VISTA STAR CONSTRUCTION CO.

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Dubai, U.A.E

HEALTH AND SAFETY PROGRAM MANUAL

January 2016

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A - Health and Safety Policy

VISTA STAR CONSTRUCTION CO. RECOGNIZES THE RIGHT TO WORK IN A SAFE AND HEALTY WORKPLACE, AND IS COMMITTED TO PROVIDING SUCH A WORKPLACE FOR EVERY EMPLOYEE OF VISTA STAR CONSTRUCTION CO. AND OUR SUBCONTRACTORS. NO ACTIVITY IS MORE IMPORTANT THAN PROTECTING THE HEALTH AND SAFETY OF THESE EMPLOYEES, AND THOSE WHO LIVE AND WORK ADJACENT TO OUR OPERATIONS.

IT IS THE POLICY OF VISTA STAR CONSTRUCTION CO. TO PREVENT OCCUPATIONAL ILLNESS, INJURY, AND PROPERTY DAMAGE THROUGH FULL COMPLIANCE WITH THE DUBAI OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS, AND ANY AND ALL OTHER APPLICABLE PROVINCIAL AND LEGISLATION.

THIS HEALTH AND SAFETY POLICY WILL BE DILIGENTLY ENFORCED, AND WILL BE REVIEWED AT LEAST ANNUALLY.

VISTA STAR CONSTRUCTION CO.

JANUARY 2016

B - Corporate Roles & Responsibilities

ALL EMPLOYEES AND SUBCONTRACTORS EMPLOYED BY VISTA STAR CONSTRUCTION CO. ARE REQUIRED AND EXPECTED TO COMPLY WITH PERTINENT LEGISLATION AND WITH VISTA STAR CONSTRUCTION CO.'S (HEREAFTER **VSC**) PROCEDURES AFFECTING HEALTH AND SAFETY. FAILURE TO DO SO MAY RESULT IN REMOVAL FROM THE WORKPLACE.

Constructor

When acting as a constructor, VSC must:

- Ensure that the Occupational Health & Safety Act, OHSA, and Construction Regulations are respected, followed and implemented as a minimum standard on every project
- Ensure that all employees and other workers on a project comply with the OHSA and regulations
- Ensure that the health & safety of all employees on a project is protected
- Make available and provide orientation for the VSC Safety Program
- Provide leadership in the formation and maintenance of a H&S representative or Joint Health & Safety Committee
- Ensure that each prospective contractor or subcontractor for the project receives a list of any designated substances present at the project

Employer

*Includes **Subcontractors,** their workers and **VSC** workers.*

- Appoint a competent person as supervisor
- Provide information, instruction and supervision to all worker to protect their health and safety
- Provide equipment, materials and protective devices and that they are well maintained
- Ensure the OHSA and construction regulations are followed on the project
- Provide any information (medical or otherwise) necessary in the event of an emergency
- Provide accident prevention education courses (ie. WHMIS, First Aid, Propane Safety, PPE etc.)
- Implement, maintain and make available a copy of their corporate safety policy
- Conform to WHMIS regulations by cataloguing MSDS for all chemicals and hazardous materials on a project
- Cooperate with other trades and the project supervisor on project
- Take every precaution reasonable for the protection of a worker
- Investigate all accidents, incidents and findings forwarded to senior management
- Deal with safety violations according to corporate safety policy discipline
- See section 25-26 of the OHSA for full legal responsibilities

Ownership/Senior Officer

- Provide the necessary support and resources to implement, support, and enforce the health and safety policy and program within the company
- Prepare and review a written corporate occupational health & safety policy
- Review accident reports and communicate with government labour authorities regarding notices respecting critical injuries, accidents, incidents and other events
- Review all project safety inspection reports
- Conduct planned and unplanned project safety inspections of conditions and methods
- Promote the exchange of health & safety information with outside groups and associations
- Provide support for the Health & Safety Program and any safety related initiative (ie. health & safety targets/goals)
- Respond to project hazards raised on all projects
- Ensure return to work program operates with support to monitor injured worker's progress and to return the injured worker to meaningful work beginning with modified duties during the rehabilitation stage
- Conduct an annual safety review meeting with all staff
- Attend at least 1 health and safety committee meeting at a project each year

Project Supervisor

- Review the project health & safety program with contractors before they start work
- Prepare and implement emergency response plan (see Emergency Response Plan)
- Perform accident investigation and complete accident report when required (see Accident Investigation)
- Identify project hazards, advise workers of any danger, outline appropriate safe work procedures and certify that training requirements are met
- Forward copies of all MOL inspection reports to the Senior Officer/Safety Coordinator
- Ensure thorough investigation is performed for all accidents involving lost time injury and/or property damage and/or any hazardous incident in order to prevent a recurrence
- Arrange and attend accident prevention education courses for all workers as required
    - Valid First Aid Certificate is mandatory
- Ensure all workers are provided with all equipment, tools and personal protective equipment as is necessary
- Ensure all workers work in a safe manner, according to the OHSA, Construction regulations, and VSC's Health and Safety program including:
    - Working with protective devices, measures and safe work procedures
    - Using equipment, protective devices or clothing required
- Provide orientation for all new workers before they begin work (in writing where prescribed) covering measures and procedures to follow for their protection and known project hazards (see Orientation policy & checklist)
- Provide adequate toilet and clean-up facilities as required by the OHSA
- Ensure all necessary signs are posted on the project
- Ensure a management representative accompanies federal and/or provincial labour authorities (ie. Ministry of Labour) during inspections

- Review project safety inspection checklists and implement recommendations
- Coordinate monthly project safety meetings, the election of H&S representatives and/or the existence of a JHSC
    - Post minutes and names of H&S reps/JHSC
    - Post copies of written reports and follow up to recommendations
    - Discuss matters of safety with project H&S representative and/or JHSC member(s) and respond to recommendations (within 21 days)
- Establish a project health & safety documentation system for project safety inspection checklists, injury reports, MOL reports, Material Safety Data Sheets, emergency & rescue procedures, MOL contractor registration forms and other documents
- Perform daily project tours, noting any hazards or unsafe practices
- Respond immediately to hazards and keep records for follow-up
- Where prescribed by law, provide oral and/or written instruction
- Take every reasonable precaution for the health & safety of the all people on a project

Health & Safety Representative or Joint Health & Safety Committee

- Complete an inspection of the entire project once every 4 weeks
- Identify dangerous or hazardous situations and report them to project supervisor
- Record health and safety recommendations from other workers and report them to project supervisor
- Participate in accident investigation when required (see Accident Investigation Procedures)
- Be familiar with OHSA and Construction Regulations
- Participate in monthly project safety meetings where dangerous or hazardous situations are presented and recommendations are discussed
- Review inspections and accident reports
- Assist in mediation of enforcement issues
- Review the effectiveness and the representation of the committee membership – it should actively improve the project conditions
- Accompany and cooperate with federal and/or provincial labour authorities (ie. Ministry of Labour) during inspections

Worker

- Work in accordance with the Occupational Health & Safety Act (OHSA) and Construction Regulations
- Never work in a manner that may endanger anyone
- Use or wear the equipment, protective devices or clothing that the Constructor <u>and</u> the Employer require to be used
- Participate in project inspections when required
- Implement project inspection and safety meeting recommendations
- Maintain an orderly work area and perform daily housekeeping
- Report hazardous conditions or contraventions of the OHSA and Construction Regulations to the Health & Safety representative or project supervisor

- Report all accidents, injuries and near misses to the Health & Safety representative or project supervisor
- Never engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct on a project
- Not use or be under the influence of alcohol, or drugs while on a project
- Never remove or make ineffective any protective device required by the regulations or by the Constructor or Employer, without providing temporary protection
- Inspect PPE before use and report defects or damage supervisor
- When in doubt about any practice, ask for information from the project supervisor
- DO NOT speak to reporters but refer them to head office for comment
- Attend training programs as required by the VSC

Contractor and CN/GO Projects

Guidelines

Under the OHSA, the constructor and/or employer have the greatest involvement and exercise the greatest control and direction over a construction project and all persons working on it. Therefore, as constructor/employer, ***VSC*** must ensure compliance with all prescribed safety requirements. It is also the constructor/employer"s obligation to take every precaution reasonable on the project for the protection of each worker (ie. ensure all workers follow policies and safe work procedures).

Any work at a CN or GO Transit Project has the additional requirement of compliance with all CN and GO transit safety requirements and site specific requirements, including the requirement for CN Contractor Orientation Course.

In normal working operations, ***VSC*** will assume the duties of a constructor/employer upon hiring an independent contractor and will be strictly responsible for project safety (ie. warning contractor about project hazards and enforcing compliance with safety standards). If the primary contractor under ***VSC*** contracts out the performance of the work to additional independent contractors, ***VSC*** remains the constructor/employer for all workers on the project and must take all reasonable steps to ensure that contractors understand their obligations under OHSA. Similarly, the contractor and subcontractor must ensure that they meet all requirements of the contract including adherence to ***VSC*** policies and safe work practices under their industry standards. These requirements are a minimum standard of practice.

VSC reserves the right to stop work at any time where ***VSC*** representatives deem:

- Contractor(s) or subcontractor(s) is/are not fulfilling their obligations in accordance with the specifications of the contract or quoted work
- Failure by the contractor to correct a violation of the safety rules set out by *VSC*, OHSA and relevant regulations (ie. O. Reg. 213/91 & O. Reg. 851)

Any work, performed contrary to ***VSC*** health and safety policy, must be stopped and progressively discipline will be assessed to the point where the suspension of and or immediate cancellation of the contract will result. Once ***VSC*** has ordered the work stoppage, ***VSC*** has no further financial obligations until it is mutually agreed that work shall resume.

Contractors and subcontractors must have Workplace Safety and Insurance Board coverage for their workers and shall have accounts in good standing with the WSIB. The contractor shall cause to be paid any assessment or compensation required pursuant to the Worker Safety and Insurance Act and upon failure to do so, ***VSC*** may pay such assessment and deduct or otherwise collect such expense from the contractor.

All contractors shall save the owner from any charge or responsibility what-so-ever arising from any accident occurring from improper safety practices of the contractor(s), subcontractor(s) and or their personnel.

Roles and Responsibilities

Contractor

- Ensure all required safety equipment is available for all workers on the project
- Ensure all necessary equipment is available to complete the project
- Ensure proper communication available (ie. Cellular phone)
- Ensure availability of contact numbers at the project:
  - ***VSC*** – 416-675-7676
- Additional work is commenced only once documentation and approval by a ***VSC*** representative is received in the form of a contractor provided change order. Change order copies shall be attached to the invoice and itemized separately
- Ensure all work is conducted in accordance with ***VSC*** policies and procedures, MTO – Book 7 Temporary Conditions, OHSA and Ontario regulations 213/91, 851 and 145/00
- Ensure work performed after hours is only done after notifying and receiving direction from ***VSC***

C - Health and Safety Administration

Annual Review

In order to monitor the effectiveness of all policies, VSC will perform an annual review. It is at this time that the success of all elements will be evaluated. Recommendations will be reported and improvements will be made, while acknowledgement will be given to those who made significant contributions to any successes.

Health & Safety Target/Goals

The success of the Health & Safety Program relies on 2 main factors:

- Employees taking ownership and responsibility for the safety of themselves and others
- Senior management committing their support to the program (both financial and personal)

The main goals of the Health & Safety Program are to reduce or prevent accidents, injuries and illnesses. It is important to recognize the role that each employee has in safety on VSC projects. A successful H&S program relies on the attitudes, behavior and morale of all employees.

In order to monitor progress, increase motivation and promote the Health & Safety Program, it is necessary to set realistic, measurable targets and goals. The achievement of these targets and goals will be evaluated and an acknowledgement program will be used to reward superior performance. The success of this program will demonstrate the managements commitment to Health & Safety as well as the employees‟ devotion to safe and efficient work.

This program is designed to raise the general level of safety awareness in all employees. In no way, does this program encourage under-reporting of injuries or force employees to remain at work when their physical condition puts them at risk. Careful monitoring of the program and coordination with the Return to Work program will ensure this does not happen.

After each 2-year period, VSC will evaluate the success connected with their Health & Safety goals and will identify new Health & Safety targets for the next 2-year interval.

2009 -- 2010 Health & Safety Targets

1) **Management will review and revise the VSC Health & Safety Policy and Health & Safety Program by:**
   - Evaluating each policy‟s effectiveness after its use (ie. success of the Emergency Response Plan after an emergency)

- Making changes where needed and requesting suggestions for improvement
- Distributing the new Health & Safety Program binders by January 2007
- Conducting annual safety meetings for all employees to discuss elements of, and answer questions regarding the Health & Safety Program

2) Reduce or eliminate all lost time injuries by:

- Promoting a Return to Work program
- Hazard identification through frequent project inspections by H&S consultants, project supervisors and project H&S representatives
- Performing Accident Investigations for all injuries to ensure no recurrence

3) Project employees will ensure project conditions are up to legislative standards

- Procedures are in place (ie. Emergency Response, First Aid, Hazard Recognition and Assessment etc.)
- Safety meetings occur monthly involving:
  - H&S representative, representatives from all trades on a project and a Joint Health & Safety Committee (if necessary)
  - Minutes that are distributed to the project, to project management and to senior management
  - Discussion of hazards or potentially dangerous situations as well as follow up suggestions and dates

4) Management will support exceptional safety performance by:

- Any employee that strives to improve the safety on a job
- Any supervisor who improves or eliminates the incidence of lost time injury on projects under his management
- Annual Safety Awards for employees who create a safe environment for themselves and others on a project
- Providing new equipment to replace any employee‟s old, worn out equipment (part of a renewal process)
- AEC Inc. may sponsor annual safety awards based on individual project performance

5) Management will arrange training involving:

- New policies and procedures by December 2009 – for all employees
- Annual retraining for all other policies – for all employees

Discipline Policy

Progressive, corrective discipline[1] must be applied to ensure the OHSA, construction regulations (Reg. 213/91) and relevant manufacturer‟s instructions are followed. It is essential that discipline be applied consistently to all people. Written safety violation notices are to be distributed to the offender, their employer and copies are to be kept on the project.

Discipline is necessary to ensure every reasonable precaution is taken to protect the safety of all project personnel and is not intended as punishment. Its purpose is to ensure effective job performance through enhanced behaviour or practices. Discipline also illustrates the seriousness with which the employer views departure from accepted safe practices and behaviours. The employer will point out incidents of misconduct to workers when they occur as well as the behaviour that is required. The employer views the discipline situation as essentially a problem for the worker to resolve; failure to do so will place employment at risk. The employer will prompt the worker to adopt the required behaviour and will acknowledge progress.

Where the potential consequences of the violation are severe, management and the project supervisory personnel reserve the right to by-pass the normal progressive disciplinary response to enforce immediate removal of the offender. The following are violations that should be met with documented steps of corrective discipline. This list is not all-inclusive, but is in addition to violations to the Act, regulations and company/client policies:

- **Health and safety violations**
- **Deliberate property damage**
- **Drug/alcohol abuse**
- **Fraud or misrepresentation of certification**
- **Absenteeism without justification**
- **Reckless or negligent behaviour**
- **Violent or abusive conduct**
- **Lying**
- **Insubordination**
- **Theft**

The system of progressive discipline will follow this order:

1. Verbal warning (documented by supervisor)
2. Written warning (with explanation to the violator, and violation notice provided to the worker, worker‟s employer, constructor and project supervisor)
3. Removal from project/termination (with Discharge letter given to worker)

Roles and Responsibilities

[1] Progressive discipline – verbal and written warnings given for non-compliance in any area (ie. graduated discipline is applied for each item of non-compliance)

Senior Management

- Review and respond to written discipline
- Communicate with contractors to request compliance with project infraction
- Assist in serious project enforcement/discipline issues
- Perform discipline to offending company if violations relate to methods or practices of an entire company on a project
- Support project supervisor in matters of discipline

Project Supervisor

- Explain discipline policy during project orientation
- Provide explanations to the worker of why the discipline was given, what violation the worker is performing, what can be done to correct the problem, and consequences of further offences
- Require retraining or familiarization with H&S topic that has been violated, to correct unsafe behaviour
- Retain all evidence of any violation, including physical evidence (objects, damaged property, photographs, videos, sketches), and statements of witnesses and notes of supervisors made at the time of the events
- Record discipline in supervisor‟s logbook for first violation
- Complete discipline report for all subsequent violations
- If the violation relates to the violation of multiple people from one company or concerns the failure of a system used by the company, the checkbox
- Interview witnesses and the offender to ensure all facts are available
- Enforce discipline for all health & safety rule violations on a project
- Provide corrective guidance and ensure clear expectations are outlined
- Consider past discipline record, experience and attitude
- Ensure intentions are communicated to the worker and the worker‟s employer
- If required (3rd violation for repeat offender or action that could have had severe consequences), remove offending worker from the project or refer offending company to management to initiate removal from the contract

H&S Committee

- Assist in resolving enforcement/discipline issues
- Raise enforcement and discipline issues at health and safety meetings

Worker

- Report any hazardous situation to immediate supervisor

Return to Work Program

Guidelines

We recognize that our employees are our most important resource and that there may be occasions when employment may be interrupted due to an occupational or non-occupational injury or illness. In keeping with this, we have established a Return to Work Program for all VSC employees.

The **Goal** of the VSC Return to Work Program is to return employees, where possible, to their regular job as soon as possible. The program will focus on the employees‟ new level of capabilities and will provide for a fair, consistent, and gradual return to the pre-injury or illness job.

The **Objectives** of this Return to Work Program are:

- To encourage the early rehabilitation of all injured workers
- To reduce or eliminate all lost time injuries
- To maintain continuity of the work force
- To reduce the associated WSIB costs
- To evaluate effectiveness of the program

This policy will operate using:

- Regular communication with employees, the injured party, and the health care practitioner
- Review of the program efficiency after each time it is applied
- The established functional abilities of the injured party
- The tasks available at the time of return

Proper placement of an injured employee in a job with meaningful modified duties that do not increase the risk of re-injury will assist in the rehabilitation process. The cooperation of all parties is crucial to the success of the program.

Roles and Responsibilities

Program Coordinator (may be Supervisor)

- Keep accurate records
- Coordinate the Return to Work process
- Gather current medical documentation and communicate with medical practitioner
- Assign a contact person to visit and/or consult with injured employee
- Remain positive and provide encouragement throughout the program
- Help resolve conflicts

- Ensure that the employee‟s pay is properly calculated
- Maintain confidentiality
- Review effectiveness of program after each case

Supervisor

- Show respect and recognition for the worker‟s new level of capabilities
- Remain positive throughout the program and provide encouragement to the worker
- Communicate information to the returning employees‟ co-workers concerning job related activities
- Provide meaningful, productive work within the new level of capabilities
- Maintain contact with the returning worker
- Maintain confidentiality

Co-Workers

- Show respect and recognition for the worker‟s new level of capability
- Remain positive and provide encouragement throughout the program
- Assist with duties beyond the capabilities of the worker

Worker

- Notify VSC, of an injury or illness as soon as possible
- Maintain contact with VSC and provide updated medical capabilities
- Take an active role in the Return to Work Program and work according to new level of capabilities
- Supply all medical information related to Return to Work
- Remain positive throughout the program and cooperate to the best of their ability
- Maintain confidentiality

Return to Work Procedures

When an injury occurs:

1) Follow established First Aid Procedures and/or involve the Emergency Medical System if required

2) A senior supervisor accompanies the injured employee to the treating medical agency and provides a Treatment Memorandum Form (see Return to Work – Additional WSIB Forms in Checklists & Forms section)

   - The supervisor is to remain at the treating medical agency until the injured employee‟s condition is established

3) Communicate the with injured employee, providing encouragement and support

   - Where prolonged disability results from a work injury, weekly contact with the injured worker will be maintained

4) Communicate with the treating medical agency to advise them of the modified duties available in the Return to Work Program

- See Return to Work – Letter to Attending Physician in Checklists & Forms section

5) A senior supervisor completes an accident investigation the following day

- Involving the injured employee (if possible), and witnesses
- Sending copies to head office

6) Consider possible jobs suitable for the injured employee‟s new level of capabilities

- Ensure no risk of re-injury exists
- Consider that ***any*** return to work for some injuries may present increased risk
- Modified duty suggestions:
  - ► General clean up
  - ► Sweeping (when no lifting allowed)
  - ► Material handler (when light lifting allowed)
  - ► Material receiver
  - ► Equipment cleaning
  - ► Inventory
  - ► Design layout
  - ► Secondary supervision/foreman
  - ► Safety representative/accident investigator
  - ► Project traffic control
  - ► Signal person
  - ► Discuss possibilities with worker

7) Establish a date by which the employee is expected to return to full duties and the consequences of an inability to achieve full performance of duties by specified date

- If unable to return to their regular job, the returning worker will be placed in the same area, but in a different job
- If unable to return to a different job in same area, the returning worker will be placed in any suitable job in the company

8) The program will span a maximum of 6 weeks and will start when the employee can achieve the goal of the Return to Work Program within the 6 week period

- If the 6 week period is not sufficient, an additional 2 weeks may be granted if medically required

9) Implement a reduced hours work schedule to re-introduce the employee to work

- Specific hours should be determined on a case by case basis
- An example of reduced hours per day for a 6 week Return to Work program could be: 2-2-3-3-5-7-8

10) The effectiveness of the Return to Work Program will be evaluated using all those involved

- Upon the completion of each Return to Work case
- Annually at a Health & Safety Program review

Regardless of the nature of the injury, if it is not completely disabling, BE SURE AN OFFER OF MODIFIED WORK IS MADE TO THE EMPLOYEE.

New Worker Orientation

Guidelines

Training is an essential component of an employer‟s health and safety obligations. It is based on the employer‟s responsibility to:
Provide information, instruction and supervision to a worker to protect the health or safety of the worker
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…
Take every precaution reasonable in the circumstances for the protection of a worker
(from Section 25 (2) of Occupational Health & Safety Act)

Training is most important for inexperienced or new workers, as they are generally involved in more accidents than experienced workers. A new worker is anyone new to the company or project, regardless of age or experience. On a construction project, the project supervisor is responsible to ensure that the safety of all workers is protected. One aspect of this responsibility is to ensure workers are advised of any danger or possible danger of which they are aware.

The method that will be used to familiarize a new worker with the details and dangers of a project is orientation. A checklist and a physical tour of the project can accomplish this. The checklist includes information on the VSC health & safety program, the project layout, first aid procedures, specific project emergency procedures, project hazards, reporting procedures, the right to refuse and material storage/disposal rules. A physical tour should include hazards, layout details (parking, lunch area, access points) and introductions to relevant personnel (first aid attendant, H&S representative, contractor foremen).

Roles and Responsibilities

Employer

- Ensure that an orientation program is in place for all new workers on a project
- Provide information, instruction and education where required to protect the health or safety of all workers

Supervisor

- Ensure complete orientation is provided for all new workers on a project
- Ensure completed checklists (see New Worker Orientation – Project Checklist in Checklists & Forms section) are available on the project

Contractor

- Provide project orientation to all members of a crew prior to beginning work on a project
- Submit completed orientation checklists (see New Worker Orientation – Project Checklist in Checklists & Forms section) to the project supervisor

Worker

- Participate in orientation programs when new to a project
- Use information learned to protect the safety of all workers on a project

Records Review & Statistical Analysis

Guidelines

In order to recognize hazards and monitor the success of the VSC Health & Safety Program, reports, records and other performance measures must be reviewed. Analysis of these reports will provide information regarding what elements of the entire program need attention and improvement, and will assist in the prevention of accidents and injuries.

In addition to Hazard Assessment Procedures already in place, it is VSC"s policy to perform annual reviews of the following performance measures, if available:

- Hazard reports[2]
- Accident investigations
- First aid[3] reports
- Medical aid[4] reports
- Lost time injury[5] reports
- Equipment maintenance records
- Ministry of Labour, MOL, orders
- Joint Health & Safety Committee, JHSC, minutes

To review data from these sources, it is necessary to establish a system to document, maintain and keep records on all injuries, accidents, and incidents that occur on all projects. The collected data will be analyzed for trends from year to year and in some cases project to project. Medical aid cases and lost time injury (LTI) reports can be compared to provincial averages.

Roles and Responsibilities

Senior Management

- Maintain records of orientation, project inspections, safety audits, MOL reports and follow up actions
- Monitor injury frequency rates
- Compile an annual report on all health and safety activities and occurrences on the project
- Ensure follow up performed for all action items
- Ensure appropriate actions are taken following review of annual project safety data report

[2] Refers to any hazard assessment/project inspection performed by VSC or a representative
[3] Refers to an injury that can be treated on the job without any work days lost
[4] Refers to an injury not severe enough to warrant more than one day off work, but medical treatment is required
[5] Refers to an injury that direct result keeps an employee off work for more than one full day

Supervisor

- Record all accidents, incidents, first aid occurrences, lost time injuries, equipment damage, MOL reports and JHSC minutes and make available to all on the project
- Send all relevant health and safety information to the VSC head office
- Coordinate first aid response, accident investigation or other follow up procedures subsequent to an occurrence

Worker

- Report all accidents, incidents, first aid occurrences, lost time injuries and equipment damage to supervisor

Records Review and Statistical Analysis Procedures

1. All project safety data are registered and recorded at the project, with appropriate responses initiated **immediately** (ie. accident investigation etc.)
2. All project safety data are copied to management
3. Project inspection checklists from routine safety inspections are collected and statistically analysed in an **annual** Health & Safety report
4. All other project safety data is presented and reviewed using charts and graphs in **annual** reports that assess:

Project Safety Data	**Statistical Focus Examples**
Hazard Assessments	Number performed, issue involved, hazards identified
Accident investigations	Number performed, recommendations, by occupation
First aid reports	Number performed, body part involved, by occupation
Medical Aid reports	Number performed, body part involved, by occupation, versus provincial average
Lost Time injuries	Frequency, injury type, body part involved, by occupation, versus provincial average
Maintenance records	Type of equipment
MOL orders	Number performed, Issue involved, stop work orders issued, order to comply issued
Joint Health & Safety Committee, JHSC, minutes	Issues identified, follow up, meeting frequency

Appropriate action is to be taken, initiated at the management level, to respond to trends, repeated contraventions, repeated injuries or commonly identified hazards.

Workplace Violence and Harassment Policy

The single biggest contributor to workplace-related violence is stress. Stress arising from workplace or personal factors (ie. work overload/underload, role uncertainty, responsibility for others, isolation, job satisfaction, job security, or negative feedback) can push employees towards a violent outcome.

Our company is concerned and committed to our employees' safety and health. We refuse to tolerate violence or harassment in the workplace and will make every effort to prevent violent incidents from occurring by implementing a Workplace Violence and Harassment Policy with a Non-Violent Crisis Intervention program. We will provide adequate authority and resources to responsible parties so that our goals and responsibilities can be met.

All managers and/or supervisors are responsible for implementing and maintaining our program. We encourage employee participation in designing and implementing our program. We require prompt and accurate reporting of any act in which a person is abused, threatened, intimidated or assaulted whether or not physical injury has occurred.

Our program ensures that all employees, including supervisors and managers, adhere to work practices that are designed to make the workplace more safe and secure, and do not engage in verbal threats or physical actions which create a security hazard for others in the workplace.

Our Program will be reviewed and updated annually.

Non-Violent Crisis Intervention Program

- This program applies to all parties on our projects including: management, supervisors, employees, clients, contractors and consultants
- Workplace violence is: any incident in which a person is abused, threatened, intimidated, assaulted or sustains physical, emotional or psychological harm or injury in his/her employment
- Workplace violence includes:
    - Threatening behaviour – such as shaking fists, destroying property or throwing objects
    - Verbal or written threats – any expression of an intent to inflict harm
    - Harassment – any behaviour that demeans, embarrasses, humiliates, annoys, alarms or verbally abuses (includes words, gestures, intimidation, bullying or other inappropriate activities
    - Verbal abuse – swearing, insults or condescending language
    - Physical attacks – hitting, shoving, pushing or kicking
- Strategies for non-violent crisis intervention include:
    - Screening potential employees for unhealthy behaviour characteristics

- Communicating a management commitment to non-violence
- Education and training for managers, supervisors, and employees on effective communication, teamwork, interpersonal skills, stress management etc.
- Implementing personal security measures

∫ Any person/people performing workplace violence will be removed from the project immediately

Procedures

∫ Supervisors will be the leaders of the Non-Violent Crisis Intervention Program on each project

∫ Supervisors will encourage the reporting of all incidents and will keep the reporting witness‟ identity confidential

∫ No punishment or reprisal will come to the reporting witness

∫ When an incident of workplace violence is reported, the supervisor will investigate it promptly, interviewing all parties (witnesses, victims and perpetrators) and documenting statements

∫ When dealing with conflicts, strategies for supervisors include:

- Deal with complaints immediately
- Listen to entire complaint
- Determine the reason for the complaint
- Focus discussions on the problem, not the people involved
- Identify shared goals and ways to achieve them
- Set realistic goals and make reasonable promises
- Involve a third party if the conflict can not be resolved

∫ Perpetrators of workplace violence should be supported by the company and be referred to community support systems for anger and/or violence therapy

∫ Accident/incident report procedures should be initiated if required

Applicable Legislation/References

Criminal code of Canada
Violence in the Workplace – www.ccohs.ca/oshanswers/psychosocial/violence.html
Bill 168 – Occupational Health and Safety Amendment Act

Corporate Networking Program

Guidelines

The knowledge that can be attained from other members of your industry can be invaluable. New concepts, ideas and methods are constantly coming about. It is necessary to be informed of such innovations to remain competitive in any industry.

In order to ensure competitiveness and growth, it is essential that a high level of performance is met in all areas of operation, including Health & Safety. It is also essential to share information among other members of the construction industry. Therefore, it is VSC policy to interact with at least **three (3)** other companies for this purpose throughout each year.

VSC management representatives will network with other construction companies and gather information through:

- ► Email and other correspondence
- ► Personal contacts
- ► CSAO training courses
- ► OGCA safety group meetings
- ► Out-of-province construction associations
- ► MOL correspondence

VSC with achieve this by:

- Sharing ideas
- Exchanging policies/guidelines with other companies
- Performing internet research

Training will be provided in any area deemed necessary to improving networking opportunities (ie. internet/email use).

After each 2-year period, VSC will evaluate the success connected with their Networking Philosophy and will identify new/or improved avenues for gaining information and improving competitiveness for the next 2-year interval.

D - Hazard Recognition & Assessment

Project Inspections

Roles and Responsibilities

Senior Management

- Provide the necessary resources to implement, support, and enforce the health and safety policy and program within the company
- Promote the exchange of health and safety information
- Review accident reports and communicate with government labour authorities regarding notices respecting critical injuries, accidents, incidents and other events
- Provide support for the Health & Safety Program and any safety related initiative (ie. health & safety targets/goals)

Supervisor

- Accompany H&S consultants on safety inspections or designate a competent proxy (ie. H&S representative, Joint Health & Safety Committee, JHSC, member etc.
- Ensure a management representative accompanies federal and/or provincial labour authorities (ie. Ministry of Labour) during inspections
- Review project safety inspection checklists and respond to recommendations
- Discuss matters of safety with project H&S representative and/or JHSC member(s) and review & respond to recommendations (within 21 days)
- Coordinate project safety meetings and/or the existence of a JHSC
- Establish a project health & safety documentation system for project safety inspection checklists, injury reports, MOL reports, Material Safety Data Sheets, emergency & rescue procedures, MOL contractor registration forms and other documents
- Perform daily project tours, noting any hazards or unsafe practices
- Respond immediately to hazards and keep records for follow-up
- Prepare and implement emergency response plan (see Emergency Response Plan)
- Identify special project hazards and outline appropriate safe work procedures and training requirements
- Arrange necessary safety training courses through AEC Inc.

Health & Safety Representative or Joint Health & Safety Committee

- Complete an inspection of the entire project once every 2 weeks
- Identify dangerous or hazardous situations and report them to project supervisor
- Record health and safety recommendations and report them to project supervisor
- Cooperate with H&S consultants during project safety inspections
- Participate in accident investigation when required (see Accident Investigation Procedures)
- Be familiar with OHSA and Construction Regulations

- Participate in monthly project safety meetings where dangerous or hazardous situations are presented and recommendations are discussed
- Accompany and cooperate with federal and/or provincial labour authorities (ie. Ministry of Labour) during inspections

Worker

- Work in accordance with the Occupational Health & Safety Act (OHSA) and Construction Regulations
- Participate in project inspections when required
- Implement project inspection and safety meeting recommendations
- Report hazardous conditions or contraventions of the OHSA and Construction Regulations to the Health & Safety representative or project supervisor

Hazard/Incident Reporting

Guidelines

The strength of any safety program relies on the involvement of all workers on a project to identify hazardous conditions to their direct supervisors. It is up to the supervisors to take reasonable measures to correct or eliminate the problems. In all cases, there must be a combined effort to recognize, assess and control hazards before an injury occurs.

VSC has chosen H&S project inspection reports, H&S meetings, incident reporting and accident investigations and hazard reports as the methods of identifying project hazards, assessing their severity and controlling them to reduce the risk of injury. When hazards are reported to project supervisors, thorough hazard reporting and follow-up can lead to a reduction in accidents.

Hazard – occurs when a condition is present that could contribute to an incident, injury or damage if a worker or equipment were exposed to it
Incident – or „near miss" occurs when conditions are present that could have contributed to an injury, or damage, but were avoided
Accident – occurs when a worker or equipment comes in contact with a hazard resulting in an injury or damage

Roles & Responsibilities

Employer

- Provide support to project staff for comprehensive hazard report review
- Maintain records of all injuries, accidents, and hazards for each project
- Compile records of project safety performance
- Review hazard reports and make recommendations for improvement
- Train employees about hazard reporting procedures and hazard resolution

Supervisor

- Review all hazard reports
- Take corrective action to reduce risks of injury from hazards identified in hazard reports
- Inform all workers via progress reports to H&S committees of identified health and safety issues
- Discipline workers who knowingly disregard safety rules to expose themselves or others to hazards
- Submit all records of orientation, training, safety meetings and hazard reports to management, with a copy available on the project
- Ensure all accidents or hazards requiring investigation are reported immediately to head office and to the H&S committee
- Ensure that H&S representatives are consulted on recommendations

Worker

- Report all hazardous conditions immediately to their supervisor
- Participate in investigation of hazard reports, providing information into the cause and elimination of the hazard

Joint Health & Safety Committee/Health & Safety Representative

Joint Health & Safety Committee (JHSC) Guidelines

In an effort to maintain a constant safety presence on all projects, VSC supports the selection of worker representatives as Health & Safety representatives or towards the formation of Joint Health & Safety Committees where applicable.

Functions

- *Creation* – a JHSC will be established on all VSC projects where the number regularly employed exceeds 20 and the expected duration of the project is to exceed 3 months
- *Composition* – the JHSC will consist of at least 2 members for projects with a labour force between 20 and 49 workers and 4 members for projects with a labour force of greater than 50
- Equal representation from labour and management parties is required
- *Selection* - the workers on the project will select the labour representative(s) to represent them
- The constructor or employer will select the management representation
- On projects with a workforce greater than 50 workers and an expected duration of at least 3 months, a minimum of 2 **certified members**[6], representing both labour and management
- Co-chairs will be elected to chair meetings and coordinate inspections
- *Meetings* - will be held at a minimum of once per month and copies of minutes will be distributed to all present
- *Inspections* - project inspections will be performed by, at minimum, one member of the JHSC designated by the labour force who will also accompany Ministry of Labour inspectors during project inspections
- *Recommendations* - after project inspections, dangerous and/or potentially hazardous conditions will be reported to the project supervisor and JHSC and will be discussed at the JHSC meetings
- *Investigations* - critical injuries will be investigated[7] by one or both of the certified members on the project and findings will be reported to the Ministry of Labour (MOL)

Joint Health & Safety Committee (JHSC) Responsibilities

Project Supervisor

- Arrange for monthly safety meetings – at the first of which, co-chairs for JHSC will be chosen, if applicable
- Copy and post inspection reports from all project safety inspections
- Copy and post all minutes from JHSC meetings
- Provide training for JHSC members (certified member training required for one member of both management and labour) in the proper performance of their duties
- Acknowledge all positive contributions to safety
- Review inspection and accident reports
- Follow up recommendations with improvements or reasons for disagreement

[6] Certified by the Workplace Safety and Insurance Board under the Workplace Safety and Insurance Act „97
[7] According to (see) Accident Investigation Policy & Procedures

- Provide information regarding any hazards or potential hazards involving equipment, materials or chemicals at the project

JHSC Member

- Obtain information from the constructor regarding the testing of equipment, material or chemicals at the project
- Be consulted about or designate a member to be present at the beginning of testing performed on the project
- Inspect the project at least once a month, recording and reporting hazardous conditions as they appear
- Make health & safety recommendations to the project supervisor, who must respond with either a timetable for implementation or reasons for their disagreement
- Investigate all fatalities or critical injuries and report findings to the Ministry of Labour
- Participate in project safety meetings, where the results and recommendations from project safety inspections will be reviewed
- Accompany Ministry of Labour inspectors during project inspections

Worker

- Cooperate with JHSC members during their inspections
- Report hazards or unsafe conditions to the project supervisor and JHSC
- Provide recommendations for improvement of project conditions
- Participate in project safety meetings
- Work safely in accordance with the VSC Health & Safety program and with the project Health & Safety program (including the OH&S Act and construction regulations)

Health & Safety Representative Guidelines

Functions

- *Creation & Selection* – on all VSC projects with six to 19 workers, one Health & Safety representative shall be selected from the workers at the project who do not work on behalf of management
- *Inspections* - the H&S representative will perform project safety inspections on (at least) a monthly basis & will report any hazardous circumstance to the project supervisor
- *Meetings* - monthly project safety meetings will be held, where any hazardous conditions will be discussed and recommendations will be put forward
- *Recommendations* - will be followed up by the project supervisor
- *Investigations* – critical injuries will be investigated by the H&S representative and findings will be reported to the Ministry of Labour (MOL)

Health & Safety Representative Responsibilities

Project Supervisor

- Arrange for monthly safety meetings – at the first of which, a Health & Safety representative will be chosen
- Copy and post inspection reports from all project safety inspections

- Copy and post all minutes from safety committee meetings
- Provide training for Health & Safety representatives (certification training and/or CSAO Advanced Health & Safety Representative Training Program where possible) in the proper performance of their duties
- Acknowledge all positive contributions to safety
- Follow up recommendations with improvements or reasons for disagreement
- Provide information regarding any hazards or potential hazards involving equipment, materials or chemicals at the project

Health & Safety Representative

- Obtain information from the constructor regarding the testing of equipment, materials or chemicals at the project
- Inspect the project at least once a month, recording and reporting hazardous conditions as they appear
- Obtain information regarding existing or potential hazards in the workplace
- Make health & safety recommendations to the project supervisor, who must respond with either a timetable for implementation or reasons for their disagreement
- Investigate all fatalities or critical injuries and report findings to the Ministry of Labour
- Participate in project safety meetings, where the results and recommendations from project safety inspections will be reviewed
- Accompany Ministry of Labour inspectors during project inspections

Worker

- Cooperate with H&S representative
- Report hazards or unsafe conditions to the project supervisor and H&S representative
- Provide recommendations for improvement of project conditions
- Participate in project safety meetings
- Work safely in accordance with the VSC Health & Safety program and with the project Health & Safety program (including the OH&S Act and construction regulations)

Indoor Air Quality/Adequate Ventilation

Guidelines

A potential health hazard exists when a person is exposed to any agent whose properties can harm the body when excessive exposure occurs. In some instances, any exposure to hazardous agents at work can lead to an occupational illness or disease. On construction projects, the most hazardous sources of potential hazards are Chemical, Physical, or Biological. Occupational illnesses & diseases can result from short-term exposure to a high concentration of a hazard or from repeated exposures to low concentrations. In order to reduce the exposure of a worker to a hazardous agent, a standard practice of recognition, assessment and control must be implemented. Hazard indicators that can assist in identifying biological, chemical and physical agents in the workplace can be: sensitive detection equipment, complaints from workers, excessive dust, strong odours or the presence of known hazardous products. If any potential hazards exist, it may be necessary to collect samples to measure the presence and levels of a hazardous agent. Information gained from workplace sampling can be used to assess the need for controls and also to decide on the design and maintenance of controls. Monitoring for chemical and biological hazards normally involves sampling the air in the workplace.

Roles and Responsibilities

Project Supervisor

- Recognize hazards and advise all workers of their presence on the project
- Ensure that all hazardous materials present are accounted for by MSDS, and that work is performed according to prescribed methods
- Arrange for workplace monitoring if hazardous quantities of chemicals or other agents may be in the work environment
- Stop all work from being performed in the area being monitored, and ensure workers‟ safety
- Ensure results of workplace monitoring are documented and made available to all workers on the project
- Ensure adequate local and/or general ventilation exist to remove potentially hazardous contaminants (and that it does not draw contaminated air back into the workplace)
- Ensure systematic maintenance is performed by responsible parties (ie. owner, client or contractors) including, where applicable:
    - Regular checks of hoods, filters, belts and air cleaners
    - Periodic tests of system performance
    - Visual checks of air flow
    - Documentation of all checks and tests performed
- Ensure appropriate personal protective equipment is available if elimination or other controls are not possible or practical (ie. respirators that are the correct type, that fit correctly and are properly used)
- Ensure workers are trained in the proper maintenance and use of all personal protective

equipment

Worker

- Report the presence of a hazardous (or unknown) substance to the supervisor
- Stop working in an area where a potentially hazardous environment exists
- Use personal protective equipment where required by the employer, the Occupational Health & Safety Act or by the appropriate regulations

Chemical Safety Policy

Guidelines

Chemical hazards on construction projects are often airborne in the form of dusts, fumes, mists, vapors or gases. As a result the most common route of exposure is inhalation, although other possible routes of entry are absorption through the skin (e.g. organic solvents), ingestion (with food or water) or eye contact. Chemical hazards also occur in liquid or semi-liquid state (e.g., glues or adhesives, tar) or as powders (e.g., dry cement). Construction workers may be exposed to a hazard through more than one route of entry (eg. skin contact a chemical in addition to possible inhalation of the vapor).

Several illnesses have been linked to the construction trades, among them:

- Silicosis among sand blasters, tunnel builders and rock drill operators
- Elevated cancer rates among asbestos insulation workers, roofers, welders and some woodworkers
- Asbestosis (and other diseases caused by asbestos) among asbestos insulation workers, steam pipe fitters, building demolition workers and others
- Bronchitis among welders
- Skin allergies among masons and others who work with cement
- Neurological disorders among painters and others exposed to organic solvents and lead
- Lead poisoning occurs among bridge rehabilitation workers and painters
- Heat stress (from wearing full-body protective suits) among hazardous-waste cleanup workers and roofers
- White finger (Raynaud"s syndrome) appears among some jackhammer operators and other workers who use vibrating drills (e.g., stopper drills among tunnellers)
- Alcoholism and other alcohol-related disease is more frequent than expected among construction workers

Exposure to hazardous chemicals on a construction project must be limited by adherence to the internal responsibility system and by practices required by WHMIS regulations (Regulation 860). This policy is most effective if it operates in combination with the WHMIS policy.

Chemical Safety Responsibilities

Project Supervisor

- Before work begins, identify potential chemical hazard exposure and use an appropriate method to minimize exposure risk to all workers (see Hazard Analysis in Checklists & Forms section)
    - Substitution – encourage substituting product posing hazard with less hazardous one
    - Isolation/enclosure – isolate or enclose hazardous chemical
    - Ventilation – increase general ventilation to dilute concentration of hazard or increase local exhaust ventilation to remove the hazard
    - Personal hygiene practices – provide clean-up facilities

        - Administrative controls – rotate workers to limit exposure of workers and the public
        - Personal protective equipment – ensure it is appropriate to the hazard, used appropriately, tested prior to use and monitored for effectiveness
    - Ensure contractors using hazardous chemicals on a project submit MSDS information on the products prior to beginning work
    - Ensure products containing hazardous chemicals are properly labeled
    - Ensure all workers are educated in the exposure potential of products containing hazardous chemicals, including which trade will be using them, how they will be used and where on the project they will be used
    - Ensure products containing hazardous chemicals are stored according to their MSDS
    - Ensure daily housekeeping is performed by each contractor
- Ensure exposure monitoring is performed if environment is potentially dangerous (explosive, oxygen-enriched or oxygen-deficient, or toxic)
    - Ensure a competent person performs continuous sampling air monitoring equipment (according to manufacturer‟s instructions) in the area of the dangerous environment
    - Ensure testing results are documented at fixed intervals throughout the workday including, readings taken prior to workers entering the potential CO collection area
        - These test results are to be kept on the project
- If a dangerous environment exists, remove all workers from the area, arrange for purging and increased general/dilution ventilation to create and maintain an environment that will not endanger workers
- If a dangerous environment exists due to an accidental spill or release evacuate all workers from area, alert Spills Hotline 1-800-268-6060 and EMS
- If dangerous environment continues to exists, keep area evacuated and alert EMS personnel

Worker

- Report any potential hazardous chemical to a direct supervisor and to the project supervisor
- Report any symptom of hazardous chemical exposure immediately to the project supervisor
- Be informed of all hazards and potential hazards
- Report any damage or defect to any equipment or process that may contribute to a hazardous chemical release

Work Refusal

Guidelines

According to the Section 43 (3) Occupational Health & Safety Act,

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

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

All workers have the right to refuse is they believe a hazardous condition exists in their workplace. The worker must notify his supervisor immediately. Before this becomes a work refusal under the Occupational Health & Safety Act, the worker and supervisor should discuss the hazardous condition to determine if there is issue can be resolved internally. If the issue cannot be resolved, and the worker still feels that a hazardous condition exists, the MOL will be involved to determine if the condition is likely to endanger. During the official work refusal process, other workers may be offered to perform the duties as long as they are notified of the details of the work refusal. An investigation will be performed involving various workplace parties to identify corrective action needed to achieve a resolution. Education can be included as corrective action. Once the corrective action is implemented, and all parties agree that the hazardous condition has been resolved, work can continue.

Roles and Responsibilities

Employer

- Ensure all workers are given orientation including a review of their right to refuse hazardous work
- Ensure supervisors and workers are supported in the work refusal process
- Provide all information as needed during a work refusal

Supervisor

- Provide orientation to all workers including a review of their right to refuse hazardous work
- Support all workers‟ right to refuse work they fell may be hazardous
- Investigate the report of hazardous work immediately
- Attempt to resolve the hazardous condition internally
- Adhere to the work refusal process if it cannot be resolved internally with a JHSC member, a H&S rep, and/or worker representative (see Work Refusal Flow Chart in Checklists & Forms section)
- Ensure the work considered hazardous is not resumed until recommendations are implemented and the resolution is accepted by all parties

- Never threaten or impose reprisals on workers who refuse work
- Ensure communication exists amongst all parties during a work refusal

Worker

- Report hazardous conditions immediately to direct supervisor
- Assist in attempting to resolve the hazardous condition internally
- If no resolution is acceptable, continue to refuse to work and stand by while investigation is performed
- Resume work once corrective action is implemented and a resolution is achieved

E - Emergency Planning

Emergency Response Plan

Emergency Response Procedures

Emergency response procedures will vary depending on many factors including the severity of the incident and the type of construction project. Several elements will remain constant however:

- All incidents are to be treated seriously and investigated thoroughly
- Priority in the case of an accident goes to:
    - Saving a life
    - Saving a limb
    - Maintaining an essential service or utility
    - Making the injured comfortable
    - Preventing damage to equipment or property (without risk of injury)

All emergencies must be treated with caution as circumstances can arise that put those who are unprepared, ill equipped and not sufficiently trained into situations of extreme danger.

When responding to the following incidents, all project personnel must be informed of the procedures to be followed.

Emergency Communication System

The project supervisor must ensure that an effective communications system is in place with strategically placed equipment and properly defined responsibilities to relay information quickly. It is recommended to have a backup system in place, in case the system is rendered useless by the emergency.
The type and location of emergency communication systems must be posted on the project. This will include location of telephones or 2-way radios, a list of personnel included in the emergency communication system, and any other equipment available.

First Aid/Major Accident Response

(see Emergency Response Checklist in Checklists & Forms section)
The project supervisor and a certified first aid/CPR provider are notified of the accident. Care is arranged for the injured employee based on the evaluation of the severity of the injury. If EMS is notified, the emergency access route is attended and emergency care is provided until support arrives. Senior management and the Ministry of Labour (if applicable) are informed of the accident. A company representative is sent to the hospital to determine the injured worker‟s condition. The accident scene is secured and an accident investigation is launched – including interviewing witnesses and completing reports (see Accident Investigation Procedures).

Loss of Power

In the event of power loss, all employees on project must turn off all equipment. This is due to the hazardous circumstances that may result from equipment that is unattended when power is restored. If the power failure involves loss of lighting and no emergency lighting is present, the employees must leave any building as a precaution. All workers should present themselves for a head count at the main project entrance. The utility supplier must be contacted to determine the duration of the power loss.

Fire Response

(see Emergency Procedures Checklist in Checklists & Forms section)
Trained employees can respond to localized or minor fires, but all fires should be treated as emergencies. Steps to respond to a fire include: evaluate severity of the fire, notify the Response Team and attempt to extinguish fire if possible, if too large, call the Fire Department, alert others in work area of dangers, notify project supervisor of fire, call senior management, call Ministry of Labour, make MSDS available, ensure evacuation procedures are executed, assist in First Aid, complete investigation of causes and results.

Fire extinguishers must be readily available near any open-flame operation and where combustible or flammable liquids are stored, handled or used. Fire extinguishers are to be marked with their appropriate manufacturer symbols designating its class and use and their WHMIS supplier label. All extinguishers are to be inspected on a monthly basis by a competent person.

The following are the classes of dry chemical extinguishers:

Class A		Class B		Class C	
ORDINARY FLAMMABLE		FLAMMABLE LIQUIDS & GASES		ELECTRICAL	
Trash	Cloth	Oils	Gasoline	Motors	Switchgear
Wood	Rubber	Oil Paints	Propane	Electrical Panels	Electrical Wiring
Paper	Plastics	Acetylene	Solvents		

Hazardous Spills

In the event of a hazardous spill, the following actions should be taken:

- Evacuate area of spill and surrounding area (follow Evacuation Plan)
- Call Spills Action Centre Emergency Phone Number: 1-800-268-6060
- Notify project supervisor of spill type and area
- Consult MSDS for emergency precautions for spilled chemical
- Provide chemical information for Emergency Spills Response Team

Severe Weather

Natural causes, which may jeopardize the health & safety of employees, such as floods, lighting, tornadoes, earthquakes as well as extreme heat and cold will be treated as emergency situations. No work will be performed during periods of severe weather when the possibility exists that an injury may result. Employees must take cover in any available solid, stable shelter that removes them from the hazard and perform a tally to ensure that all are present. Evacuation procedures may be required.

Cave-in

If a trench or excavation wall gives way, or a form bursts, procedures should be:

- Call EMS if a worker is trapped
- Use tarpaulin, fencing, plywood or similar material to can cover the ground and will ride up over any further cave-in
- Excavate area suspected of further cave-in or place backhoe bucket against it
- Workers attempting a rescue must wear rescue harnesses connected to manned ropes
- Remove the casualty by stretcher (tarps and/or ladder can be used) when possible
- Perform first aid/CPR as required until EMS takes over

Evacuation Plan

(see Emergency Procedures Checklist in appendix)
In the event of a critical emergency, *after* Emergency Services are alerted, the evacuation plan will be as follows:

- Alert workers to an emergency evacuation by using an aerosol powered airhorn blown 3 times, followed by 5 seconds of silence and 3 more horn blasts
- Evacuate the structure or project through nearest exits
- Meet beside the main entrance to the project as far from the cause of the emergency (ie. fire or hazardous spill) as necessary
- Each contractor conducts a head count to ensure all employees are present
- Results of the head count are passed on to the Emergency Controller or project supervisor
- Ensure neighbours are notified of emergency
- Notify project owner of emergency
- Remain clear of the project until the responding emergency services give „all-clear" signal

Protective and Rescue Equipment

In accordance with Reg. 213/91, procedures must be established and available on the project to rescue a worker after his or her fall has been arrested by a fall arrest system.

Falls will be prevented through the use of travel-restraint systems, and guardrails wherever possible. When not feasible and the potential for a fall is present fall arrest systems will be used. All fall arrest systems will consist of a full body harness with adequate attachment points and a lanyard equipped with a shock absorber. Fall arrest systems will be attached, by a lifeline, to an independent fixed support. Before each use, a competent worker will inspect the fall arrest system and if any part found defective, it will be taken out of service and replaced. A fall rescue person will be assigned to each project and will act as a control person who will coordinate the rescue.

If a fall occurs, it will be treated as an emergency situation. The system of rescue will be unique to each project and will use the checklist on page. In all cases, requirements are to communicate with the supervisor that a worker has fallen, to communicate with the worker whose fall has been arrested, consider the best method for rescue on your project that **rescues the worker within 15 minutes of falling**, perform First Aid assessment of worker whose fall was arrested, conduct a safety meeting with all on the project, offer the worker whose fall was arrested the choice of returning to work, supply new equipment

The proper performance of fall rescue procedures depends on two components:

1) A Powered Elevating Work Platform, extension ladder, rolling scaffold or other means of rescue with an adequate range are available on the project at all times when a worker has a risk of falling
2) The designated fall rescue person is trained in the Emergency Rescue Procedures and the proper operation of a Powered Elevating Work Platform

Choose **two** methods from Emergency Procedures Checklist - Rescue (see Checklists & Forms section) according to the project conditions.

EMERGENCY PHONE NUMBERS:

- Ambulance		911
- Fire Department		911
- Police		911
- Utilities	- Gas	
	- Hydro	
	- Water	
- Management	- Office	(416) 675-7676
	- Project Manager	
	- Safety Coordinator	
- Ministry of Labour		
- Ministry of the Environment		
	- Spills Hotline	(416) 325-3000 or (1-800-268-6060

Accident Investigation

Guidelines

Investigating incidents and accidents is a critical process that provides insight into the contributing factors and allows decisive action to reduce future risks. All incidents that result in injury or property damage or that could have resulted in serious injury or property damage (near miss) must be reported to the Ministry of Labour and thoroughly investigated. These include:

- Fatalities
- Critical injuries, defined as an injury of a serious nature that:
  - Places life in jeopardy
  - Produces unconsciousness
  - Results in substantial loss of blood
  - Involves the fracture of a leg or arm
  - Involves the amputation of a leg, arm, hand or foot
  - Consists of burns to a major portion of the body
  - Causes the loss of sight in an eye
- Fire, explosion or hazardous material release
- Lost time injuries or accident requiring medical treatment
- Occupational illnesses
- Any worker who has had their fall arrested
- Any Prescribed Incident[8]
- Property damage >$500

Roles and Responsibilities

Senior Management

- Ensure training is provided for Supervisors and Health & Safety Representatives in Accident Investigation and First Aid
- Receive and review Accident Investigation reports
- Initiate action deemed necessary as a result of the investigation
- Participate in major accident investigations as appropriate
- Provide notices or other legally required notices respecting critical injuries, accidents, incidents and handle all media relations as necessary

Supervisor

- Receive reports of accidents, injuries and incidents and encourage the reporting of these to all employees
- Ensure that the injured person has received or is receiving adequate medical aid and appropriate transportation of the injured person to medical treatment has been arranged

[8] Prescribed Incidents include: accidental electrical contact (by a worker or equipment), structural failure of falsework, failure of a principal supporting member, failure of any structural supports of a scaffold, failure of any part of an earth or water retaining structure, failure of a wall of an excavation or similar earthwork, or the overturning or structural failure of any part of a crane

- Establish control of the accident scene to ensure evidence is not removed except for the purpose of saving life, relieving suffering, maintaining an essential service or preventing unnecessary damage to equipment or property
- Ensure accident report is completed with four (4) days of accident (see Accident Report in Checklists & Forms section)
- Complete accident investigation (see Accident Investigation Report in Checklists & Forms section) with the Certified Worker Representative (if available) or Health & Safety Representative
- Distribute copies of the Accident Report and Accident Investigation to the Joint Health & Safety Committee, JHSC, (if applicable) and Senior Management
- Ensure original copies of Accident Investigation is placed in the employee‟s file
- Fulfill reporting requirements as defined in the Act

First Aid Attendant

- Assess the seriousness of the injury
- Take appropriate action for the well being of the injured person
- Only disrupt the accident scene to remove the danger of further injury

Worker

- If capable, assist in application of first aid, otherwise, immediately vacate work area and report to Supervisor any accident, injury, illness, property damage etc.
- Assist in Accident Investigation by providing accurate information concerning the circumstances, causes and future prevention of the accident
- Assist the Supervisor in investigating the accident (if the H&S representative)

F - Safe Work Procedures

Lock Out/Tag Out

Guidelines

Uncontrolled energy sources include: steam, heat, air (pneumatic) or hydraulic pressure, gravity and electricity. Electricity presents the most common energy hazard to construction projects. Electrocution continues to be a significant contributor to the total number of construction related deaths each year. On average, **one out of every five construction deaths is caused by electrocution**. In most cases, this occurs because of a failure to identify hazardous or potentially hazardous situations involving an uncontrolled electrical energy source.

On construction projects, electrical hazards can come from:

- Equipment contact with overhead powerlines or buried electrical services
- Cranes, booms, pump trucks, excavators, scaffolds, ladders and other equipment
- Electrical equipment breakdown including:
- Cut cords, damaged or dirty plugs
- Ungrounded equipment
- Improper temporary panel boards
- Unsafe procedures including:
- Electrical work being performed by unqualified[9] workers
- Knowingly using damaged or ungrounded equipment
- Not wearing proper PPE
- Not following Lock Out/Tag Out procedures

Lock Out/Tag Out procedures are designed to provide a method of controlling energy hazards through a set of safe work practices and rules. These work practices and rules must be applied to every project and every circumstance where workers can come into contact with uncontrolled energy sources.

VSC will make it their goal to ensure that procedures are designed that can apply to every project and eliminate the possibility of any worker contacting an uncontrolled energy source by implementing this Lock Out/Tag Out program.

[9] Workers must be qualified electricians or otherwise meet the standards of the Apprenticeship and Tradesmen"s Qualification Act

Roles and Responsibilities

Supervisor

- Before work begins and as the project proceeds, identify all energy sources on the project that require lock out/tag out procedures or location, marking and support if a buried electrical service
- Ensure that the lock out and tag out procedures are appropriate and are in accordance to company procedures
- Perform or arrange general and specific tagging and lock out training where required
- Provide workers with PPE, tags, individual keys, padlocks and scissors clamps (multiple hasps)
- Explain that failure to comply with lock out/tag out procedures will result in disciplinary action
- If multiple personnel are working on a system simultaneously, ensure they are equipped with independent lock out/tag out equipment (ie. no equipment sharing)
- Ensure a competent worker, with training in First Aid/CPR is available and able to see the worker who is performing the work

Worker

- Identify uncontrolled energy sources that could become hazardous and report them to the project supervisor (including buried electrical services and overhead powerlines)
- Be a qualified electrician or carry adequate qualifications to connect, maintain or modify electrical equipment or installations
- Wear proper personal protective equipment, PPE, when required
- Follow proper procedures to lockout and tag hazardous energy sources before performing work on them
- Use appropriate lock out/tag out equipment in good condition
- Prior to performing the work, determine that all energy sources have been adequately locked out and tagged
- If secure lockout of an energy source is not possible, consult with supervisor and/or project supervisor
- Check that all workers are clear of work area before re-energizing the system
- Obtain authority to re-energize any system

Confined Space Program

Guidelines

Confined spaces constitute the most hazardous work environments in construction. Procedures for work in them are an essential part of an effective Health & Safety Program.

Definition

A confined space is defined as a place:

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

All confined spaces will be treated as hazardous environments until it has been established (through testing, ventilation, personal protective equipment, and/or adequate supervision) that no threat to worker health exists.

The hazards commonly encountered are:

- Dangerous vapours, mists, dusts or fumes
- Lack of oxygen (which may cause asphyxiation)
- Ionizing radiation
- Fire and explosion
- Electric shock
- Mechanical hazards e.g., operation of process equipment while a person is in the enclosure
- Extremes of temperature and humidity or contact with hot objects

Roles and Responsibilities

Project Supervisor

- Before work begins, identify confined space locations, perform hazard assessment and identify confined space work procedures required
- Arrange for training and equipment for work in confined spaces
- Supervisors who are to certify the confined space but who do not actually perform the testing of the confined space, but rely on another person, such as a trained gas tester must:
    - Be aware of the correct procedures for the testing of the confined space
    - Ensure that the person carrying out the tests follows the correct procedures
    - Be able to interpret the results of the gas test in order to be able to certify the confined space.
- Ensure the following conditions are met:

    - Means of access and egress are provided for all workers using the space;
    - All mechanical equipment in the confined space is disconnected & locked out from its power source;
    - All pipes and supply lines, whose contents could create a hazard, are blanked off;
    - The confined space atmosphere is tested and certified to be safe
  - When testing of a confined space atmosphere is done, ensure:
    - It is performed and evaluate by a competent person[10] before a worker enters it, to determine whether it is free from hazards
    - The testing equipment is calibrated and suitable for this confined space
    - The person performing the tests certifies in writing whether the confined space may endanger a worker, and these test results are to remain on project
    - Periodic monitoring of a „safe" confined space is performed to ensure its status does not change and test results are recorded and retained
- If a hazardous environment exists arrange for purging and ventilation to create and maintain an environment that will not endanger workers
  - If this is not possible, provide a suitable breathing apparatus
- In all cases of work within a hazardous confined space, ensure all workers wear a harness that is attached to rescue equipment that will remove workers from the confined space in case of an emergency
  - Ensure a competent worker inspects all rescue equipment
  - Ensure a worker (trained in First Aid/CPR) observes any worker in the confined space (known as the **attendant**)
- Discontinue work if any unusual health effect is felt; e.g., headaches, dizziness, irritation or other ill effect or when unusual operating conditions occur

Attendant

- Ensure adequate training in the hazards of confined spaces
- Monitor and assist the workers in the confined space including:
  - Maintaining communication with the workers via an adequate communication system
  - Calling for emergency rescue using an audible alarm system
  - Providing confined space workers with fresh air packs and other personal protective equipment
- Do not enter the confined space for any reason

Worker

- Do not enter or re-enter a confined space unless testing has been performed
- Be informed of all hazards and potential hazards in the confined space, including the route of entry, signs/symptoms and long-term effects
- Know how to use or wear the equipment properly (including PPE)

[10] A competent person is: a) qualified because of knowledge, training or experience to organize the work and its performance; b) familiar with the Act and relevant regulations that apply to the work; c) knowledgeable of any potential or actual danger to health or safety in the workplace

- Report any potential confined space hazards to the project supervisor
- Participate in confined space training when required
- Report any damage or defect in the confined space entry equipment
- Maintain communications with the attendant
- Alert the attendant if:
  - You recognize a warning sign or symptom of over-exposure or dangerous condition
  - An alarm is activated
- Evacuate the confined space immediately whenever:
  - A warning system, gas monitor or evacuation alarm is activated
  - The attendant gives an evacuation order
  - A worker recognizes a warning sign or symptom of over-exposure or dangerous condition
- Given the task of monitoring a worker in a confined space, a worker will not perform any other duties, but will maintain communication and remain alert

Propane Handling

Guidelines

Care should be taken when handling all compressed gas cylinders, full or empty. They should be in good condition (without dents, rust or gouges), approved by the appropriate association, and less than 10 years old or re-certified. All employees working with compressed gas must be trained in its proper use, including proper use of protective equipment and the correct storage, handling and transportation.

Compressed gases on a project can present several safety hazards:

- A falling cylinder may cause injury
- Accidental removal of a valve may cause the cylinder to become a dangerous projectile
- Damaged or faulty valves may cause a release of hazardous gas
- Elevated temperatures (ie. fire) may cause the sudden release of hazardous gas
- Frostbite hazards from extremely cold liquids
- Toxic and corrosive gases can cause irreversible respiratory irritation that can be fatal
- Pure oxygen or other oxidizers can present serious fire or explosion hazards
- Gases that are more dense than air (ie. propane) will collect in trenches or other holes
- Some compressed gases represent explosion and flammable hazards in the presence of an ignition source

Procedures for Storage, Handling and Transportation of Compressed Gases

Storage of compressed gas cylinders

- Cylinders of compressed gas which are not in service shall have the valves closed and be equipped with valve caps and shall be stored in an areas where the ambient temperature does not exceed 52°C
- Cylinders not in use shall be stored only in designated storage areas
- Cylinders shall be stored in secure places and not in any means of egress such as aisles, hallways, doorways, stairwells, or exits
- Cylinders of gases that may react with one another shall not be stored adjacent to one another (eg. oxygen and hydrogen)

Handling and use of compressed gas cylinders

- Acetylene cylinders shall be kept in an upright position
- Propane cylinders shall be stored and/or installed such that the pressure relief valve is not in the liquid phase inside the cylinder
- All cylinders shall be protected from mechanical damage and shall be secured by a restraining strap or chain while in service

- Three (3) propane cylinders maximum (ie. manifolded together) shall be used on any one floor of a building unless 50 ft. apart
- Toxic and corrosive gases shall be used only in a continuously ventilated enclosure
- Compressed gas cylinders shall only be used with a pressure reduction regulator attached to the valve. The regulator shall be appropriate for the gas and will not be used as a shut-off valve.
- When connecting equipment to a compressed gas cylinder, all connections should be checked for leaks (ie. using soap and water solution for propane)
- Leaking, expired or faulty equipment shall be returned to the manufacturer or rental company for repair
- Cylinders shall be positioned so that the cylinder valve is accessible at all times
- Proper personal protective equipment must be worn at all times when working with compressed gases
- Personnel working with compressed gases shall be trained in all relevant subjects (WHMIS, Construction Heater Operator CH-02, Roofing Equipment Operator RE-0 etc.)

Transportation of compressed gas cylinders

- Cylinders shall be moved or transported using cylinder carts and shall be restrained by chains or straps
- Protective valve covers shall be in place when cylinders are transported
- Appropriate TDG procedures and labeling will be used for delivery and removal of compressed cylinders from a project

Housekeeping

Guidelines

Proper housekeeping procedures are essential to an effective Health & Safety Program. A successful H&S program is proven to reduce or prevent accidents, injuries and illnesses and ultimately, save lives. Consistent with company policy, VSC will not tolerate an untidy project. It is the responsibility of subcontractors to clean their area of work daily, or as often as necessary to maintain a clean standard. When subcontractors‟ waste and debris create a hazard and are not cleaned up in a reasonable time, it will be cleaned up by VSC at the expense of the subcontractor. No warnings need to be given before such action.

A project that does not emphasize good housekeeping practices is susceptible to workplace injuries. The following procedures and practices must be undertaken at every VSC project.

Housekeeping Responsibilities

Project Supervisor

- Arrange for work areas to be cleaned up at least daily, and for debris to be removed to project containers
- Plan for, and provide adequate access routes, waste storage locations, garbage chutes, and temporary lighting, where applicable
- Review housekeeping problems and requirements in safety meetings with all workers
- Ensure that all waste and debris that might create a hazard is cleaned up and/or secured
    - When subcontractors‟ waste and debris create a hazard and are not cleaned up in a reasonable time, they will be cleaned up by VSC at the expense of the subcontractor

Health & Safety Representative

- Conduct regular inspections (as required) to monitor housekeeping and to identify related hazards
- Review housekeeping problems and requirements in safety meetings with all workers
- Report housekeeping related hazards to the project supervisor

Worker

- Perform daily clean up of work area
- Store materials safely and in an organized fashion
- Dispose of debris in refuse containers provided
- Bring housekeeping related hazards to the attention of the H&S representative, project supervisor and other workers on the project

Housekeeping Procedures

General

- Daily cleanup of all work areas, disposal of debris provided by VSC
- Visually inspect work areas at the beginning and end of each shift
- Regular remove of debris, material and garbage from project garbage bins
- Stacked/piled material must be well clear of walkways and exits
- All walkways, stairways, passageways and gangways must be clear of materials, tools, cords, garbage etc. at all times
- Signs must be posted on and around hazardous debris (i.e. asbestos)
- Avoid storing materials near overhead power lines
- All work areas must have proper lighting and adequate ventilation
- Ensure all materials stored on a roof or in open spaces are secured to prevent blowing debris
- Remove all trip hazards (cords, tools, materials) from the project
- Remove all nails and protruding items from material before handling
- Avoid throwing or passing material or debris from one level of a project to another – lower using a chute or other approved devices
- Never lower or raise any tool or equipment by its own cord or supply hose
- When guardrails must be temporarily removed, fall arrest equipment must be worn and the area must be roped off with warning signs

Storage

Flammable Materials

- Use copper grounding straps to reduce static electricity build up
- Store fuels in containers approved and stamped by the Canadian Standards Association (CSA) or Underwriters‟ Laboratory of Canada (ULC)
- Ensure electric fixtures and switches are explosion-proof where flammable materials are stored

Hazardous Chemicals

- Refer to Material Safety Data Sheets (MSDS) for specific safety and storage information on each controlled substance
- Follow manufacturer‟s recommendations for storage
- Comply with all restrictions concerning environmental factors and minimum distance requirements
- Post legible warning signs where required
- Provide suitable equipment for prompt spills response where required
- Store empty containers in a secure location, apart from full containers

Compressed Gas Cylinders

- Store and transfer cylinders in a secure, upright position
- Store cylinders in a secure area outside
- Keep full cylinders apart from empty cylinders
- Maintain adequate distance between cylinders and heat sources

Workplace Hazardous Materials Information System, WHMIS

Guidelines

WHMIS is a national system of information sharing that passes on details of hazardous materials from the supplier to the employer to the worker. The three (3) main elements of WHMIS are: labels, education and MSDS. Labels include both supplier and workplace varieties. Specific information must be included on each to ensure adequate disclosure of the hazards involved in using a product. Education involves the training of all those who may come in contact with WHMIS controlled products. The training should permit participants to identify relevant components of labelling system see (WHMIS Classes & Symbols in Checklists & Forms section), locate and use an MSDS, and understand the hazards involved in using the products.

WHMIS Responsibilities

Employer

- Ensure all workers have been trained in WHMIS
- Ensure annual WHMIS retraining is performed
- Ensure that copies of MSDSs are made readily available at a project
- Provide additional prescribed information on any controlled product

Supervisor

- Ensure all workers likely to be exposed to hazardous materials have been trained in the specific hazardous materials, the hazards and the appropriate procedures
- Ensure every worker has been trained in and understands WHMIS
- Provide project orientation to all workers, identifying specific project hazardous materials identified and verification of current WHMIS training
- Ensure all hazardous materials that are used on a project are properly labelled
- Ensure MSDSs are received prior to a hazardous material being used on a project
- Ensure MSDSs are less than 3 years old
- Organize all MSDS for project hazardous materials in project trailer
- Ensure proper storage, handling and disposal procedures are followed by all workers using hazardous materials

Worker

- Report any hazardous materials without labels to immediate supervisor
- Apply workplace labels to any hazardous materials transferred into smaller containers
- Ensure proof of training is available at all times

Personal Protective Equipment

Guidelines

Despite being the last resort of protection from hazards on construction projects, personal

protective equipment (PPE) can be of vital importance. It is VSC policy to control hazards on a project using engineering, administration or behavioural measures. Most hazards that exist on construction projects require the use of PPE to limit exposure. In many cases, PPE is to be used as a backup system to controls that limit exposure at the source rather than at the worker.

A successful H&S program is proven to reduce or prevent accidents, injuries and illnesses and ultimately, save lives. Consistent with company policy, VSC will endeavour to ensure that appropriate engineering and administrative controls as well as proper PPE are available on each project. Further, project personnel will ensure that all controls and PPE are properly used

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

Personal Protective Equipment Responsibilities

Project Supervisor

- Ensure the PPE is used properly whenever necessary by all workers on a project
- Ensure PPE is provided for use by workers whenever necessary
- Familiarize project personnel with all hazards to which they may not be aware
- Review PPE compliance problems and requirements in safety meetings with all workers

Health & Safety Representative

- Report PPE related hazards to the project supervisor
- Monitor the compliance of contractors' personnel to the VSC PPE policy

Worker

- Participate in PPE training when applicable (ie. respirators, hearing)
- Be informed of all hazards and potential hazards on a project
- Bring all hazards to the attention of the H&S representative, project supervisor and other workers on the project
- Remove or make ineffective any protective device required by the regulations or by his employer

Radiation Controls

Guidelines

There are two main sources of workplace exposure to radiation for workers in construction: ionizing (microwave and radio-frequency) and non-ionizing (ultraviolet). Ultraviolet (UV) radiation is a form of ionizing electromagnetic radiation, like radio waves, x-rays and light. Sources of UV radiation in construction that can become excessive include various kinds of welding arcs and exposure the sun. Although exposure to small amounts of UV radiation can have beneficial effects, overexposure can cause serious health effects: Sunburn, Welders' flash,

Skin Cancer, Photoaging (premature aging of the skin), and Senile Cataracts (a clouding of the lens of the eye). Radio-frequency radiation is a form of non-ionizing radiation produced by devices such as radio and TV transmitters, induction heaters, and dielectric heaters. Microwave radiation is produced by microwave ovens, parabolic (dish) antennas, and radar devices. Health hazards result from heating of body tissues as the body absorbs energy. Prolonged exposure to strong RF/MW fields may increase the body temperature, producing symptoms similar to those of physical activity. In extreme cases, or when exposed to other sources of heat at the same time, the body's cooling system may be unable to cope with the heat load, leading to heat exhaustion and heat stroke.

Radiation procedures

Recognize	• Project supervisors are to recognize potential hazards associated with exposure radiation on a project • Workers are to report any possible source of radiation to their supervisor(s)
Assess	• If exposure to radiation may approach hazardous levels, monitoring may be required • Measurements of radiation exposure, as well as the determinations of exposure levels, allowable exposure times and compliance with the guidelines, must be carried out by a qualified person with appropriate equipment • Results of exposure measurement will be made available to all workers on a project

Control	• Consider guarding or shielding the sources of radiation
	• Where possible, limit exposure times and increase the distance between workers and the radiation sources
	• Measurements are required to determine safe working distances and exposure times.
	• Areas where exposure to UV radiation is possible should have appropriate warning signs.
	• Workers are to use appropriate personal protective equipment where potential exposure to radiation exists including:
	  o UV-blocking safety eyewear (goggles, spectacles, face shields, welding shields, etc.) with side-shields where applicable
	  o long-sleeved, closely-woven clothing that covers as much of the body as practicable
	  o sun-screen with a sun-protection factor (SPF) of 15 or higher
	• Project supervisors are to supply equipment to workers for the purpose of their protection
	• Overexposure to sources of radiation should be treated as a first aid injury

Tool and Vehicle Safety & Maintenance

A. All cord-connected electrical tools or equipment shall use either 3-prong (grounded) electrical cords or else be double-insulated (approved by CSA certification).

B. In outdoor or wet locations, all electrical tools will be protected by a ground fault circuit interrupter installed at the receptacle or on the circuit at the panel.

C. A copy of the manufacturer's operating manual for any vehicle, tool, machine or equipment used on a project will be kept on the project, with a copy sent to the Safety Coordinator at VSC Head Office.

D. A vehicle, tool, machine, or equipment shall be inspected by a competent worker before it is first used on a project. A written report of these results of this inspection will be kept on file at the project (see attached chart to be filled out at time of inspection).

E. A vehicle, tool, machine, or equipment shall be subsequently inspected by a competent worker on at least a monthly basis or more frequently as required, or more often as indicated in the manufacturer's operating manual. A written report of the results of this inspection will be kept on file at the project (see attached chart to be filled out at time of inspection).

PROJECT _____ **DATE** _____

VEHICLE
(TYPE, MAKE, MODEL) _____ **SERIAL NO.**_____

	OK (Yes / No)	COMMENTS
WHEELS (eg. worn, properly inflated)		
SEATBELT, ROLL-OVER PROTECTIVE STRUCTURE		
VEHICLE CONTROLS (general condition)		
BOOM, SHOVEL, BUCKET (general condition)		
EXHAUST SYSTEM		
MOVING PARTS (eg. properly lubricated, cracked, worn)		
ENGINE		
OTHER		

CHECKED BY _____

IF ANYTHING IS WRONG AS NOTED ON THE ABOVE CHECKLIST, THE VEHICLE MUST NOT BE USED, AND IT MUST BE REPAIRED/REPLACED AS SOON AS POSSIBLE.

TOOL OR EQUIPMENT **SERIAL NO.**_____

(MAKE & MODEL) _____

	OK (Yes / No)	**COMMENTS**
HANDLE (eg. cracked, bent, broken)		
CORDS (eg. tears, breaks, worn spots)		
GROUNDED (3 prongs) or DOUBLE-INSULATED		
MOVING PARTS (eg. properly lubricated, cracked, worn		
BLADES, DRILL BITS, HAMMER HEADS (general condition)		
SAFETY CATCHES / PROTECTION /SHIELDS (eg. in place? general condition?)		
OTHER		

CHECKED BY _____

IF ANYTHING IS WRONG AS NOTED ON THE ABOVE CHECKLIST, THE TOOL OR EQUIPMENT MUST NOT BE USED, AND IT MUST BE REPAIRED/REPLACED AS SOON AS POSSIBLE.

Guidelines

Lighting levels should suit the type of work being performed. Every worker should have a clear and unobstructed view of his or her work area. No one should be forced to bend and peer to compensate for poor lighting. Poor lighting has been a contributing factor in many workplace injuries and is one of the easiest hazards to correct.

Adequate lighting should be available for all workers in temporary and permanent work situations alike. Lighting must be adequately guarded to reduce the risk of exposure to uncontrolled energy hazards (ie. cages protecting bare light bulbs from damage)

According to the Illuminating Engineering Society of America (IES), general construction should be performed with approximately 100 Lux or 10 Footcandles of light. The performance of excavation work requires 20 Lux or 2 Footcandles of light.

Roles & Responsibilities

Worker

- Report all project conditions involving insufficient light or broken/defective light sources

Supervisor

- Ensure adequate lighting (minimum of 100 Lux for general construction) is provided in all areas of the project, including points of access/egress
- Ensure regular inspection and maintenance of project lighting
- Ensure temporary lighting is enclosed by a mechanical protection device (ie. light bulb cage)
- Ensure adequate lighting conditions exist when project conditions change

Employer

- Provide resources to allow for adequate lighting on construction projects

Forklift Procedures

Guidelines

Forklifts have been involved in a large proportion of critical injuries and fatalities in Ontario workplaces, including construction. Contributing factors include the prevalence of forklifts and environmental conditions, but primarily causes relate to training, testing and certification of operators and the absence forklift safety programs.

The Ministry of Labour (MOL) published the *Guideline for the Safe Operation and Maintenance of Powered Lift Trucks* which outlines "the main elements to be included in an effective powered lift truck safety program" and "the knowledge and skills required by a worker in order to be a "competent" operator of a powered lift truck" (from Guideline for the Safe Operation and Maintenance of Powered Lift Trucks, 1999)

All contractors operating forklifts on construction projects are expected to adhere to the general duties of the OHSA and construction regulations relating to equipment as well as the MOL guideline.

Roles & Responsibilities

Project Supervisor

- Evaluate the type of equipment that will be used, the tasks to be done and the workplace environment (ie. soil conditions, slopes, proximity to other work)
- Prepare a hazard assessment referring to all the potential hazards
- Educate workers about the potential hazards in their work
- Review the hazard assessment, and if there is a significant change in how the work is carried out, and make changes to the written report as necessary
- Ensure that all forklift equipment is in good condition properly maintained
- Ensure forklift operators are competent workers, trained in the fundamentals of forklifts, how environmental conditions can affect performance, basic forklift operating skills, and the rules and practices for safe lift-truck operation
- Ensure that all supervisors and workers who work around lift trucks have been informed of the hazards, instructed in the rules and procedures to avoid harm, and know where the written rules and procedures are located
- Ensure forklift operators follow standard operating procedures (refer to Guidelines for the Safe Operation and Maintenance of Powered Lift Trucks)
- Evaluate contractor Forklift Safety Program, elements should include:
    - Workplace hazards – how to identify them
    - Training, testing and certification – proof of training and competency
    - Maintenance program – preventative maintenance, testing and records
    - Capacity and limitations – describing the rated capacity and limitations for use
    - Operating procedures – defined and management systems for safety
    - Environment – rules for where equipment is permitted/not permitted

Contractor

- Ensure that all forklift equipment is in good condition properly maintained
- Ensure forklift operators are competent workers, trained in the fundamentals of forklifts, how environmental conditions can affect performance, basic forklift operating skills, and the rules and practices for safe lift-truck operation
- Ensure that all supervisors and workers who work around lift trucks have been informed of the hazards, instructed in the rules and procedures to avoid harm, and know where the written rules and procedures are located
- Ensure forklift operators follow standard operating procedures (refer to Guidelines for the Safe Operation and Maintenance of Powered Lift Trucks)
- Establish a Forklift Safety Program, including these elements:
    - Workplace hazards – how to identify them
    - Training, testing and certification – proof of training and competency
    - Maintenance program – preventative maintenance, testing and records
    - Capacity and limitations – describing the rated capacity and limitations for use
    - Operating procedures – defined and management systems for safety
    - Environment – rules for where equipment is permitted/not permitted

Worker

- Operate forklift equipment only with appropriate training and certification
- Operate forklift equipment according to the regulations, standards and guidelines
- Report the malfunction of any equipment

Ladder Safety

Guidelines

Falls from ladders occur throughout construction and pose one of the most serious safety problems in construction. Most often, ladder accidents happen because:

- Ladders are not secured
- Slipping due to poor footing on rungs
- Failing to grip ladder adequately when ascending/descending
- Taking unsafe positions (ie. leaning out too far)
- Placing ladders on poor footing or at improper angles
- Ladders are defective
- High winds topple ladders
- Careless handing near electrical lines
- Ladder stabilizers are not used
- Ladders are used when workers should use more suitable access equipment

In order to reduce the risk of ladder accidents, this policy includes information on the types of ladders to be used, the methods for use, and requirements for inspection and maintenance.

Roles and Responsibilities

Supervisor/foreman

- Train workers to maintain and use ladders properly
- Evaluate the access requirements of elevated work areas
- Choose the best means of access for the work
- Ensure ladders are used appropriately for the purpose
- Ensure ladders are being inspected and requirements are followed
- Ensure defective ladders that have been removed are tagged for repair or discarded
- Complete ladder safety checklist in Checklists & Forms section

Workers

- Evaluate their requirements for safe access to work areas and consult with supervisor
- Use independent fall arrest system when work is being done from a ladder >3m high
- Maintain 3-point contact when climbing or working from a ladder
- Remove defective ladders from service
- Follow requirements as indicated by supervisor/foreman or ladder safety checklist in Checklists & Forms section

Electrical Safety

Electricity presents the most common energy hazard to construction projects. Electrocution continues to be a significant contributor to the total number of construction related deaths each year. On average, **one out of every five construction deaths is caused by electrocution**. In most cases, this occurs because of a failure to identify hazardous or potentially hazardous situations involving an uncontrolled electrical energy source.

On construction projects, electrical hazards can come from:

- Equipment contact with overhead powerlines or buried electrical services
  - Cranes, booms, pump trucks, excavators, scaffolds, ladders and other equipment
- Electrical equipment breakdown including:
  - Cut cords, damaged or dirty plugs
  - Ungrounded equipment
  - Improper temporary panel boards
- Unsafe procedures including:
  - Electrical work being performed by unqualified[11] workers
  - Knowingly using damaged or ungrounded equipment
  - Not wearing proper PPE
  - ***Not following Lock Out/Tag Out procedures***

Lock Out/Tag Out and Operations near Powerline procedures are designed to provide a method of controlling energy hazards through a set of safe work practices and rules. These work practices and rules must be applied to every project and every circumstance where workers can come into contact with uncontrolled energy sources.

Roles and Responsibilities

Employer

- Develop written procedures to prevent contact with overhead powerlines (see checklist in appendix)
- Develop written lockout/tag out procedures to ensure workers are protected from hazards associated with uncontrolled energy sources (see checklist in appendix)

Supervisor

- Before work begins and as the project proceeds, identify all energy sources on the project that require lock out/tag out procedures, operations near powerline procedures or location, marking and support if a buried electrical service
- Ensure that all corded equipment is polarized or double insulated and is plugged into a GFCI (Class A) if it is used outdoors on in wet location

[11] Workers must be qualified electricians or otherwise meet the standards of the Apprenticeship and Tradesmen"s Qualification Act

- Ensure that electrical contractor has formal lock out and tag out procedures that are appropriate and are in accordance with electrical requirements
- Ensure electrical workers use PPE, and appropriate equipment (ie. tags, individual keys, padlocks and multiple hasps)
- Ensure anyone who is connecting, maintaining or modifying electrical equipment or installations is a certified electrician or is being supervised as an apprentice according to the Trades Qualification and Apprenticeship Act **and** can provide proof of certification
- Explain that failure to comply with lock out/tag out procedures will result in disciplinary action
- If multiple personnel are working on a system simultaneously, ensure they are equipped with independent lock out/tag out equipment (ie. no equipment sharing)
- Ensure equipment operator is competent and is aware of overhead powerline hazards that may impact the work
- Ensure a competent worker, with training in First Aid/CPR is available and able to see the worker who is performing the work
- Ensure Lockout/Tag Out Permit and Procedures checklist in Forms & Checklist section is completed

Worker (Operator)

- Report the presence of uncontrolled or hazardous energy sources to the project supervisor (including buried electrical services and overhead powerlines)
- Perform pre-operation meeting to discuss potential electrical hazards including contact with overhead powerlines
- Follow Operations near powerlines procedures in Forms & Checklists section

G - Checklists & Forms

Discipline Report

2nd Violation ☐ 3rd Violation/Removal ☐ Company Violation[12] ☐

1st violation is verbal, but is to be documented by supervisor

Name:	Position:
Employer:	Date:
Foreman:	Time:
Witness:	Project:
Completed by:	Incident Location:

Violation Categories:

- ☐ Violations against company policy or OHS regulations
- ☐ Drug/alcohol abuse
- ☐ Fraud or misrepresentation of certification
- ☐ Theft
- ☐ Other _____
- ☐ Deliberate property damage
- ☐ Absenteeism without justification
- ☐ Reckless or negligent behaviour
- ☐ Violent or abusive conduct
- ☐ Lying
- ☐ Insubordination

Violation Description:

*Attach photos or sketches of violation

Recommended Corrective Action:

Project Supervisor"s Signature	H&S Representative Signature

GIVE COPIES TO: WORKER; HIS EMPLOYER; PROJECT; HEAD OFFICE

[12] If the violation is performed by multiple people from the same company or is a violation related to the performance of the entire company, then this checkbox should be selected and follow up should be directed to management of the company committing the violation

Discharge Letter

As a result of continued H&S violations or actions that could have severe consequences and in accordance with the discipline policy explained during orientation, your employment has been terminated. This action has been taken to protect the safety of all people on the project and is not intended as punishment.

Previous discipline reports were completed on: _____ and _____. When these reports were distributed, the consequences of your actions were explained, as were the penalties of repeated violations and recommendations for corrective action.

Copies of the discipline reports were given to you, your employer, the constructor and the project supervisor, to ensure complete and open communication.

Discipline Sequence:

Stage	**Violation Category** (from discipline report)	**Date**
Worker Start Date		
1st Violation / verbal warning		
2nd Violation / second warning		
3rd Violation / removal		

Sincerely,

_____
Project Supervisor

Inspection Procedures Checklist

Project	**Project Location**
Supervisor/Foreman	**Date**

Place checkmark if performed or acceptable; X if not performed or unacceptable; ~~strike out~~ item if not applicable

	REQUIREMENTS	**DESCRIPTION**
☐	Elect a H&S representative	If there are >5 workers, a H&S rep is to be elected The name of the H&S rep is to be posted in the project office
☐	Elect a Joint Health & Safety Committee, JHSC	If there are >19 workers and the project duration is >3 months, 1 representative from labour and 1 from management must be elected If there are >50 workers and the project duration is >3 months, 2 representatives from labour and 2 from management must be elected
☐	Perform project safety inspections	All project should have: • Daily informal project inspections by supervisors • Weekly formal project inspections by supervisors • Bi-weekly project inspections by H&S representatives
☐	Use checklist to record inspection results and recommendations	Record any hazardous situation or potentially dangerous practice on a project safety inspection checklist along with recommendations for improvement and a compliance date
☐	Endorse the inspection results	The H&S representative and/or project supervisor will endorse the inspection results and recommendations with a signature
☐	Distribute and post inspection checklists	Copies of project safety inspection checklists will be distributed to the project and to senior management
☐	Ensure follow up occurs	Follow-up to written recommendations, initiated by the project supervisor, is to be immediate, but must be implemented in a maximum of 21 days
☐	Hold project health & safety meetings	Monthly project safety meetings will be held involving members of each trade on the project, the H&S representative and the project supervisor
☐	Record, distribute and post recommendations form H&S meetings	Pass on recommendations from meetings to the project supervisor Post and make available all minutes, checklists, notices and inspections
☐	Accompany MOL inspectors during their inspections	At least one management representative must be available to accompany MOL inspectors
☐	Post MOL inspection results	Post MOL reports on H&S board

NOTE: Use this checklist to ensure inspection procedures are being followed**;**
Copied to: Project & Head Office

Hazard/Incident Report - Sample

Name:
John Smith

Date:
December 14, 2004

Project:

Location on project:
SW Corner

Hazard/Incident Type:
Near Miss – Falling Material

Equipment involved:
Masonry debris

Incident Report	Hazard Report	Written Warning	Dismissal
☐	☐	☐	☐

Description of Hazard/Incident – **who** was involved, **what** happened, **when** did it happen, was there any damage, **why** did it happen (use separate sheet if required)

At 9:45am Dec. 14/04, a masonry labourer was walking under masonry scaffold when one of his co-workers swept broken blocks and debris off the 4th section of scaffold while trying to clean up the work area. The debris narrowly missed the labourer. No injuries or damage occurred.

Suggested corrective action:

1 Debris is not to be dropped from a height unless the area is fenced off from traffic

2 Signs should be installed to restrict access due to struck-by hazard from falling debris

3 Masons should ensure that toe boards are in place to stop material from falling accidentally

Name of Report Author:
John Smith

Signature of Report Author:
John Smith

Supervisor"s remarks:

I agree with the corrective action suggested above. A copy of this hazard/incident report has been forwarded as a written warning to Block Masonry Inc."s foreman and head office.

Corrective action taken:

- Written warning given and discussion with Block Masonry foreman
- Provided warning signs to be installed on fence

Signature of Supervisor:
Mike Jones

Date:
December 15, 2004

Project – Copy **Contractor – Copy** **Employer – Copy** **AEC – Copy**

Hazard/Incident Report

Name: Date:

Project: Location on project:

Hazard/Incident Type: Equipment involved:

Incident Report	Hazard Report	Written Warning	Dismissal
☐	☐	☐	☐

Description of Hazard/Incident – **who** was involved, **what** happened, **when** did it happen, was there any damage, **why** did it happen (use separate sheet if required)

Suggested corrective action:

1

2

3

Name of Report Author: Signature of Report Author:

Supervisor"s remarks:

Corrective action taken:

Signature of Supervisor: Date:

Project – Copy **Contractor – Copy** **Employer – Copy** **AEC – Copy**

Hazard Analysis - Sample

Project	**Contractor Name**
Supervisor	**Date**

Job Performed	Task Steps	Potential Hazards	Risk Level	Controls	Follow up
Flooring installation	Remove floor tiles	Impact from chipper	Low	Rotate workers Use low impact hammer	Foreman Supervisor
	Pour epoxy on floor	Chemical exposure	Med	Use different product Increase ventilation Use NIOSH approved respirator	Supervisor
	Smooth surface	Chemical exposure Work at floor level	High	Use different product Increase ventilation Use NIOSH approved respirator	Supervisor

Hazard Analysis

Project	Contractor Name
Supervisor	Date

Job Performed	Task Steps	Potential Hazards	Risk Level	Controls	Follow up

Chemical Safety Procedures Checklist

☑	Step	Action	Description

☐	1	Before work begins, identify and evaluate chemical hazards for all phases of work	❑ Identify products containing chemicals to be used on the project ❑ Ensure all hazardous products have labels ❑ Identify products containing hazardous components using MSDS ❑ Identify potential exposure risks ❑ Consider locations and applications for product use
☐	2	Use controls to limit worker exposure to hazards	❑ Substitution – substitute product posing hazard with less hazardous or benign product ❑ Isolation/enclosure – isolate or enclose hazardous chemical ❑ Ventilation – increase general ventilation to dilute hazard concentration or increase local exhaust ventilation to remove the hazard ❑ Personal hygiene practices – provide clean-up facilities ❑ Administrative controls – rotate workers to limit exposure ❑ Personal protective equipment – appropriate to the hazard, used appropriately, tested prior to use and monitored for effectiveness
☐	3	Educate all workers on potential exposure to chemical hazards	❑ List all products containing hazardous chemicals to be used on the project, where they will be used, who will use them and how they will be used ❑ Outline symptoms of exposure to specific hazardous chemicals ❑ Ensure all workers are to report potential hazards to their supervisor
☐	4	Ensure products containing hazardous chemicals are properly stored	❑ Follow storage requirements from MSDS and regulations ❑ Ensure storage is away from public areas and high traffic zones
☐	5	Ensure proper housekeeping practices are performed	❑ Spills or releases are to be reported and cleaned by authorities ❑ Emergency access routes must be maintained ❑ Daily housekeeping must be performed ❑ Hazardous waste will be properly stored, labeled and disposed
☐	6	Ensure exposure monitoring is performed	Perform exposure monitoring if environment is: ❑ Explosive ❑ Oxygen-enriched ❑ Oxygen-deficient ❑ Toxic
☐	7	Perform continuous exposure monitoring as required	❑ When hazardous chemical exposure continues ❑ When source of hazard is unknown ❑ If any chance of exposure risk to project personnel exists
☐	8	Ensure exposure monitoring is performed appropriately	❑ Exposure monitoring equipment must be used by a competent worker in accordance with manufacturer"s instructions ❑ Ensure testing results are documented at fixed intervals throughout the workday including, readings taken prior to workers entering an area of hazardous ❑ These test results are to be kept on the project
☐	9	Evacuate all workers if hazardous environment exists	If continuous monitoring suggests a hazardous environment or workers exhibit symptoms of overexposure ❑ Remove all workers from the area ❑ Shut down equipment ❑ Alert emergency response personnel Spills Hotline 1-800-268-6060 and EMS (911) if hazardous environment is from a spill ❑ Follow evacuation procedures (see Emergency Response)

Emergency Procedures Checklist – First Aid/Major Accident

Project	Project Location	Accident Location
Supervisor	Date	Time

☑	Step	Action	Description
☐	1	Assess the situation and take command	Remain calm and assess the severity of the situation – take control of yourself and others
☐	2	Provide first aid	The designated first aid/CPR control person delivers appropriate first aid
☐	3	Call the appropriate Emergency Medical Service, or EMS	The first aid/CPR control person chooses someone to call 9-1-1 (if applicable), provide injury circumstances, and project location This person must report back to control person when finished
☐	3	Notify project supervisor of injury	Contact project supervisor and inform him of the injury and the status of the emergency response (ie. "EMS on their way" etc.)
☐	4	Wait with injured worker for EMS to arrive	Continue to deliver first aid/CPR to injured worker
☐	5	Call senior management at: **(416) 675-7676**	Project supervisor should contact the constructor"s senior management and describe status
☐	6	Call Ministry of Labour and local Union office (if applicable)	Project supervisor or foreman must contact the nearest office of the MOL and describe the current situation
☐	7	Send management representative to hospital	A representative from management is sent to the hospital to determine the injured worker"s condition
☐	8	Do not disturb the accident scene	Secure the immediate area of the accident scene to preserve the details of the accident If a hazard still exists, restrict all access
☐	9	Tour project with MOL inspector	Provide insight into the circumstances of the accident Provide all accident reports or other documentation available
☐	10	Interview witnesses	Determine who was in the vicinity and who witnessed the accident – record names, addresses and phone numbers Obtain signed statements from witnesses
☐	11	Complete accident report, investigation report and required WSIB forms	Complete detailed accident and investigation reports including witness statements, photos/sketches, and contributing project conditions
☐	12	Assess the situation and take command	Remain calm and assess the severity of the situation – take control of yourself and others

Emergency Procedures Checklist – Fire

Project	Project Location	Fire Location
Supervisor	Date	Time

☑	Step	Action	Description
☐	1	Evaluate severity of fire	The first to discover the fire must evaluate the danger posed to himself and all other workers
☐	2	Notify the Response Team and attempt to extinguish fire if possible	If small enough and controllable[13], allow trained employees attempt to extinguish the fire with available extinguishers
☐	3	If too large, call for help and/or request the help of the Fire Department	The control person chooses someone to call 9-1-1 (if applicable), provide fire location, all chemicals on the project and the project location This person must report back to control person when finished
☐	4	Alert others in work area of dangers	Inform all other workers of potential dangers and encourage them to follow evacuation procedures
☐	5	Notify project supervisor of fire	Contact project supervisor and inform him of the fire and the status of the emergency response (ie. "EMS on their way" etc.)
☐	6	Call senior management	Project supervisor should contact the constructor"s senior management and describe status
☐	7	Call Ministry of Labour	Project supervisor or foreman must contact the nearest office of the MOL and describe the current situation
☐	8	Make MSDS available	Provide MSDS of all chemicals and substances on the project for fire department
☐	9	Ensure evacuation procedures are executed	Meet in designated area for head-count and assessment of all employees
☐	10	Assist in First Aid	Secure the immediate area of the accident scene to preserve the details of the accident If a hazard still exists, restrict all access
☐	11	Complete investigation of causes and results	Carry out accident and investigation reports as well as WSIB forms

[13] If the content of two, 50 lb. fire extinguishers does not extinguish a fire immediately, call the Fire Department

Emergency Procedures – Fall Rescue Plan

Project	Project Location	Fall Location
Supervisor	Date	Fall Rescue Person

☑	#	Requirement	Description	
☐	1	Ensure emergency requirements are available	☐ Emergency phone numbers ☐ Company contact information ☐ Project address and directions posted ☐ Location on the project ☐ Clear emergency access route for fire truck or other emergency services ☐ Qualified First Aid responder	
☐	2	Do not work alone	☐ Workers work in pairs ☐ Workers using fall arrest equipment have a mode of communications	
☐	3	Choose rescue method to be used for a fallen worker on this project[14]	☐ Obtain Powered Elevating Work Platform (scissor lift, zoom boom, man lift etc.) – raise it slowly until the worker is on or inside the work platform, then lower it to the ground ☐ Obtain extension ladder – place it near fallen worker – secure it at top and bottom – instruct worker to climb up/down ladder ☐ Pull fallen worker back up to level from which they fell or in through an opening or window ☐ Obtain rolling scaffold at or close to level of fallen worker – move scaffold to a position where the fallen worker can step onto it ☐ Use a method of hoisting from overhead or a method of descent that allows the fallen worker to be secured during rescue ☐ If the worker is injured, unconscious or if no other method can be used the emergency services (police/fire departments) are to be contacted, and informed of the situation and asked to respond ☐ Other_____	
☐	4	Ensure rescue equipment is available	☐ Ladder ☐ Rolling scaffold ☐ Suspended access equipment ☐ Ropes	☐ Aerial ladder truck ☐ Boom truck or scissor lift ☐ Climbing/rappelling equipment ☐ First aid kit
☐	5	Protect accident scene and public	☐ Assign someone to direct traffic ☐ Set up barriers ☐ Prevent further injury or damage	☐ Set up barriers ☐ Preserve wreckage ☐ Aid investigation later
☐	6	Other considerations	☐ Working alone ☐ Language barrier ☐ Unusual features of building/structure ☐ Wind	☐ Other hazards ☐ No 911 in area ☐ No emergency services nearby ☐ Out of reach for high rescue teams

[14] This must be completed by the general contractor/constructor prior to a fall occurring. Also, never place another worker at risk of falling when attempting rescue a fallen worker

Emergency Procedures Checklist – Fall Rescue

Project			Project Location	Fall Location
Supervisor			Date	Time
☑	**Step**	**Action**	**Description**	
☐	1	Communicate with the supervisor that a worker has fallen	Employees at the project are to convey to the supervisor the circumstances surrounding the worker falling	
☐	2	Communicate with the worker whose fall has been arrested	Find out if he is injured. Tell him that help is coming. The designated fall rescue person initiates one of the rescue methods. If the worker is unconscious, call 9-1-1.	
☐	3	Use the best method for rescue on your project[15]	☐ Obtain Powered Elevating Work Platform (scissor lift, zoom boom, man lift etc.) – raise it slowly until the worker is on or inside the work platform, then lower it to the ground ☐ Obtain extension ladder – place it near fallen worker – secure it at top and bottom – instruct worker to climb up/down ladder ☐ Pull fallen worker back up to level from which they fell or in through an opening ☐ Obtain rolling scaffold at or close to level of fallen worker – move scaffold to a position where the fallen worker can step onto it ☐ If the worker is unconscious or if no other method can be used the emergency services (police/fire departments) are to be contacted, and informed of the situation and asked to respond	
☐	4	Perform First Aid assessment of worker whose fall was arrested	Designated First Aid person surveys the worker to ensure no injuries resulted from the fall	
☐	5	Conduct a safety meeting with all on the project	Project supervisor convenes safety meeting to determine the cause of the fall and approaches for prevention of future reoccurrences	
☐	6	Offer the worker whose fall was arrested the choice of returning to work	Project supervisor discusses the option of returning to work – workers to perform similar work are to be informed that a worker fell	
☐	7	Supply new equipment	Worker"s employer supplies a new safety lanyard with shock absorber to the worker when he is considered ready to resume work	

[15] This must be chosen prior to a fall occurring. Also, Never place another worker at risk of falling when attempting rescue a fallen worker

Emergency Procedures Checklist – Electrical/Services Contact

Project	Project Location	Service Location
Supervisor	Date	Time

☑	Step	Action	Description
☐	1	Evaluate severity of emergency	Decipher severity based on the risk of injury: **High** – electrical contact, gas line rupture **Med** – water line break **Low** – phone/cable break
☐	2	Notify project supervisor	Provide details about the location and severity of the emergency
☐	3	Evacuate personnel and public from effected area	If the emergency could impact construction personnel or the public initiate evacuation away from the effected area
☐	4	Secure the area	Secure the immediate area of the emergency to restrict access and preserve the details of the accident If the affected area grows, enlarge the secured area
☐	5	Notify service provider of emergency	Call relevant service provider (ie. Hydro, Gas/Water Utility, Bell Canada etc.) and provide details of the scope of the emergency (ie. the size of the pipe broken or the damage to the powerlines)
☐	6	Call senior management and the Ministry of Labour	Project supervisor should contact the constructor‟s senior management and the local MOL office to describe the emergency
☐	7	Provide first aid to any injured workers	Ensure any worker injured in the accidental contact receives first aid including involving EMS if it is a critical injury
☐	8	Complete investigation of causes and results	Carry out accident and investigation reports as well as WSIB forms

Emergency Procedures Checklist – Electrical Contact

Project	Project Location	Electrical Line Location
Supervisor	Date	Time

☑	Step	Action	Description
☐	1	Operator remains inside cab	Keep the operator inside the cab and instruct him to remain calm. He will be safer inside the cab of the equipment.
☐	2	Notify project supervisor	Provide details about the location and severity of the electrical contact
☐	3	Evacuate personnel and public from contact area	Keep all personnel away from the equipment, ropes and load as they will all be electrically charged If the operator must leave the machine refer to Step 6
☐	4	Operator tries to remove the contact	Without any external assistance, try to break contact with the electrical contact by reversing the direction If contact is broken, continue at least 15" from the line If the machine cannot be moved, do not move away, stay and wait until the circuit is de-energized and conditions are safe
☐	5	Notify service provider of emergency	Call relevant electrical service provider, provide details of the emergency and try to have the power shut off to the area of contact
☐	6	Follow Emergency Operator Bailout procedures if evacuation is necessary	If the operator must evacuate the machine (due to fire or another hazard): ☐ Jump clear, never step down to ground ☐ Shuffle slowly away from the equipment - Do not take large steps
☐	7	Call senior management and the Ministry of Labour	Project supervisor should contact the constructor"s senior management and the local MOL office to describe the emergency
☐	8	Provide first aid to any injured workers	Ensure any worker injured in the accidental contact receives first aid including involving EMS if it is a critical injury
☐	9	Inspect the equipment	Inspect the equipment for possible damage prior to use Replace any wire rope involved in electrical contact
☐	10	Complete investigation of causes and results	Carry out accident and investigation reports as well as WSIB forms

Emergency Procedures – Evacuation Plan

Project	Supervisor
Location	Project Description

Instructions:

- Sketch project layout, showing emergency exits, fire extinguisher locations, stairwells and emergency services access points
- Provide written instructions for evacuation and assembly areas
- Include unique project features (ie. crane evacuation, design requirements, or access restrictions)

Evacuation Layout:
Evacuation instructions:

Emergency Procedures Checklist – Evacuation

Project	Project Location	Emergency Location
Supervisor	Date	Time

☑	Step	Action	Description
☐	1	Supervisor confirms location of Assembly Area	Assembly Area is located _____
☐	2	Supervisor assesses if emergency is a condition for evacuation	☐ Major Fire ☐ Chemical Spill (call 1-800-268-6060 for Emergency Spills Action Centre) ☐ Severe Weather ☐ Major Accident/Explosion ☐ Air Quality ☐ Power Outage ☐ Other _____
☐	3	Supervisor ensures other emergency procedures have been initiated	Refer to emergency procedures checklists and policies
☐	4	Supervisor ensures all personnel are notified	Inform all personnel of hazards and encourage them to follow evacuation procedures
☐	5	Supervisor ensures any critical equipment is shutdown	Delegate responsibility to competent person – instruct them to abandon shutdown if situation becomes hazardous
☐	6	Supervisor ensures required information is available to emergency personnel	Provide project maps (incl. floor plan and hazardous areas) and WHMIS info (incl. MSDS for all chemicals)
☐	7	Supervisor ensures all personnel leave via designated emergency exits	Refer to established emergency response procedures and/or floor plan
☐	8	Supervisor ensures all personnel know where assembly area is	Refer to established emergency response procedures and/or signs
☐	9	Supervisor initiates head count at assembly area	Delegate each trade or company to account for all their crew Results are reported back to supervisor
☐	10	Supervisor prepares list unaccounted personnel	Prepare list of names and last known location for all missing personnel Provide list to emergency personnel
☐	11	Supervisor keeps all personnel at assembly area until emergency deemed over	No personnel are to re-enter emergency area or leave scene until given permission by supervisor
☐	12	Supervisor moves personnel further from emergency	Further evacuation may be required if hazard expands

New Worker Orientation – Project Checklist

Place check if covered; X if not covered; ~~strike out~~ item if not applicable

Company	Project	Date
New Worker	Supervisor	Time

	Leadership & Organization		**Control Activities**
☐	Responsibilities for contractor, worker, supervisor, management, H&S rep		*Emergency Procedures*
☐	H&S program: Leadership, Organization, Hazard Recognition and Controls	☐	First Aid Station/Kit, First Aid Attendants (Names/Trades) _____
☐	Authority of Company policy, OHSA and construction regulations	☐	Procedures for emergency situation (ie. First Aid/Major Accident, Loss of Power, Fire Response, Severe Weather, Evacuation Plan, Fall Rescue)
☐	Alcohol and drug use policy	☐	Emergency procedures coordinator(s)
☐	Discipline policy	☐	Meeting place for evacuation
	Project Orientation	☐	Location of phone and emergency numbers or additional procedures
☐	Lunch, coffee breaks –duration, time and location	☐	Location of fire extinguishers
☐	Location of washroom, clean-up facilities and drinking water	☐	Emergency access route
☐	Tool and equipment damage procedures	☐	Ladders, scaffolds, power tools, electrical hazards, access, egress
☐	Physical tour of project including: relevant personnel, hazards and areas of note (parking, entry route, access points)		*Safe Work Procedures*
☐	Right to know (about all hazards) Right to participate (in health & safety) Right to refuse (any work that is hazardous)	☐	Confined spaces, fall hazards, traffic control, trenching, moving equipment
	Hazard Recognition & Assessment	☐	Compressed gases, MSDS, contractor requirements, guarding, PPE
☐	Injury and incident reporting procedures	☐	Housekeeping/daily clean up
☐	Accidents, accident investigation procedures	☐	Return to work procedures
☐	Property damage reporting procedures		*Training*
☐	Project inspection procedures	☐	Certificates available: WHMIS, Fall Protection, First Aid/CPR and other relevant training (ie. elevated lift operator)
☐	Specific project hazards _____	☐	Other
☐	Specific project hazards	☐	Specific project hazards

Worker's Signature Supervisor"s Signature

New Worker Orientation Leader Instructions

Workers have to check the boxes after the topic is covered; use an **X** if it isn"t covered; or ~~strike out~~ item if it doesn"t apply to them

Company	Project	Date
Worker	Supervisor	Time

	Leadership & Organization		**Control Activities**
☐	1. Discuss the fact that on this project you are responsible to work according to the H&S act and regulations. Also, identify who is the project supervisor and H&S rep		*Emergency Procedures*
☐	2. Discuss the company H&S program. Mention that workers are to report to their supervisors who report to the project supervisor. All personnel must report hazards and help in improving safety on the project	☐	1. Point out where the First Aid Station/Kit is and who are the First Aid Attendants (Names/Trades) – GET THEM TO WRITE IT DOWN
☐	3. Mention that the company policy, the H&S act and the construction regulations are the law on this project. These give the supervisor the right to discipline for safety violations. Also, MOL can visit at any time and can issue fines	☐	2. Discuss specific procedures for any emergency situation. USE THE CHECKLISTS IN THE H&S MANUAL (ie. First Aid/Major Accident, Loss of Power, Fire Response, Severe Weather, Evacuation Plan, Fall Rescue)
☐	4. Discuss that anyone suspected of being under the influence of drugs or alcohol who works in a safety-sensitive position will be removed from that position for the safety of everyone	☐	3. Identify the Emergency procedures coordinator(s) – USUALLY THE PROJECT SUPERVISOR – GET THEM TO WRITE IT DOWN
☐	5. Mention that violating company policy, the H&S act or regulations can receive 1 verbal warning, 1 written warning or removal from the project depending on the severity of the violation	☐	4. Point out the meeting place if there is an evacuation – GET THEM TO WRITE IT DOWN
	Project Orientation	☐	5. Show them the location of phone and emergency numbers or additional procedures
☐	1. Go over things like when the coffee truck comes and where lunch rooms are located	☐	6. Identify fire extinguisher locations
☐	2. Point out the location of washrooms, clean-up facilities and drinking water	☐	7. Point out the emergency access route - THAT MUST BE KEPT CLEAR AT ALL TIMES
☐	3. If any tools or equipment are damaged, report it to your supervisor	☐	8. Discuss the most common contributors to accidents including: ladders, scaffolds, power tools, electrical hazards, access, egress
☐	4. Give a physical tour of project including: H&S rep., project supervisor, buddy system partner, hazards and other areas (parking, entry route, access points)		*Safe Work Procedures*
☐	5. Discuss the 3 rights of all workers: Right to know (about all hazards) Right to participate (in health & safety) Right to refuse (any work that is hazardous)	☐	1. Discuss any unique project conditions that include these hazards: confined spaces, fall hazards, traffic control, trenching, moving equipment

Hazard Recognition & Assessment		☐	2. Go over safe work requirements for compressed gases, guarding, and personal protective equipment (PPE). Also mention the requirements for MSDS, and contractors safety
☐	1. Mention that all injuries and near misses must be reported to your immediate supervisor	☐	3. Discuss the housekeeping/daily clean up requirements
☐	2. Make sure that all accidents are reported immediately to the project supervisor. Don"t touch anything until an accident investigation is done	☐	4. Mention that there is a company Return to work program to help workers return to work after an injury
☐	3. Discuss that if any property is damaged, it should be reported to your supervisor	**Training**	
☐	4. This project will be inspected by onsite personnel (supervisor and H&S) & by H&S consultants.	☐	Have each person check the certificates that they can show you for: ☐WHMIS ☐First Aid/CPR ☐Fall Protection ☐Powered Elevated work platforms ☐Traffic control ☐Propane ☐Confined space ☐H&S Representative ☐Cert. of qualification
☐	Specific project hazards Use this area to outline any unique conditions that are or could become hazards. Get the worker to list them on his sheet		
☐	Other Use this area for anything that hasn"t been covered elsewhere		

Don"t sign this copy Don"t sign this copy

Worker's Name – PLEASE PRINT Supervisor"s Name – PLEASE PRINT

Accident Investigation Procedures

☑	Step	Who	Action & Responsibilities	Description
☐	1	Project supervisor	Contact senior management & MOL (if required)	If the accident meets the criteria in Table 1, contact senior management and the MOL immediately (see back of „green book" for MOL contact information)
☐	2	Project supervisor & JHSC member	Initiate investigation	Arrive at scene immediately. After completing the accident report, initiate the investigation of the accident
☐	3	Project supervisor	Choose investigators	The Supervisor and Certified Worker (if available) or Health & Safety Representative will conduct the investigation Once completed, those involved will review the report to ensure its accuracy and completion
☐	4	Accident investigators	Physical accident scene investigation	Tour accident scene, taking photos, drawing sketches and noting observations. What is apparent? What needs clarification?
☐	5	Accident investigators	Interview witnesses	Ensure names, addresses and contact information is gathered. Obtain detailed witness accounts
☐	6	Accident investigators	Restore operations	Operations will not begin again until all accident investigators are satisfied that every reasonable precaution has been taken to ensure the resumption of work is not likely to endanger any other worker
☐	7	Accident investigators	Prepare accident investigation report	The preliminary Accident Investigation report will be distributed to Senior Management and the JHSC (if applicable) within 48 hours – if required a report will further details will be submitted within 7 days
☐	8	Project supervisor, JHSC	Address report recommendations	If required, arrange a meeting involving all affected parties to discuss and address any recommendations made in the Accident Investigation report
☐	9	Project supervisor	Implement report recommendations	The supervisor will review the recommendations made within 48 hours of the original accident to ensure appropriate actions have taken place
☐	10	JHSC, Senior management	Review accident investigation report and recommendations	JHSC members and senior management will review accident investigation report
☐	11	Project supervisor	Submit report to MOL	Completed accident investigation report is forwarded to MOL inspector

The Workplace Safety & Insurance Board must receive notification (Form 7 or letter) within three (3) days after all accidents

Accident Report

Injured Worker"s Last Name First Name Occupation

Location where injury/accident occurred First Aid Provider

Hospital or Clinic Attended for Medical Aid Physician"s Name

Nature of Injury Project Location of Accident/Injury

Person who transported employee Is this a lost time injury? No ☐ Yes ☐ Unsure ☐

Were any contractors involved? No ☐ Yes ☐ Is the injury work-related? No ☐ Yes ☐

If Yes, Contractor Name & Address

Injury Details

Date and Hour of Injury
Day Month Year a.m. p.m.

Date and Hour Reported to Employer
Day Month Year a.m. p.m.

What caused the injury? Describe the injury, the body part involved and specify left or right side (use back of sheet if necessary).

Describe the worker"s activities at the time of the injury. Include details of equipment or materials used (use back of sheet if necessary).

Who was the injury reported to?

Did anyone else witness the accident or know more about the injury (Names and Addresses)?

Accident Investigation Report[16]

Date of Investigation: _____ Investigator Name: _____

Date of Injury: _____ Project Location:_____

Project Supervisor: _____IW Occupation: _____

IW[17] Employer Name, Address & Phone #: _____

Employer"s Type of Bus: _____

IW Name, Address & Phone #: _____

MOL notified (see Accident Investigation policy): No ☐ Yes ☐ if yes time & date _____

MOL Inspector Name & Phone #: _____

Joint Health & Safety Committee notified (if required): No ☐ Yes ☐

Nature of Injury Reported (injured body part): _____

_____

Name & Address treating Medical Facility: _____

Name & Address Treating Physician: _____

Project Safety Representative Name/Comments: _____

_____

Names and Addresses of witnesses and comments (use back for additional comments):

[16] According to OHSA Sec. 52 and Reg. 213/91 Sec. 8, 9 or 10
[17] IW – Injured Worker

Nature and Circumstances of the Occurrence & Description of Machinery or Equipment
(use back for additional comments)

Sketch/Diagram or Attach Photos

Recommendations prevent recurrence:

1.

2.

3.

4.

Follow up required: No ☐ Yes ☐ Follow up by: _____ on ____Date____ ☐

_____ _____

VSC Investigator Name VSC Investigator Signature

Accident Investigation Report Reviews

Health & Safety Committee (Worker Members)

_____

_____

_____

_____

Name: _____ Signature: _____ Date: _____

Health & Safety Committee (Management Members)

_____

_____

_____

_____

Name: _____ Signature: _____ Date: _____

Senior Management

_____

_____

_____

_____

Name: _____ Signature: _____ Date: _____

Hot Work Permit & Procedures

(Definition) *Hot Work*: any trades activity that uses or produces flames, sparks or heat that would act as an ignition source for any flammable or combustible material (eg. Brazing, cutting, welding).

Project	**Hot Work Location**	
Supervisor	**Date**	**Time**
Type of Hot Work (ie. welding, cutting, brazing etc.)		
PPE required	**Fire Watch Personnel**	

Procedures

❑	Step	Action	Description
❑	1	**Necessary precautions taken**	❑ Ensure sprinklers are in service in hot work area unless specifically approved by supervisor ❑ Ensure cutting and welding equipment is in good condition ❑ Ensure appropriate fire extinguishing equipment (minimum 2 gallon capacity) is charged, near the work and readily available ❑ If confined space is present, follow additional procedures outlined in Construction Health & Safety manual (CSAO publication)
❑	2	**Precautions within 35ft. (10m) of work**	❑ Floors swept clean of combustibles ❑ Combustible floors wet down, covered with damp sand or fire resistant sheets ❑ Flammable liquids removed, other combustibles protected ❑ Explosive atmosphere in area eliminated ❑ Wall and floor openings or cracks covered ❑ Fire-resistant tarpaulins suspended beneath work
❑	3	**Work on wall or ceilings**	❑ Ensure work area is not combustible and is only performed with combustible coverings, barriers or isolation ❑ Combustibles moved away from other side of wall
❑	4	**Work on enclosed equipment**	❑ Enclosed equipment cleaned of all combustibles ❑ Containers purged of flammable liquids
❑	5	**Fire watch personnel[18] assigned**	❑ A thorough examination will be made at and below the area in which work has been performed during and for at least 30 min. after hot work is finished and during all breaks to detect and extinguish any fires

Completed by

[18] **Fire watch personnel** is a worker who is trained in the use of fire equipment and emergency procedures, is not to perform any other duties and is supplied with extinguishers

Lock Out/Tag Out Permit & Procedures

Project	**Lock Out Location**	
Supervisor	**Date**	**Time**
Energy Source ☐steam ☐heat ☐air (pneumatic) ☐hydraulic pressure ☐gravity ☐electricity		
PPE required		

Procedures

❑	Step	Action	Description
❑	1	*Supervisor and worker*[19] identify all sources[20] of energy that affect the work	❑ Review all energy sources including: ○ Electrical ○ Hydraulic ○ Pneumatic ○ Gravity ○ Spring
❑	2	*Worker* performing lock out/tag out notifies other workers in the area	❑ Workers should be removed from immediate area ❑ Ensures no accidental presence in locked out area
❑	3	*Worker* turns off and disconnects equipment from power source	❑ Remove a fuse ❑ Close a valve ❑ Place a physical block
❑	4	*Worker* locks out and blocks out power	❑ Attaches his own lock to the main power source ❑ Ensures that he has the only key to the lock ❑ Ensures that if >1 worker is working on the same equipment, that a multiple hasp is used and that each other worker has their own lock
❑	5	*Worker* tags the lock at the disconnect in a conspicuous location	❑ Applies a durable tag identifying: who applied the lock, why and when it was applied
❑	6	*Worker* releases residual energy from system	❑ Lowers all suspended parts ❑ Blocks moveable parts ❑ Vents residual air pressure ❑ Drains hydraulic lines ❑ Releases or block spring energy
❑	7	*Worker* tests equipment to ensure a zero energy state	❑ Checks for others in danger zone ❑ Pushes start buttons, operates valves or tests current ❑ This verifies that the power is neutralized and work can be performed
❑	8	**Work is performed**	
❑	9	*Worker* restores energy carefully after work is completed	❑ Removes lock from the energy source ❑ Waits until no further locks are present ❑ Ensures the following: ○ Guards are in place, valves are closed ○ Braces, pins or blocks are removed ○ Pipes, tubing and hoses are reconnected ○ All tools are accounted for ○ People are clear of the danger zone ❑ Restores energy to system

Completed by

[19] Worker must be a certified electrician or a worker with equivalent qualifications by training and experience
[20] Some equipment can use different sources of energy in combination – all sources must be locked out. Beware of backup or emergency power sources, discontinued power sources and multiple lockout points.

Confined Spaces Procedures Checklist

☑	Step	Action	Controls Description

☐	1	Before entry is permitted, confined space locations must be identified and evaluated	❑ Recognize if work areas qualifies as a confined space (see Confined Space definition)
			❑ Communicate hazard potential to all workers who may be affected
			❑ Obtain a work permit, specifying the conditions for safe entry and work
			  ❑ Work permits should be obtained separately for each specific job, location, person and time
			  ❑ Permits should not be carried from one shift to the next
			  ❑ A copy of the permit should be given to the worker in the confined space.

☐	2	If after Step 1, a confined space is identified which **is not likely** to contain a hazardous environment (ie. explosive, flammable, hazardous, or oxygen deficient/enriched), these conditions must be met for work to be performed	❑ Means of egress is provided
			❑ All mechanical equipment is disconnected and locked out
			❑ All pipes/supply lines likely to create a hazard are blanked off
			❑ Confined space is purged and ventilated to create and maintain an environment that will not endanger workers
			  ❑ This provides protection in case of accidental release of chemicals, to remove contaminants produced by the work carried out or to cool the enclosure
			  ❑ Openings shall be provided for the entry of clean replacement air
			  ❑ To ensure thorough ventilation, the points of air supply and exhaust should be separated as far as possible
			  ❑ Free oxygen shall **not** be used to ventilate a confined space
			❑ Lack of hazardous environment is verified by continuous air monitoring, evaluation and written certification by a competent worker
			❑ Proper personal protective equipment is worn appropriate to the nature of the hazard
			❑ Workers wear full body harnesses securely attached to a rope:
			  ❑ With the free end attached to a fixed support outside the confined space; and
			  ❑ That is being held by a worker outside the confined space who is equipped with a full body harness and lifeline and is provided with an alarm device to signal an emergency
			❑ Rescue equipment must be present to remove a worker from the confined space in case of an emergency
			❑ Another worker, trained in First Aid/CPR must observe the worker in the confined space
			❑ If there is a possibility of fire and explosion, all sources of ignition in the area shall be eliminated. All electrical equipment shall conform to Ont. Elect. Safety Code's requirements for hazardous locations
			❑ Non-ferrous fan blades and non-sparking tools should be used
			❑ Cylinders of oxygen or other gases shall not be taken into confined spaces. This does not apply to breathing equipment
			❑ Welding and cutting torches shall not be left in confined spaces when not in use
			❑ Adequate fire fighting equipment shall be readily available
			❑ A competent worker inspects all equipment as often as necessary to ensure it is in good working order

☐	3	If after Step 1, the confined space **is likely** to contain a hazardous environment (ie. explosive, flammable, hazardous, or oxygen deficient-<19.5% or enriched->23%), **in addition to Step 2**, these conditions must be met	❑ Workers are competent in and use suitable protective breathing apparatus equipment ❑ A worker may perform cleaning or inspection activities that do not create a source of ignition in a confined space providing the concentration of explosive or flammable matter is not likely to exceed **50%** of its *lower explosive limit* ❑ A worker may perform cold work in a confined space in which the concentration of the explosive or flammable gas, dust, mist or vapour is not likely to exceed **10%** of its *lower explosive limit*

Confined Space Entry Plan & Permit

Employer name _____ Project name _____

Date _____ **Permit end time** _____

Assessment performed by _____ **Permit start time** _____

Location of confined space (or spaces if they are similar)
Description of confined space (or spaces if they are similar)
Description of work to be performed

Monitoring equipment

Air testing equipment	Serial #	Last calibrated (minimum monthly)

Air quality results

	Location:			Location:			Location:		
	Test #			Test #			Test #		
	1	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
Time of test									
Oxygen, %									
Combustibles, %									
Atmospheric hazard:									
Atmospheric hazard:									
Atmospheric hazard:									
Other:									
Tester"s name					Signature				

Controls

Atmospheric hazards (existing or introduced)		Physical Hazards			
Flammable	☐	Hot temperature	☐	Lighting	☐
Toxic	☐	Cold temperatures	☐	Work at height	☐
Corrosive	☐	Noise	☐	Moving machinery	☐
Oxygen deficient	☐	Electricity	☐	Influx of liquid	☐
Oxygen enriched	☐	Vibration	☐	Influx of gas	☐
Other:_____	☐	Slippery surface	☐	Other:_____	☐

Hazard controls		Equipment Required for entry	
Purge using mechanical ventilation equipped with warning device in case of failure	☐	Coveralls	☐
		Boots	☐
Natural ventilation (re-test / air quality)	☐	Respirator or Self-Contained Breathing Apparatus	☐
Continuous monitoring	☐	Hearing protection	☐
De-energize, lockout	☐	Anti-vibration gloves	☐
Blank, disconnect	☐	Other gloves: _____	☐
GFCI cords	☐	Eye protection	☐
Lighting	☐	Fall protection	☐
Other:_____	☐	Tripod	☐
		Harness	☐
		Winch/cable	☐
		Other:_	☐

Attendant

Attendant"s name	Signature

Communications

Method of communication with workers	Method of communication to summon rescue

Rescue Requirements

☐	Adequate number of trained persons is available to implement rescue procedures
☐	Appropriate rescue equipment is readily available to be used for a rescue
☐	Appropriate rescue equipment has been inspected and is in good working order
☐	Specific rescue procedures are communicated to all workers

Hot work **(complete if hot work will be conducted)**

Will space be rendered inert by adding inert gas?	**Yes** ☐	**No** ☐
If "yes," ensure	☐ Space is monitored continuously to ensure it remains inert	
	☐ Worker(s) entering use adequate respiratory equipment – list equipment:	
	☐ There is adequate equipment to allow persons outside to locate and rescue worker – list equipment: _____	
	☐ There is other equipment necessary to ensure safety of worker – list equipment: _____	
If "no," ensure	☐ Flammable gas is maintained below 5% of its LEL by purging and continuous ventilation	
	☐ O2 content is maintained below 23%	
	☐ Atmosphere will be monitored continuously	
	☐ Alarm and exit procedures are in place should the LEL exceed 5% or the O2 exceed 23%	

Training

Names of workers approved for entry	**Has confined space training**	**Trained in the entry plan**	**Time of entry**	**Time of exit**
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		

Supervisor"s name _____ Signature _____

Confined Space Hazard Assessment

DATE:	LOCATION:	COMPANY:
POSITION:	PERFORMED BY:	CONTACT:

STEP 1 – IDENTIFY MAIN JOB TASKS	STEP 2 – RECOGNIZE HAZARDS People – Equipment – Materials – Environment – Process	STEP 3 – ASSESS RISK (RISK = PROBABILITY X CONSEQUENCE)
Pre-entry to confined space	❑ Access/egress ❑ Training/competency ❑ Rescue plan development ❑ Equipment available/adequate	
During confined space work	❑ Oxygen deficiency/enrichment, ❑ Flammable, combustible or explosive agents, ❑ Toxic air contaminants, smoke, fume and dusts, ❑ Residual chemicals, ❑ Ignition hazards, ❑ Moving parts, ❑ Thermal stress to worker, ❑ Engulfment, ❑ Electrical, ❑ Visibility/lighting, ❑ Traffic (pedestrian and vehicular), ❑ Biological (animals, droppings, etc.), ❑ Residual pressure ❑ Slippery surfaces ❑ Noise ❑ Equipment malfunction	High
Rescue/ emergency response		
Post confined space work		

STEP 4 – CONTROL HAZARDS			
HAZARD	WHAT CONTROL	BY WHOM	WHO CHECKED

ISSUED BY:	REVIEWED:

Return to Work – Letter to Attending Physician[21]

Dear Doctor:

VISTA STAR Construction CO. has adopted a Return to Work Program for its employees. Through this program, we are committed to return our employees to their regular jobs following an occupational or non-occupational sickness or injury.

With leadership from the project supervisor, the program is designed to help re-introduce the employee back into their work environment as quickly as possible. The program can be up to 6 weeks duration of reduced hours and modified or suitable work.

In order to accomplish the return to work of your patient (our employee) _____ we request that you complete this form and have the employee return it to his/her Supervisor.

To be completed by Employer:

_____Injured worker_____ Claims to have been injured in our employ on _____Date_____

Project: _____ Supervisor: _____

Physician Assessment:

Nature of problem and diagnosis _____

_____

_____

	Yes	No
Employee may return at once to normal work	☐	☐
Employee may return at once to modified duties	☐	☐
Employee will be absent	_____ days	
Employee requires further treatment	☐	☐ if „Yes" _____Date_____

COMMENTS: _____

_____

_____

_____

_____Physician"s Name (please print)_____ _____Telephone_____

_____Physician"s Signature_____ _____Date_____

Thank you for your assistance and cooperation

[21] WSIB Form 156 (available online) - Treatment Memorandum should also be completed and sent to treating physician

Return to Work – Worker's Medical Consent Form[22]

Employee name (please print) _____

Trade _____ Project Location_____

Home Address: _____

_____

_____

This will authorize my treating practitioner(s)

Name: _____ Name: _____

Address: _____ Address: _____

_____ _____

Postal Code: _____ Postal Code: _____

Telephone: _____ Telephone: _____

Fax: _____ Fax: _____

To release/discuss my specific medical capabilities concerning my recent injury/illness _____ with members of VSC, as they relate to my returning to work. This shall include my functional capabilities and/or precautions. Nothing contained herein shall authorize the release of any other medical or confidential information.

_____ _____

Employee Signature Date

_____

Witness

[22] WSIB Form 1492 (available online) - Worker's Claim/Consent Form – should be completed when you cannot obtain the employee"s signature on a Form 7 – send copies to the employee and to the health professional for RTW

Return to Work – Additional WSIB Forms

Additional forms are available from the WSIB to help the Return to Work process by providing clear information to all involved parties (ie. the worker, employer, health professional and WSIB). These forms are not reproduced here, but links to the WSIB website are provided for online completion.

WSIB Form 7 – Employer‟s Report of Injury/Disease

- Provides preliminary information on injury details from employer to WSIB and worker
- Initiates process of returning injured worker to work using subsequent forms

WSIB Form 156 – Treatment Memorandum

- Provides communication between employer and treating Health Professional/Hospital with respect to an employer contact and who, what, and when of injury

WSIB Form 1492 – Worker's Claim/Consent Form

- To be completed by employer when unable to obtain injured employee‟s signature on a Form 7
- Copies to be sent to the employee and to the health professional for Return to Work program

WSIB Form 2647 – Functional Abilities Form for Timely Return to Work

- Provides clear information from the Health Professional about capabilities and limitations of the worker‟s current physical condition
- Allows employer to choose suitable modified work for injured worker

WSIB Form 9 – Employer's Subsequent Report

- Provides information from the employer to the WSIB when the injured worker returns or is able to return to work

WHMIS Classes and Symbols

 Figure 1 - Class A: Compressed Gas	 Figure 2 - Class D: Materials causing Other Toxic Effects
 Figure 3 – Class B: Combustible Material	 Figure 4 - Class D: Biohazardous Material
 Figure 5 - Class C: Oxidizing Material	 Figure 6 – Class E: Corrosive Material
 Figure 7 - Class D: Poisonous & Infectious Material	 Figure 8 – Class F: Dangerously Reactive Material

PPE Procedures Checklist

Project	Date	Supervisor

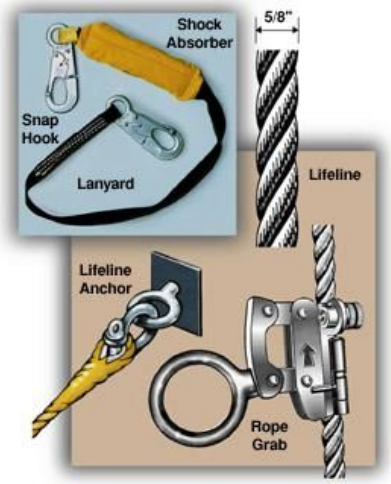
☑	Step	Supervisor Action	Description
☐	1	Identify the personal protection needs on the project	Consider the various types of work, equipment and chemicals used and the locations where work takes place. Any source of danger to workers' health or safety needs to be eliminated altogether or, where this is not practicable, the risks must be properly controlled. The best ways to control risk is to isolate the source of danger from people or to use physical barriers to prevent people coming into contact with the danger. But where this can not be done, or when it does not fully control the risk, use properly understood safe work procedures and the right combination of personal protective equipment (PPE)
☐	2	Post the necessary personal protection signs	The entire project will be a hardhat and protective footwear area. Post the safety signs for these prominently at project entrances. Post signs at any areas where workers will need hearing protection, safety glasses, gloves or breathing masks
☐	3	Ensure the right PPE being used	It is your responsibility only to ensure the workers are using the right equipment, not to supply or pay for it. Suggest that workers select the particular model that gives them maximum personal comfort. Comfortable PPE will be worn, while "one size fits all" PPE that is uncomfortable is only worn reluctantly.
☐	4	Provide reasons for using PPE during orientation	During orientation, ensure workers know what are the hazards they may be exposed to and what PPE is required as a result. If workers are reluctant to use PPE, encourage them to help you develop a better way to do the work so that they won't need PPE.
☐	5	Ensure workers are trained in the use of PPE	Some types of PPE have particular, fitting, testing, cleaning and inspecting requirements. Where this is the case, make sure workers have been properly instructed in these procedures and can demonstrate them correctly
☐	6	Monitor PPE use to ensure it is adequate	PPE is only as good as the degree to which it is properly used. Providing a worker with PPE and then failing to make sure it is being used is simply not good enough. Conduct regular checks. Insist that the rules for PPE are always followed
☐	7	Discipline workers that are not using appropriate PPE	Use formal discipline policy for all workers who are not using proper PPE. Provide written copies of discipline reports.
☐	8	Ensure PPE is inspected and replaced as necessary	Faulty PPE is sometimes worse than no PPE because it can give the worker a false sense of security. Make sure PPE is checked regularly for serviceability and compatibility. For fall arrest equipment use attached fall protection inspection and maintenance record. For respiratory protection use pgs. 63-67 in the Construction H&S Manual.
☐	9	Review project PPE needs	New products come on to the market, which may provide you with a way of controlling risks without the need for PPE any longer. Also, new techniques may be developed that minimize exposure.

PPE – Fall Arrest Equipment Inspection Procedures

From CSAO Fall Arrest article - www.csao.org/UploadFiles/Magazine/VOL9NO3/93**fall**.htm

A travel-restraint or fall-arrest system can only work properly if used properly. Correct use involves instruction, inspection, and maintenance of components.

Equipment should be inspected for adequacy before each use and on a regular basis. Any damaged or worn components should be identified and replaced before they have a chance to fail during use.



Components

The basic components of travel-restraint and fall-arrest systems are similar. Components typically include:

- Snap Hook
- Rope Grab
- Shock Absorber
- Lifeline
- Lanyard
- Anchor Point

Harness

It is recommended that a full-body harness be used for both travel-restraint and fall-arrest applications.

A safety belt is still allowed for travel-restraint, but only if there is no chance for a worker to be exposed to any fall hazard.

A harness must be inspected prior to each use. Most web-type harnesses have a service life of 5 years. Always check the tag with the date of manufacture on it. If the harness does not have a tag, don't use it. Return the harness to a supervisor immediately to prevent others from using it.

WEBBING

- Look for cuts, fraying, broken stitching, and other damage.
- Check for chemical or heat damage evidenced by discolouration, brittleness, or melted fibres.
- Ensure that grommets are intact and plastic or metal keepers are sound.
- Inspect all metal buckles for distortion, cracks, and sharp or rough edges. All buckles should slide easily for adjustment.

D-RING

- Inspect for distortion, cracks, sharp or rough edges, and chemical or heat damage.
- Ensure that the adjustment plate holding the D-ring in position on the harness is free from cracks, heat

damage, or other defects. The plate must keep the D-ring in position without allowing it to slide out of place under its own weight.

Lanyard

Most lanyards have a service life of 5 years. Always check the tag on the lanyard for the date of manufacture. Lanyards must be inspected prior to each use to ensure proper protection:

- Check the lanyard from end to end looking for worn, broken, or cut fibres. Look for evidence of stretching or impact-loading indicating that the lanyard may have been involved in a fall arrest.
- Inspect the lanyard for evidence of chemical or heat exposure. Discolouration and brittle material are signs of exposure.
- Check the connecting hardware for cracks, distortion, and other signs of stress.
- If the shock absorber is part of the lanyard, check the core of the absorber by sliding your fingers along its length to ensure that it is intact.
- Discard any lanyard that shows signs of the damage described here.

Shock Absorber

A shock absorber must be checked prior to each use. All shock absorbers should carry an inspection tag with the date of the last inspection. If the tag is missing, the shock absorber should be returned to a supervisor for advice on its suitability.

- Check the outer jacket and end loops for any signs of damage including cuts, tears, burns, chemical damage, and stretching.
- Stitching should be checked, especially around end loops.
- Remove a shock absorber from service immediately if it's found to be defective.

Snap Hook

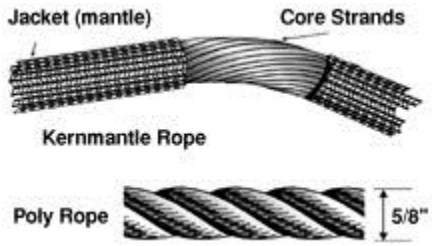
- Check the snap hook for cracks and corroded or pitted surfaces.
- Ensure that the spring has enough tension to close the keeper securely.
- Ensure that bill and eye sections are not twisted or bent and are free from sharp edges.

- Check that the locking mechanism is working properly by attempting to push the keeper into the open position with the mechanism still engaged. If the keeper opens, discard the unit immediately.
- Open the keeper and release. The keeper should sit into the bill without binding. It should not be bent or show excessive lateral movement.

Lifelines

Vertical and horizontal lifelines should be at least 16mm diameter polypropylene or other material of equal strength.

- Inspect the lifeline from end to end for damaged strands, abrasion, cuts, burns, and foreign materials lodged in the strands that may cut or chafe it.
- Check the lifeline for signs of discolouration and brittleness indicating heat or chemical exposure.
- Manually check for signs of decreased diameter in the lifeline that may indicate it has been involved in a fall arrest.
- Check the eyes of a rope for cracks and deformities.
- Ensure that all **horizontal** lifeline systems are designed and installed according to stamped, engineer"s drawings
- A **self-retracting** lifeline must retract smoothly and the braking system must activate when the line is pulled on quickly
- A **self-retracting** lifeline should not make noises such as grinding or rubbing sounds, or feels like there is grit inside the system



Rope Grab

- Inspect the rope grab for corrosion, distortion, alteration to parts, missing parts, and ease of function. Components to check include the connecting ring, main lever, guide roller, pins, hinges, and main body. Remove the rope grab from service if it shows any signs of damage.
- Test the rope grab for fall-arrest action. Mount the rope grab on the line with the directional arrow in the proper orientation (toward the anchor along the lifeline). Pull the rope grab sharply by the connecting ring in the direction of a fall. The grab should lock within 30 cm (12 inches).
- Ensure that the proper size lifeline is used with each rope grab. The size of lifeline required is marked on the rope grab.

Anchor Points

An anchor point should be able to withstand a minimum of 10 times the weight of the person using the fall-arrest system or the weight of a small vehicle.

- Ensure that lifelines are securely attached to the anchor points before use.

- Wherever possible, attach only one lifeline to each anchor.
- Never anchor to bundles of lumber or other construction material that may be moved or depleted through use. Do not anchor to exposed rebar unless embedment length is known and is adequate.
- If you're not sure whether an anchor is suitable, check with your supervisor.

PPE – Fall Arrest Monthly Inspection and Maintenance Record

Harness Make/Model		**Serial #**	
Lanyard Make/Model		**Serial #**	
_____ Make/Model		**Serial #**	

Component	**Item to check**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Harness	Stitching												
	Webbing												
	D-ring												
	Buckles												
	Label												
Lifeline	<5 years old Min. 16mm (5/8”) diameter												
	Good condition												
	No deformities												
	Not in contact with sharp edges												
Lanyard	SRL performs well Stitching												
	Webbing												
	Snap hooks												
	Shock absorber												
	Label												
	<5 years old												
Rope Grab	Connecting ring, main lever, guide roller, pins, hinges, and main body are OK												
	Installed in proper orientation (arrow pointing up)												
	Tested to brake and stop												
	Adjusted to lifeline diameter												
Anchor point	Adequate (supports 1630kg or 3600 lbs.)												
	Lifeline securely attached												
	Verified by supervisor/competent person												

Maintenance, repairs or corrective action performed	
Inspected by	

Forklift Procedures Checklist

☑	Step	Action	Description
☐	1	Before work begins, identify and evaluate hazards involving forklifts for all phases of work	Evaluate: ❑ the type of equipment that will be used ❑ the tasks to be done ❑ the workplace environment (ie. soil conditions, slopes, proximity to other work)
☐	2	Perform a hazard assessment	❑ complete start-up hazard assessment referring to all the potential hazards, relative risks and controls to be used ❑ Review hazard assessment periodically and if there is a significant change in how the work is carried out, make changes as necessary
☐	3	Educate all workers on potential exposure to forklift hazards	❑ Provide information to workers about the potential hazards relating to forklifts on the project ❑ Provide instruction in procedures to avoid harm ❑ Ensure that all workers know that written rules and procedures are located in equipment if required
☐	4	Ensure equipment is well maintained	❑ Ensure that all forklift equipment is in good condition properly maintained ❑ Ensure maintenance logs and operator manuals are available
☐	5	Ensure forklift operators are competent	Ensure forklift operators are competent workers: ❑ Trained in the fundamentals of forklifts ❑ How environmental conditions can affect performance ❑ Basic forklift operating skills ❑ Rules and practices for safe forklift operation
☐	6	Ensure forklift operators work appropriately	❑ Ensure standard operating procedures are followed (refer to Guidelines for the Safe Operation and Maintenance of Powered Lift Trucks)
☐	7	Ensure contractors using forklifts have written safety procedures	Evaluate contractor Forklift Safety Program contains: ❑ Workplace hazards – how to identify them ❑ Training, testing and certification – proof of training and competency ❑ Maintenance program – preventative maintenance, testing and records ❑ Capacity and limitations – describing the rated capacity and limitations for use ❑ Operating procedures – defined and management systems for safety ❑ Environment – rules for where equipment is permitted/not permitted

Forklift Equipment Checklist

Load-handling Device

Manufacturer's Specification Plates

- ❑ truck plate
- ❑ attachment plate
- ❑ information shown on the capacity plate matches the truck, mast and currently installed attachments

Forks

- ❑ record fork length, width and thickness
- ❑ in accordance with manufacturer's specifications (note any unauthorized cutting, cracks and heel wear)
- ❑ straightness of blade and shank
- ❑ fork angle
- ❑ fork tip height and condition
- ❑ tube condition
- ❑ welded areas
- ❑ blade and heel
- ❑ hook mount forks
- ❑ shaft mount forks
- ❑ special forks
- ❑ attachments to forks
- ❑ latch pins (where originally provided)

Attachments

- ❑ visual and operational check
- ❑ in accordance with manufacturer's specifications
- ❑ attachment mounting
- ❑ load bearing arms (straightness & twists)
- ❑ pivot points and hinges
- ❑ hanger brackets
- ❑ latch pins
- ❑ stops
- ❑ load backrest condition

Movement

- ❑ carriage free and unobstructed
- ❑ anchors
- ❑ stub shafts
- ❑ bearings
- ❑ weldments/forkbars

Elevating Section

Lift Chains

- ❑ anchors
- ❑ guards
- ❑ elongation
- ❑ wear (with wear gauge)
- ❑ adjustment (as per manufacturer's specifications)

Mast

- ❑ visual and operational check of mast operation
- ❑ mast mounting, bushings and pivots
- ❑ rails
  - straightness
  - wear
- ❑ cross bracing
- ❑ pins
- ❑ chain guiderollers
- ❑ wear strips and guides
- ❑ hoses, pulleys and fittings
- ❑ latches - stops

Hydraulic System

- ❑ lift cylinders
- ❑ anchors
- ❑ piston head guides
- ❑ lines
- ❑ leaks
- ❑ drift test
- ❑ tilt cylinders
  - anchors
  - racking
  - rod end retainer
  - tilt angle
    (degrees) Forward _____ Back _____
  - lines
  - leaks
  - drift test
- ❑ set hydraulic pressure relief valves
- ❑ lift/lower levers - identified and in good condition

Welds and Fasteners

Propulsion System	**General Safety**
Brakes ❑ test operation ❑ wheel cylinders ❑ master cylinder ❑ brake lines Tires ❑ check tire pressure for load-rating capacity ❑ check for damage, wear and missing hardware Battery ❑ minimum allowable weight from manufacturer's specifications ❑ Manufacturer _____ Model _____ Serial No. _____ ❑ battery weight ❑ battery position ❑ battery restraining devices ❑ leaks Counterweight ❑ mounting ❑ unauthorized additions or missing weights cracks	Transmission Tires ❑ driving and steering characteristics ❑ bonding Steering ❑ check steering wheel for physical damage ❑ check steer axles and box ❑ operational check of wheel bearings Overhead Guard ❑ secured ❑ breaks or cracks ❑ missing pieces ❑ modifications Propane Equipment ❑ fuel tank mounting system secure ❑ fuel tank position pin intact ❑ check propane relief valves ❑ check hose condition Other ❑ check failsafe components of electrical controls ❑ warning devices (lights, bells, whistles) ❑ engine operation and emissions ❑ seat (secure, belts) ❑ seat and handle switches ❑ fuel leaks ❑ carbon monoxide (CO) emission test

From MOL Appendix IV: Maintenance Checklists, Guideline for the Safe Operation and Maintenance of Powered Lift Trucks, 1999

Ladder Safety Checklist

Project	**Project Location**
Supervisor/Foreman	**Date**

Place **check** if performed or acceptable; **X** if not performed or unacceptable; ~~strike out~~ item if not applicable

	REQUIREMENTS	**DESCRIPTION**
	Before use:	
☐	Check the ladder for defects	Has any wood splintered? Are the defects in the side rails or rungs? Are rungs missing or broken? Are there broken parts repaired with makeshift material? Are the feet worn, damaged or missing? Is the rope on extension ladders worn, broken or frayed? Are the spreader arms on stepladders bent, worn or broken?
☐	Check area for overhead powerlines	Pre-plan work done with metal or conducting ladders. Ladders made of aluminium should not be used near powerlines.
☐	Clear areas surrounding base and top of ladder of debris	Getting on and off the ladder is more hazardous than other aspects of use
☐	Secure top and base of ladder	Tie off top to suitable anchor point to restrict movement. Use a ladder with non-slip feet, or nail a cleat or anchor to the floor.
☐	Set up on firm level surface	If the base rests on soft, un-compacted soil, use a mudsill
☐	Extend top a minimum of 3 feet above the landing and add railings	Railing and ladder length provide handholds to facilitate getting on and off the ladder
☐	Ensure ladder is set up at an angle of 1:3 or 1:4	For every 3 or 4 feet the ladder extends vertically, it must extend horizontally 1 foot. This ensures a comfortable climbing angle.
☐	Ensure ladder is being used appropriately	Do not use ladder as a substitute for scaffold planks, runways or anything else for which they were not designed
	During use:	
☐	Do not stand on either of the top 2 rungs on a portable ladder	A portable ladder can become unsteady when standing above 3rd rung from the top. The ladder should be tied off or stabilized.
☐	Do not splice ladders together	Side rails may not be strong enough to support load
☐	Do not set up ladders in passages, doorways	Ladders could be struck or moved by other using access route
☐	Only one person at a time can use it	Unless ladder is double-width and each is on separate side
☐	Do not place ladders against flexible or movable surface	Movement may cause user to lose balance and fall
☐	Always face the ladder when climbing up or down and when working on it	Provides more stability and support
☐	Maintain 3-point contact when climbing up or down	Two hands and one foot or two feet and one hand in contact with the ladder at all times
☐	Keep your belt buckle within the side rails	Reduces the risk of the ladder becoming unstable
☐	Do not carry tools, material or equipment when climbing up or down	Place anything that is needed into a container and raise or lower it using a rope
☐	Keep boots free of mud, snow or grease	Provide mud scraping board to reduce the risk of lost footing
☐	Hold the ladder with one hand when working	If work is >3m high and both hands are needed, tie off to an independent vertical lifeline using a full body harness & ropegrab
☐	Do not erect long or heavy ladders alone	Two or more people should share the task to avoid injury
☐	Do not rest a ladder on any rung	Ladders must rest on side rails

NOTE: Use for orientation, training and perform periodically during project; **Copied to: Project & Head Office**

Electrical Safety – Operations Near Powerlines Procedures

Project	**Powerline Location**	**Powerline Voltage**
Supervisor	**Date**	**Time**
Work to be Performed		

Procedures

❑	Step	Action	Description	
❑	1	*Supervisor and operator* identify areas where operations may encroach on absolute limit of approach	❑ Identify potential hazard zones where loads may be in danger of contact with electrical lines ❑ Absolute limit of approach depends on line voltages, but are generally:	
			10 ft. (3m)	750 – 150 000 volts
			15 ft. (4.5m)	150 001 – 250 000 volts
			23 ft. (6m)	> 250 000 volts
❑	2	*Supervisor* contacts electrical utility	❑ Consider shutting down or moving the powerline ❑ Consider having the electrical utility cover the lines for protection	
❑	3	*Supervisor* posts signs	❑ Signs posted in conspicuous locations warning of danger due to overhead electrical wires	
❑	4	Assign and use a *signaller* if equipment is within reach of electrical lines	❑ Use a qualified signaller with an audible alarm who is: in full view of the operator, in clear view of the powerlines, and is in constant verbal communication (ie. two-way radios) with the operator to warn the operator if the equipment is approaching the lines ❑ The signaller will wear protective equipment that distinguishes him from all other workers	
❑	5	Keep all others away from the area	❑ Except for the operator, keep all personnel well away from the equipment if it is working close to the powerlines ❑ Ensure that no one touches the equipment	
❑	6	Avoid using taglines	❑ When hoisting, do not use taglines unless the load can spin into the powerline	
❑	7	*Operator* should slow down equipment operating cycle	❑ Reduce hoisting, booming, swinging and travel speeds to ensure equipment is in control	
❑	8	*Operator* must stay with equipment	❑ If the equipment (ie. a crane) can enter the absolute limit of approach, it must be attended at all times	

Completed by:	**Communicated to:**