐	☐	☐	
Fully charged	☐	☐	☐	
Adequately identified	☐	☐	☐	
Other	☐	☐	☐	
15. CRANES, HOISTS, ETC.				
Safe setup of equipment	☐	☐	☐	
Maintenance log available	☐	☐	☐	
Competent operator and Signaler	☐	☐	☐	
Condition of slings, hardware, safety catches	☐	☐	☐	
Proper lifting containers	☐	☐	☐	
Critical Task Checklist complete	☐	☐	☐	
Other	☐	☐	☐	

Item Inspected	OK	Not OK	NA	Requires Immediate Action
16. WELDING				
Properly secured ground cables	☐	☐	☐	
Proper eye protection worn	☐	☐	☐	
Proper screens and exhaust	☐	☐	☐	
Fire extinguisher readily available	☐	☐	☐	
Critical Task Checklist complete	☐	☐	☐	
17. TRENCHES & EXCAVATIONS				
Properly sloped, where required	☐	☐	☐	
Excavated soil properly placed	☐	☐	☐	
Appropriate shoring used	☐	☐	☐	
Proper access to trench	☐	☐	☐	
Critical Task Checklist for Deep Excavation	☐	☐	☐	
Other	☐	☐	☐	
18. TEMPORARY POWER SUPPLY				
Properly identified	☐	☐	☐	
Overhead lines flagged & secured	☐	☐	☐	
Surface cables buried or protected	☐	☐	☐	
Other	☐	☐	☐	
19. MATERIALS STORAGE				
Properly located	☐	☐	☐	
Safely piled, stacked, bundled	☐	☐	☐	
Properly moved or lifted	☐	☐	☐	
Properly labeled (WHMIS)	☐	☐	☐	
Other	☐	☐	☐	
20. SIGNS & PRINT MATERIAL				
OH&S Act and regulations	☐	☐	☐	
WSIB Form 82 poster	☐	☐	☐	
SDSs onsite	☐	☐	☐	
Emergency info and Warning Signs	☐	☐	☐	
Other	☐	☐	☐	
21. HYGIENE				
Washroom facilities available	☐	☐	☐	
Worker health and safety (Water/shelter)	☐	☐	☐	
Safety policies and procedures	☐	☐	☐	
Other	☐	☐	☐	

NEW EMPLOYEE SAFETY CHECKLIST

Employee Name: _____

Date Employed: _____

Date Checklist Completed: _____

Checklist completed by: _____

Type of Work: _____

Previous Work Experience: _____

Supervisor: _____

Ask Employee: Do you have any physical conditions or disabilities which might limit your ability to perform this job? If so, what reasonable accommodation can be made by us?

_____

Did the employee have a pre-employment physical? o Yes o No

IF yes, were there any work restrictions indicated from the physical?

_____

Provide the employee with a copy of the CCL Health & Safety Policy Handbook

CCL Health & Safety Policy Handbook provided on: _____ Employee Initial: _____

Supervisor and new employee should review the following as a minimum. Check off as discussed and acknowledged.

- o Training Requirements
- o Job Description
- o Company specific Procedures
- o Company Organizational Chart
- o Company safety policies & programs
- o General Safety rules and enforcement
- o Job site orientation
- o Use of tools & equipment (Proper guarding of equipment)
- o Proper clothing & Personal Protective Equipment
- o Materials handling / Hazardous materials
- o Accident & Hazard Reporting Procedures
- o Housekeeping
- o Special hazards of the job
- o Emergency Response Procedures
- o Employee Responsibilities/Accountability
- o Proper completion of paperwork (Driving logs, time cards, Daily job sheets, POST Documents etc…)
- o Location of First Aid Kits / Where to go for medical treatment
- o Vehicle Safety
- o Zero tolerance for Drug and Alcohol use

Training and certification needed for position:

_____

_____

Employee shall receive additional training in:

_____

_____

Probationary period is from: _____ to_____

Performance (including safety) will be reviewed formally on: _____

Employee agrees to cooperate fully with the safety efforts of the employer, follow all safety rules, and use good judgment concerning safe work behavior? o Yes o No

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Signed: _____ Signed: _____

Employee Trainer/Supervisor

WORKER/SUB-CONTRACTOR ACKNOWLEDGEMENT & AGREEMENT

I state that I have read/received a copy of the **CANNINGTON CONSTRUCTION LIMITED** Health and Safety Policy Handbook including rules and regulations surrounding my employment directly with CCL or as a Sub-contractor.

I, _____, acknowledge that I have read and understand the following Policies of CANNINGTON CONSTRUCTION LIMITED

- Health and Safety Policy Statement (Page 11)
- Environmental Policy Statement (Page 12)
- Violence & Harassment Policy Statement and Prevention Program (Page 13 and 66)
- Duties and Responsibilities of Workplace Parties (Page 16)
- Workers Rights (Page 26)
- Personal Safety Rules (Page 79-89)
- Health and Safety Training (Page 45)
- Identifying & Controlling Hazards / List of Critical Tasks (Page 46-48)
- H&S Rules and Project Compliance Requirements (Page 76)
- New Hire Process – Probation (Page 44)
- Personal Protective Equipment (Page 77)
- Equipment Safety – General Safety Precautions (Page 130)
- Disciplinary Procedures (Page 52)
- Emergency Response Information (Page 54)
- Sub-Contractors Guidelines to our Safety Program (Page 73)
- Internal Forms (Page 153)
- Company Rules (Page189)
- Procedures, Job Descriptions, Hazard Assessments, Pre-filled JSA's (Page 191)

I, as a **Worker**, agree to adhere to all policies and will ensure that employees working under my direction adhere to all policies. I understand that if I violate the rules and legal requirements under OHSA, I may face legal, punitive, or corrective action, up to and including termination of employment and/or criminal prosecution.

I, as a **Sub-Contractor**, state that I have read and understand these rules and acknowledge that compliance with the safety rules and regulations is a condition of employment. If I violate the safety rules or fail to report an injury or hazard to my supervisor immediately, I understand that I am subject to termination, in accordance with this company's policy.

_____ _____

RECIPIANT'S SIGNATURE DATE

Name: _____

Date Completed: _____

Employee Survey

Complete this survey using the following scale:	1	Poor
Please circle your answer/rating	2	Below Average
	3	Average
	4	Above Average
	5	Excellent

Health and Safety

Do you feel you are provided with the appropriate Training to do your job safely?			Yes		No	
How would you rate the Safety Training provided?		1	2	3	4	5
Do you feel you are provided with the appropriate Equipment and PPE to do your job safely?			Yes		No	
How would you rate the level of safety within your work environment?		1	2	3	4	5
Have you read the CCL Health and Safety Policy Guide Book?			Yes		No	
Do you feel your co-workers are looking out for your safety on the job site?			Yes		No	

Training and Personal growth

Do you feel you are provided with enough Training?			Yes		No	
Do you feel there is additional training not provided that you would benefit from?			Yes		No	
Are you interested in another Position such as Site Supervisor or Project Manager?			Yes		No	
Are you interested in any other courses or training?			Yes		No	

If Yes, please specify Eg: OBT, Tank and Line Testing, PM1/2/3 _____

Management and Support Staff

When on site, do you feel you have sufficient support from all other team members?			Yes		No	
How would you rate the support from Office staff?		1	2	3	4	5
How would you rate the support when on site by Field staff/Supervisors?		1	2	3	4	5
How would you rate the support by Management, when on site?		1	2	3	4	5
Are Safety talks and tailgate meetings held on a daily basis?			Yes		No	
Do you feel you would like a one on one meeting with Steve?			Yes		No	

Compensation and Benefits

How would you rate the compensation you are currently receiving?		1	2	3	4	5
How would you rate the additonal benefits provided to you?		1	2	3	4	5
Are you happy with your current hourly salary?			Yes		No	
Are you content with the Health Benefits package provided?			Yes		No	

Communication and Organization

How would you rate the Communication within the company?		1	2	3	4	5
Do you feel you have the right equipment and supplies to perform your job?			Yes		No	
How would you rate the level of Organization when it comes to starting new jobs?		1	2	3	4	5
Do you want to be more informed about what happens on other sites and in the office?			Yes		No	
Do you have any suggestions for cost savings?			Yes		No	

If Yes, please share: _____

Employee Comments: Please add comments for questions rated less than 3. Your feedback is important!

EMPLOYEE ANNUAL PERFORMANCE REVIEW

Employee Name:							
Date:							
Review period:		to					
Reviewer's Name:							
Reviewer's Title:							
Evaluation			**Excellent**	**Good**	**Fair**	**Poor**	
Demonstrates required Job Skills & Knowledge							
Productivity							
Work Quality							
Takes direction from Management							
Attitude							
Punctuality							
Cooperation / Works well with co-workers							
Shows Initiative and is able to solve problems							
Creative Ideas and solutions							
Attendance / Dependability							
Communication Skills							
Training Necessary for Current Position:		WHMIS	POST	First-Aid	Working at Heights	Confined Space	
Workplace Violence & Harassment	Heavy Equipment		Traffic Control Safety		Trenching & Excavating	Scaffolding Safety	
Training or Re-training required?	Yes	No	**If yes, what is needed?**				
Have you Reviewed the Cannington Construction Health and Safety Policy?				Yes	No		
Employee always wears proper PPE?	Yes	No	**Any written warnings on record?**			Yes	No
Reviewer's Comments:							
Reviewer's Signature							
Employee's Comments:							
Employee's Signature							

POST DOCUMENTS AND CRITICAL TASK CHECKLISTS

DAILY SAFE WORK PERMIT

(Can also be used as Daily Safety Meeting)

Location of work: _____ Work Order Number: _____

Description of todays work: _____

_____

Date of issue: _____ Time: _____ : _____

Prime Contractor: _____

Weather: Temp: _____ Precipitation: _____ Wind Speed: _____ Direction: _____

SECTION A: Identification of site hazards for this day

- ☐ Overhead power lines
- ☐ Traffic - **Vehicular / Pedestrian**
- ☐ **Potential Energy (Fluid/Gas under pressure, Electricity, Static**
- ☐ Hazardous material (e.g. **fuel/vapour**, asbestos, lead, mercury **etc.**)
  Specify: _____
- ☐ Inclement weather
  Specify: _____
- ☐ **Guard against falling / dropped objects:**
- ☐ Underground utilities
- ☐ **Slip / Trip**
- ☐ Bulk fuel / Stored pressure systems (e.g. propane)
- ☐ Operating equipment **(note on JSA)**
- ☐ Atmospheric **Hazard** - Use Atmospheric Testing Log in the Confined Space Checklist to record results
- ☐ **Hand Hazards (e.g. pinch points, cuts, appropriate gloves)**
- ☐ **Other:** _____

Section B: Identification of hazards for this day (a JSA is required by the crew prior to commencing work to address any of these hazards)

- ☐ Demolition
- ☐ Underground tank removal/disposal/**high vapours**
- ☐ Shallow excavation not in careful digging zone or utility locate area
- ☐ Activities in **or near** traffic areas
- ☐ Concrete cutting / Coring
- ☐ Pile driving / Shoring
- ☐ Mobile heavy equipment activity (excavators, dump trucks & hydrovac trucks)
- ☐ Welding, cutting, grinding
- ☐ Hydroblasting / Sandblasting
- ☐ Radiography / X-ray testing
- ☐ Pressure Testing
- ☐ Other: (Includes clearing brush/trees, reactive chemical handling, working in proximity to deep water, etc.)

CRITICAL PROCEDURES: Where work involves any of the following hazards, applicable critical checklists must be incorporated into the JSA

- ☐ Work at Height above 1.8m (includes excavations)
- ☐ Confined Space Entry
- ☐ Tankfield Sump Entry
- ☐ Lock Out/Tag Out (LOTO)
- ☐ Hot Work
- ☐ Heavy Equipment Lifting (i.e., with Crane or Boom Truck)
- ☐ Critical Controls System Shut Down
- ☐ Ground Disturbance (within careful digging zone or utility locate)
- ☐ Vacuum Truck use

SECTION C:

- **All work to be conducted in accordance with provincial OH&S regulations and Contractor's Safety Guidelines.**
- **All applicable conditions must be met before work commences.**

	YES	N/A
1. Supervisor in attendance for duration of work outlined above.	☐	☐
2. All personnel involved are trained employees and have received work and site orientation.	☐	☐
3. Work area has been inspected for potential hazards and risks have been mitigated/controlled.	☐	☐
4. Appropriate personal protective equipment is on site and worn by workers and visitors (e.g. glove policy).	☐	☐
5. Work area is defined and appropriate signs/barricades are in place to ensure other traffic or people kept out of area, where applicable.	☐	☐
6. Appropriate fire extinguisher(s) available in work area.	☐	☐
7. Did any incident or near miss occur that should be reported and discussed before work starts.	☐	☐
8. All required JSA's (including critical procedures) will be signed by work crew and site supervisor	☐	☐

SECTION D: Operations/Operating Associate acknowledges work being done on site and any effect on Critical Controls *(include contractor start and finish times for maintenance work)* — YES ☐ N/A ☐

OPERATION / OPERATING ASSOCIATES _____ : _____ : _____

Signature | Time (start): | Time (finish):

CONTRACTOR CONFIRMATION OF ABOVE LISTED ITEMS

_____ : _____

Contractor Site Supervisor (print) | Signature | Time

DAILY SAFE WORK PERMIT

(Can also be used as Daily Safety Meeting)

Daily Safety Meeting Discussion Items:

Subject:	Comments and follow up:

Last Minute Risk Assessment (LMRA) Testing Results

Worker:	Worker's Company/Trade:	Score 1-4 (1 point for each correct criteria)*	Completed By Print and Sign:	Additional Comments Positive and/or criteria not demonstrated and how to address

***Criteria for testing LMRA quality: (1) understands task (2) risk identification (3) adequate risk mitigation and (4) attitude**

WORKER AND VISITOR REGISTER

Your signature signifies that you understand and agree to abide by all the Safety elements reviewed in this Safe Work Permit that are applicable to your activities at the work site.

Worker or visitor name	Company name	Arrival time	Departure time	Signature
		:	:	
		:	:	
		:	:	
		:	:	
		:	:	
		:	:	
		:	:	
		:	:	
		:	:	
		:	:	

*For additional registrations, use **Worker/Visitor Registration***

MAINTENANCE SAFE WORK PERMIT

(See Condition of Use on Reverse)

Date: _____ Site No: _____ Completed By: _____

W/O No: _____ Prime Contractor: _____

Description of Planned Work: _____

Note: Record any significant unusual or unexpected events on reverse.

Subcontractor(s), if applicable: _____

SECTION A: HAZARD IDENTIFICATION AND CONTROL

Where the following site hazards exist, **the JSA** on the reverse must be completed:

- ☐ Overhead Power Lines
- ☐ Traffic - Vehicular / Pedestrian
- ☐ Hazardous Material (**e.g. fuel/vapour**, asbestos, **lead, mercury**, etc.)
- ☐ Inclement Weather (specify):
- ☐ Potential Energy (Fluid or Gas under Pressure, Electricity, **Static**)
- ☐ Slip/Trip (specify):
- ☐ Other (specify):
- ☐ **Guard against falling / dropped objects**

Where the following elevated risk work hazards exist, **the JSA** on the reverse must be completed:

- ☐ Mobile Heavy Equipment Activity (Boom Truck, Scissor Lift)
- ☐ Welding, Cutting, Grinding in non-hazardous atmosphere
- ☐ Shallow Excavation not in careful digging zone or utility locate area
- ☐ Fuel Pressure/Vacuum Testing
- ☐ Coordination Interdependency (Overlapping Trades)
- ☐ **Hand Hazards (e.g. pinch points, cuts, appropriate gloves)**

Where the following high risk work hazards exist, the applicable **critical task checklist** or procedure must be completed and incorporated into **the JSA** on the reverse

- ☐ Working at Heights above
- ☐ 1.8m Confined Space Entry
- ☐ Tankfield Sump Entry
- ☐ Lock Out/Tag Out (LOTO)
- ☐ Other (specify):
- ☐ Hot Work
- ☐ Heavy Equipment Lifting (i.e., with Crane or Boom Truck)
- ☐ Critical Controls System Shut Down
- ☐ Ground Disturbance (within careful digging zone or utility locate area)
- ☐ **Vacuum Truck use**

SECTION B: CONFIRMATION OF BASIC REQUIREMENTS

Yes	n/a	
☐	☐	Work will be conducted in accordance with applicable OH&S regulations and Prime Contractor's Safety Policy.
☐	☐	Safety Data Sheets - Material details to be reviewed prior to start of work. Ensure readily available in case of emergency. List applicable SDS's: _____ _____
☐	☐	Appropriate Personal Protective Equipment will be used by Workers and Visitors in Work Area.
☐	☐	Certified appropriate Fire Extinguisher(s) are available in immediate Work Area, if applicable.
☐	☐	Tools and Equipment to be used are appropriate and in good working Condition.
☐	☐	All workers are adequately trained for their Tasks.

Tools/Equipment: *(to be used / stored on site including ladders, steps, mobile scaffold, harness, gas monitoring equipment etc., relevant to safety on site)*

Personal Protective Equipment *(Minimum requirement: Approved safety boots / hard hat / visi-vest / safety glasses / gloves fit for use):*

- ☐ Hearing Protection
- ☐ Fall Protection
- ☐ Respiratory Equipment
- ☐ Gas Monitor
- ☐ Eye Protection (specify): _____
- ☐ Fire Resistant Clothing
- ☐ Other (e.g. traction aids): _____

Gloves: Type(s) to be used _____ Will gloves need to be removed during work? (Y/N) ____

*If Yes, Why? ** _____

Ensure noted in applicable step in JSA. Gloves are to be put back on as soon as task requiring glove removal has been completed

SECTION C: LAST MINUTE RISK ASSESSMENT (LMRA) TESTING RESULTS *(Periodic)*

Worker:	Worker's Company / Trade	Score 1-4 (1 point for each correct criteria)*	Completed by (Print & Sign)	Additional Comments:

Criteria for testing LMRA quality: (1) understands task (2) risk identification (3) adequate risk mitigation and (4) attitude

SECTION D: ACKNOWLEDGEMENTS OF PLANNED WORK

	Name:	*Signature:*	*POST Cert No.:*
Responsible Technician			
Supporting Technician			
Supporting Technician			
Supporting Technician			

RETAILER/ SALES ASSOCIATE:		:			:
	Signature	*Work Start Time*		*Signature*	*Finish Time*

NOTE: The Retailer/Sales Associate Assumes No Liability for the Health and Safety of the Workers.

JSA – JOB SAFETY ANALYSIS

Site/Project:		Work Order Number:
Name of Contractor/Subcontractor:	Date:	Weather:
Task/Activity:		

Check applicable anticipated or potential hazards:

- ☐ Demolition
- ☐ Underground tank removal/disposal/high vapours
- ☐ Shallow excavation not in careful digging zone or utility locate area
- ☐ Activities in or near traffic areas
- ☐ Concrete cutting / Coring
- ☐ Pile driving / Shoring
- ☐ Mobile heavy equipment activity (excavators, dump trucks, vacuum and hydrovac trucks)
- ☐ Welding, cutting, grinding
- ☐ Hydroblasting / Sandblasting
- ☐ Radiography / X-ray testing
- ☐ Pressure testing
- ☐ Other: (includes clearing brush/trees, reactive chemical handling, working in proximity to deep water etc.)

CRITICAL PROCEDURES:
*Where work involves any of the following hazards, applicable **Critical Checklists** must be incorporated into the JSA*

- ☐ Work at heights above 1.8 m (includes excavations)
- ☐ Confined Space Entry
- ☐ Tankfield Sump Entry
- ☐ Lock Out/Tag Out (LOTO)
- ☐ Hot Work
- ☐ Heavy Equipment Lifting (i.e., with Crane or Boom Truck)
- ☐ Critical Controls System Shut Down
- ☐ Ground Disturbance (within careful digging zone or utility locate)
- ☐ Vacuum Truck use

Ensure that all hazards identified are addressed in JSA below

Sequence of Basic Job Steps *(Order in which the work will be carried out and brief details of how tasks will be performed)*	**Potential Hazards** *(Examples: underground services, hazardous zone area, impacted soil, overhead power lines, adjacent works, etc.)*	**Safety Controls to Reduce or Eliminate Hazard** *(Describe the precautions that will be taken)*
1.		
2.		
3.		

Near Miss/Hazard Identification Report

SECTION 1 – NEAR MISS IDENTIFICATION, GENERAL INFORMATION					
Near Miss Title	(e.g. Injury, Environmental, Property Damage, etc.)				
☐ Project Mgr. ☐ Contractor ☐ 3rd Party		**Contractor Company Name**			
Site Address:		**Site Number:**			
Location of Near Miss/Hazard ID	☐ Onsite ☐ Offsite	**Description if Offsite: (on the road, customer site)**			
Owner (oil company):					
Equipment and/or Property involved in Near Miss/Hazard ID:					
Date		**Time:**	:	**Shift:**	☐ Day ☐ Night
Report completed by: (person's name)		**Date form completed:**			
Persons directly involved in the Near Miss/Hazard ID:					
Person 1:		**Person 2:**			
Relationship: (e.g. Contractor, Sub-contractor, 3rd Party)		*Relationship: (e.g. Contractor, Sub-contractor, 3rd Party)*			

SECTION 2 – NEAR MISS GENERAL INFORMATION

Attach additional pages if needed

Description (What, Where, When, Who, How)

What acts or conditions contributed to the near miss and/or hazard event?

Why was the unsafe act committed, or why was the unsafe condition present?

What steps have been taken to prevent/control a similar incident or condition?

Potential Incident as a Result of a Near Miss/Hazard ID (check all boxes that apply)		**Other (if not listed):**
☐ Fire/Explosion	☐ Property/Equipment Damage	☐ Business Interruption
☐ Injury/Illness	☐ Vehicle Accident (Transport of Personnel)	☐ Contamination
☐ Product Spill or leak	☐ Transport of Commodities (Materials)	☐ Government Inspection / Report
☐ Security / Crime	☐ Damage to Third Party Property / Facility	☐ Process Safety

Completed by (signature): _____ **Date:** _____

Complete and send to your oil company representative

STOP if not clear how to do the work

Fall Protection / Rescue Equipment Checklist

When to use	Important: Attached to completed JSA
Complete daily before first use of fall protection or rescue equipment	

Date:	Worker name:		
If the equipment below has arrested a fall, the harness, lanyard and life line(s) must be taken out of service and destroyed. Retractables must be inspected before being used again for fall protection			
Full body harness info	**Rope grab info**	**Lanyard/Lifeline info**	**Anchor Point info**
Make:	Make:	Make:	Make:
Model:	Model:	Type: ❒ Single ❒ Double	Model:
Serial Number:	Serial Number:	Length:	
Manufacture Date:	Lifeline size (dia):	Shock Absorber: ❒ Yes ❒ No	

Inspect the Following:	**Full body harness**		**Rope Grab**		**Lanyard/Lifeline**		**Anchor Point**	
	Ok	Not Ok	Ok	Not Ok	Ok	Not Ok	Ok	Not Ok
	❒	❒	❒	❒	❒	❒	❒	❒
Hardware: (includes snap hooks, carabiners, adjusters, keepers, thimbles, D-rings, temporary tie-off's) Look for distortion, sharp edges, burrs, cracks, corrosion and proper operation	Comments:		Comments:		Comments:		Comments:	
Webbing and Stitching: Inspect for cuts, burns, tears, abrasion frays, excessive soiling, written on, and discoloration. Inspect for pulled or cut stitches Note: writing on webbing, unauthorized modifications, partial deployment of shock absorber are not permitted.	❒	❒			❒	❒		
	Comments:				Comments:			
Labels/Equipment information Inspect to ensure all labels are present and held securely in place, all text is legible, directional indicator is visible	❒	❒	❒	❒	❒	❒	❒	❒
	Comments:		Comments:		Comments:		Comments:	
Mechanical components: Locking mechanism functioning, all connectors present and functioning, gates open/close, system operates as designed			❒	❒			❒	❒
			Comments:				Comments:	
Ropes: (includes slings, lifelines and lanyards) Inspect for broken threads, fibers, loose eye connections, excessive abrasions, crushing, stretching					❒	❒		
					Comments:			
Overall Assessment	Ok ❒	Replace❒	Ok ❒	Replace❒	Ok ❒	Replace❒	Ok ❒	Replace❒

Comments:

I have reviewed this Checklist and completed a thorough review of the noted fall protection equipment

Name: Signature: Date:

STOP if not clear how to do the work

Tankfield Sump Entry | Critical Checklist

When to use	Important : Attach to completed JSA
Before worker enters tankfield sump or manifold sump when tanks contain, or have contained fuel **Sump entry includes but is not limited to these pictographs** **DO NOT USE this form for other types of Confined Space Entry**	

Work Order Number:	Site Location:
Contractor:	Date:
Description of work:	
What could go wrong?	

Done ☑

☐ 1. All workers competent and trained in Confined Space Entry Procedures

Test Before Entry

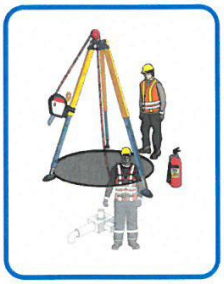
☐ 2. Standardized check (bump test) completed today on Explosive/LEL meter Record completion of bump test below

☐ 3. Erect proper barricades and place charged fire extinguisher within reach

☐ 4. Remove all fuel from the tankfield sump.

☐ 5. Ventilation requirements identified and ventilation equipment available. Perform atmospheric testing again using a certified device – see Log on page 2

☐ 6. When using tools that may create a spark, open flame or source of ignition, fully complete both this checklist and Hot Work Critical Checklist and defer to Hot Work atmospheric testing log to record testing results.



Complete 2 to 6 for each additional sump to be entered:

☐ Sump 2 ☐ Sump 3 ☐ Sump 4 ☐ Sump 5 ☐ Sump 6 ☐ Sump 7 ☐ Sump 8

Emergency and Rescue

☐ 7. Stand-by person(s) qualified in first aid/CPR/rescue continuously available to remove worker

☐ 8. Documented rescue plan completed, available and reviewed by all workers

☐ 9. Inspect approved safety harness and ensure worn by worker entering sump. Complete Fall Protection/Rescue Equipment Checklist

☐ 10. Attach safety lifeline to the harness. Ensure winch is securely mounted to tripod

Name or worker entering sump:	Signature:	Date:
Name of stand-by person:	Signature:	Date:

STOP if not clear how to do the work

Tankfield Sump Entry | Critical Checklist

Equipment Calibration and Bump Test

Gas testing equipment has been calibrated and tested (bump test) prior to daily use and to manufacturer's specifications

Instrument/Serial # _____

Name: _____ **Signature:** _____

Atmospheric Testing Log

Atmosphere testing to be completed before the initial entry into each sump and before any re-entry after the space has been left unattended

Continuous atmospheric testing is required – Record results every 15 minutes. More frequent recording may be required and noted on the JSA

Acceptable Ranges	Initial Sample Elevation	19.5-23.0	0-10	<25	<10			
Time of Reading	Top/Middle/ Bottom	%O2	%LEL	CO ppm	H2S ppm	Other	PRINT Name of Tester	Tester Initials
:								
:								
:								
:								
:								
:								
:								
:								
:								
:								
:								
:								
:								
:								

Confined Space Entrant Log

List of workers entering the confined space

Name	Time In	Time Out	Time In	Time Out	Time In	Time Out	Time In	Time Out
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:

STOP if not clear how to do the work

Lock-Out/Tag-Out (LOTO) | Critical Checklist

When to use

Important: Attach to completed JSA

To isolate equipment/machinery from energy sources
Each worker MUST complete this checklist when working on the energy source
State the source (e.g. pressure/pneumatic, hydraulic, electrical)
Complete only 1 checklist for similar tasks e.g. work on multiple pumps

Work Order Number:	Site Location:
Worker/Contractor:	Date:
Description of energy source / equipment to isolate:	
What could go wrong?	

BEFORE work begins | Isolate the equipment

Done ☑

- ☐ 1. Inform all affected employees/site personnel that the energy source is to be turned off and locked out
- ☐ 2. Locate the energy source (e.g. circuit breaker or valve) and turn power off or de-energize the main energy source(s)
- ☐ 3. Authorized Worker is competent and trained in LOTO.
- ☐ 4. Authorized Worker has attached his locks and tags to the energy source.
- ☐ 5. Tags include the Authorized Worker name, date and time
- ☐ 6. Only you (Authorized Worker) have the key
- ☐ 7. Test that equipment is isolated from the energy source

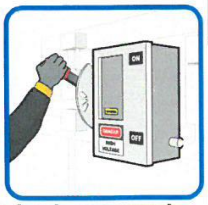
Complete 1 to 7 for each additional circuit: ☐ Circuit 2 ☐ Circuit 3 ☐ Circuit 4 ☐ Circuit 5 ☐ Circuit 6

Sign/date confirming that isolation is complete. Complete new form for transfer of lock ownership

Authorized Worker Name:	Date/Time:
Proof of Certification Available: ☐ Verified	Signature:

AFTER work is complete | Activate the equipment

Done ☑



- ☐ 8. Inform all affected employees/site personnel that energy source is to be restored
- ☐ 9. Remove all locks and tags from the appropriate energy source
- ☐ 10. Test that affected equipment is operating

Only Authorized Worker can remove lock(s). For forceful removal all workers notified, a procedure must be documented & approved by supervisor prior to lock removal.

Print name, sign and date confirming work complete or LOTO transfer completed with new form

Work Complete Authorized Worker Name/Signature:	Date/Time:
Transfer New Authorized Worker Name/Signature:	

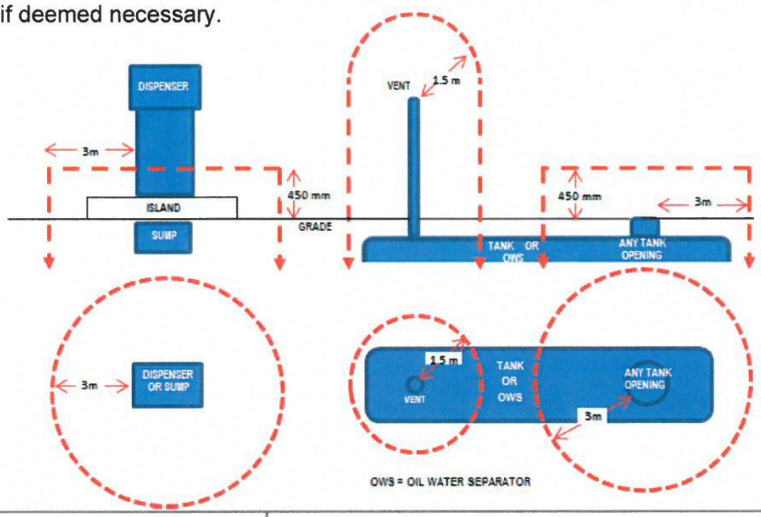
STOP if not clear how to do the work

Hot Work in a Hazardous Atmosphere | Critical Checklist

When to use

Important: Attach to applicable JSAs

- When performing any welding, cutting, grinding, or excavation using heavy equipment within the designated areas shown below.
- The use of hand tools within the designated areas is to be assessed for risk of ignition source and mitigated as required using hot work critical procedures, if deemed necessary.
- Hot work activities outside designated areas should be assessed for risk of hazardous/flammable atmosphere, and follow hot work critical procedures as deemed necessary.
- Fire Retardant Clothing (FRC) to be worn by all workers within designated area during hot work activities
- Hot work is any work involving arcing/sparking devices, or work where flame is used or sparks are produced.



Work Order Number:	Site Location:
Contractor:	Date:
Description of work/equipment that is hot work:	
What could go wrong?	

BEFORE Starting All Hot Work

Done ☑

- ☐ 1. Hot Work cannot proceed unless LEL is 0%
- ☐ 2. Identify and mitigate all sources of potential explosive vapors e.g. fuel, sewer, chemicals, vent lines, flanges. Isolate and/or Lock Out Tag Out any equipment that may produce an explosive atmosphere
- ☐ 3. Erect proper barricades and place charged fire extinguisher within reach
- ☐ 4. Emergency response procedures are understood by and reviewed with all workers
- ☐ 5. Assign a worker as dedicated Fire Watch for duration of Hot Work and if applicable, following Hot Work if potential for fire remains.
- ☐ 6. Complete standardized check (bump test) on Explosive / LEL meter- Record on pg 2
- ☐ 7. Perform atmospheric testing immediately prior to work commencing and continuously during hot work using a certified testing device - see Log on pg 2
- ☐ 8. Electrical equipment is explosion proof or intrinsically safe where possible
- ☐ 9. All Hot Work activities are stopped during fuel deliveries
- ☐ 10. If possible, reduce potential sources of explosive vapours through use of mechanical ventilation or use of fire blankets, cover, or other possible means.

Name of worker:	Signature:	Date:
Name of fire watch:	Signature:	Date:

STOP if not clear how to do the work

Hot Work in a Hazardous Atmosphere | Critical Checklist

Equipment Calibration And Bump Test

Gas testing equipment has been calibrated to manufacturer's specifications. Bump testing has been completed daily and results recorded prior to use.

Instrument/Serial # _____

Name: _____ **Signature:** _____

Atmospheric Testing Log

Monitor atmosphere continuously during the work with the appropriate equipment (e.g. Explosive/LEL meter) and record in log immediately prior to beginning Hot Work and then every 15 minutes during work

STOP HOT WORK when atmospheric test results are outside the acceptable ranges

MUST be 0% LEL for work to proceed

		For Hot Work Only		Also complete if Hot Work in Confined Space				
Acceptable Ranges	Initial Sample Elevation if Confined Space	20.0-23.0	**Zero**	<25	<10			
Time of Reading	Top/Middle/ Bottom	%O2	%LEL	CO ppm	H2S ppm	Other	PRINT Name of Tester	Tester Initials
IMMEDIATELY prior to start								

Confined Space Entrant Log (Per #13 of Confined Space critical checklist, complete only if hot work is being conducted in confined space)

List of workers entering the confined space

Name	Time In	Time Out	Time In	Time Out	Time In	Time Out	Time In	Time Out
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:

STOP if not clear how to do the work

Critical Lifting | Critical Checklist

When to use	Important: Attach to completed JSA
When Heavy Equipment Lifting Critical Checklist has determined lift to be Critical **Owner's representative or designee must be informed 72 hours prior to any critical lift activity**	

Work Order Number:	Site Location:
Lifting Contractor:	Date:
Description of work:	Lift Radius:
Load Weight (max load weight and radius for group of lifts):	**Crane's rated** Capacity at lift radius:
Name of critical lift plan approver:	Date:
What could go wrong?:	

BEFORE work begins | Create Critical lift plan

Done ☑

☐ 1. At least 72 hours prior to actual lift, create a **Critical Lift Plan** to include the following:
- ☐ Elevation view drawing
- ☐ Boom length _____ m and lifting radius _____m
- ☐ Maximum load during lifting procedure_____ tonnes
- ☐ Minimum boom clearances (load, obstructions or power lines)_____m
- ☐ Plan view drawing(s)
- ☐ Initial/final lifting position and radius
- ☐ Location of the crane(s), including tail-swing limits, nearby structure
- ☐ Lift analysis including calculation of crane capacity at lift radius _____%

☐ 2. Operator is trained, competent, licenced where required, in safe operation of crane

☐ 3. Crane(s) located at correct position as per Critical Lift Plan

☐ 4. Each crane supported on firm, stable base/foundation, outriggers deployed and blocked

☐ 5. Lift equipment has been certified in the last year, in good condition, appropriate for the lift **and meets manufacturer's specifications**

☐ 6. Lift equipment / apparatus (slings/straps/hooks) are in good condition, appropriate for the lift, and use does not exceed the rated capacity

☐ 7. Equipment or materials to be lifted are stable, wrapped and tied; lifting apparatus are securely fixed and balanced

☐ 8. Review minimum required clearance between live electrical lines and any part of the crane, load, or load line - see table at right:

Voltage (V)	Minimum Clearance (m)
750–150k	3.0
150k–250k	4.5
>250k	6.0

☐ 9. Lift area and swing radius are barricaded and traffic controls in place

☐ 10. Equipment operator(s) have a clear view of the work area

☐ 11. Dedicated signaller(s)/spotter(s) are used and communication method with each signaller/spotter is defined and understood

☐ 12. Use of proper tag line(s) / guiding rope(s) for suspended loads

☐ 13. Good access and egress in case of emergency

☐ 14. All persons to keep a safe distance from lifting activity. No persons under suspended load, including inside buildings, except person(s) receiving the load during lifting activity

Name of equipment operator:	Signature:	Date:
Name of spotter:	Signature:	Date:

STOP if not clear how to do the work

Vacuum Truck | Critical Checklist

When to use	Important: Attach to completed JSA
To remove any **liquids, solids, or contaminated product** from a site by use of a Vacuum or Hydrovac truck. **Each driver or operator** completes this checklist for the vehicle prior to starting any work.	

Work Order Number:		Site Location:	
Worker/Contractor:		Date:	
Description of work:			
What could go wrong?			

BEFORE work begins

Done ☑

☐ 1. All operators are competent and trained in:

Safe Vacuum and Hydrovac Truck Operations including:

- Atmospheric Testing
- Conductive and Non-Conductive Testing
- Bonding and grounding
- Pumps and Blowers
- Exhaust Vapour Venting
- Transfer Operations
- Pressure
- Safe Handling of Hazardous Materials
- Emergency Response procedures

☐ 2. Immediately prior to starting work, the following has been inspected and deemed fit for service:

- Fire Extinguishers
- Emergency Shut-offs
- Gauges and Valves
- Steps, ladders, railings, walkways and tie offs
- Hoses and hydrocarbon hoses (last 12 months)
- Vapour exhaust system
- Equipment to monitor atmospheric conditions (bump tests)

☐ 3. Equipment Position:

- POST barricading requirements are followed
- The vehicle is on level ground with wheels chocked and brakes applied
- Up wind of vapour hazards
- Avoid areas that could affect public safety
- The venting is positioned 7.5 meters outside the immediate work area. If this is not achievable, the JSA must be updated to identify hazards and implement safety controls.
- Venting has been piped and exhausted to a safe downwind location and at a minimum height of 1 meter. If flammable product is collected, the hose must be bonded and the vent location must be equipped with a "Flammable" and/or "No Smoking" sign.

☐ 4. Operator understands the hoses must not be left unattended during equipment operation.

☐ 5. Attach placards on the vehicle prior to vacuuming as per TDG requirements.

☐ 6. Initial reading for LELs to be taken at the immediate work area and results must be recorded on the Atmospheric Testing Log (see reverse side).

☐ 7. Establish a <10% LEL radius around the vent location. Initial reading and periodic monitoring results must be recorded on the Atmospheric Testing Log (see reverse side).

AFTER work is complete

Done ☑

☐ 8. Allow resting time before disconnecting ground cables to allow all potential of static to dissipate.

☐ 9. Confirm vehicle and equipment are free of leaks prior to leaving site.

I have reviewed the Checklist and all other work arrangements with all other workers involved in this work

Authorized worker:	Signature:	Date:

STOP if not clear how to do the work

Vacuum Truck | Critical Checklist

Equipment Calibration and Bump Test

Gas testing equipment has been calibrated and tested (bump test) prior to daily use and to manufacturer's specifications

Instrument/Serial # _____

Name: _____ Signature: _____

Atmospheric Testing Log

Atmosphere testing to be completed before work begins and throughout the process if limits exceed the allowable tolerance.

Atmospheric testing at the vent radius is required and record results every 15 minutes. **More frequent recording may be required and noted on the JSA.** If exceedances are identified, adjust vent radius to get levels within acceptable tolerances.

Location	PRINT Name of Tester	Tester Initials	Acceptable Ranges	19.5-23.0	0-10	<25	<10
			Time of Reading	%O2	%LEL	CO ppm	H2S ppm
Initial test results – Immediate Work Area							
Initial test results – Vent Location (periodic testing afterwards)							

STOP if not clear how to do the work

Deep Excavation | Critical Checklist

When to use — **Important: Attach to completed JSA**

For any manual or mechanical ground disturbance **deeper than 1.2 metres**

If ground disturbance activity extends beyond one day, complete a new checklist daily. Ensure other Critical Checklists are completed if applicable (e.g. LOTO, Confined Space , Hot Work, Shallow Excavation)

Work Order Number:	Site Location:
Contractor:	Date:
Description of work:	
What could go wrong?	

BEFORE work begins | Complete all steps

Done ☑

☐ 1. For first 1.2m of excavation, use **Shallow Excavation/Boring/Drilling Critical Checklist** if within Careful Digging Zone or utility locate area.

Before Excavation / Create Excavation Plan

☐ 2. Competent/authorized person designs sloping/shoring based on soil type/site conditions

☐ 3. Review minimum required clearance between overhead live electrical lines and any part of the excavator - see table →

Voltage (V)	Minimum Clearance (m)
750–150k	3.0
150k–250k	4.5
>250k	6.0

☐ 4. Excavation equipment is inspected and fit for purpose

☐ 5. Erect and maintain barricades around the digging area as required

During excavation

☐ 6. Equipment operator has a clear view of the work area

☐ 7. Dedicated signaller / spotter is used and communication method with signaller / spotter is defined and understood

☐ 8. Position equipment and excavated material a **minimum** of 1.0 m from edge of the excavation or as necessary to maintain excavation stability

☐ 9. Verify slope stability during excavation and/or rain / other event which increases potential for cave-in (e.g. water, vibration, change in slope or soil type)

☐ 10. Verify if de-watering is required

☐ 11. Immediately **stop work** and notify Owner if free hydrocarbons are encountered

☐ 12. Maintain barricading if excavation remains open overnight

If Workers enter the excavation

☐ 13. Ensure sloping or engineered shoring is in place and maintained

☐ 14. Ensure easy access entry and exit routes - minimum of 2 exits

- Ladders installed at opposite sides of the excavation
- Ladders anchored and extended 1.0m above edge
- Distance from worker to escape ladder must meet local regulations but not exceed 8.0m

☐ 15. Remove significant water accumulation in the excavation prior to entry

Name of equipment operator:	Signature:	Date:
Name of spotter:	Signature:	Date:

Cannington Construction Company Rules

Unplanned Absences or Sickness

As soon as you know you are not able to work, please notify your supervisor **and** leave a message with the office.

Planned Absences or Vacation

To be reported to your Supervisor and the Office. The company calendar will then be updated and is visible to all for job planning purposes.

Company Visa Cards

No personal purchases. Always submit all receipts for every visa purchase, indicating on the receipt, which jobsite the purchase relates to. Always confirm any purchase exceeding $500.

Tools

Hand-tools are to be purchased and kept by each worker.

Each Service vehicle will be assigned a list of tools provided by CCL. These tools must be kept with the assigned service vehicle and are the sole responsibility of the assigned driver of that vehicle.

Dress Code

Office staff dress code should be modest and appropriate to the season.

It is mandatory that all field staff wear the following everyday on every job site;

- long pants
- high-vis shirts
- steel toe boots

Not allowed:

- Spaghetti strap, tube or halter tops
- Cut off short shorts (must be knee length)
- Skin must not be exposed in the torso area
- Undergarments must not be exposed
- Any form of clothing that is tight fitting and/or suggestive

PPE

No one should be walking through the back shop without steel toe foot protection.

Other PPE is required depending on the work being performed at the time. PPE in the shop is the same as PPE on Site when work is being performed.

Minimum on Site PPE requirements include: High-Vis, Hard Hat, Steel Toe Boots, Safety Glasses, Gloves

Company Vehicles

Maintenance logs are kept for each vehicle showing who is assigned to vehicles, license plates, repair work performed, 407 transponder numbers, Annual Safety records.

The following rules apply to Service Vehicles:

- Home to work use is not permitted unless permission is given
- Vehicle is to be kept clean and organized

- Always lock company vehicles and tool boxes
- Service Vehicles are assigned to workers and are their responsibility
- Report any Maintenance and Repairs to be performed
- Ensure Safety sticker, Insurance, Ownership, CVOR, Plate sticker, Log book, Transponder are in vehicle and kept current
- 407 usage should be kept to a minimum if possible. Consider alternate routes.

Probation for new hires

Probation will be set at 6 months and dependant on the following:

- Successful completion of the PMH (Petroleum Mechanic Helper) Exam
- Clear understanding of Company orientation, rules, training (Probationary Questionnaire)
- Ability to work well with others
- Supervisor input must be documented on "New Employee Safety Checklist"

Training

Each Job description outlines the required training certificates for each position. All training will be paid for by the company unless second attempts are required. If costly exams are to be re-written, the worker will be expected to pay the required fee.

Surveys

Annual Surveys are distributed for feedback from workers. It is helpful for all if the surveys are completed honestly and quickly. The option for an annual review is always given.

Out of town job sites

Office staff will set up out of town accommodations whenever possible. Time cards must specify "out of town" in order to be paid the out of town rate. There is an option to receive an "out of town" rate **or** eat using the company visa – but not both.

Written warnings

To document compliance issues with the Company Rules, H&S Policy Handbook, and Legislative regulations, there will be Warning letters provided. Some examples of when a disciplinary letter would be given are:

- Continued Lateness or unplanned absence
- Safety violation
- Not wearing proper PPE
- Theft or fraud
- Falsifying hours on time-cards
- Loss of Drivers licence
- Endangering yourself or another worker
- Violence or harassment
- Complaints from clients or co-workers
- Damage to company property
- Working under the influence of Drugs or Alcohol

Always keep in mind that Clients have separate Rules that must be followed while on certain sites or working for certain customers. Criminal background checks are often required for high profile jobs and requirements must be adhered to

<u>*INSERT PROCEDURES, JOB DESCRIPTIONS, HAZARD ASSESSMENTS AND PREFILLED JSA'S</u>