OCCUPATIONAL HEALTH & SAFETY MANUAL

2026

SKYLINE
CANADA INC.

RESPONSIBILITIES & INTRODUCTION

Occupational health, safety and environmental policy are based on the internal responsibility system. This system gives the stakeholders specific legal duties and rights as they pertain to health and safety. These duties and rights are clearly spelled out in the Occupational Health and Safety Act, the Workplace Safety and Insurance Act, Environmental Protection Act, and other applicable Acts and Regulations. This booklet is designed to highlight and guide all employees in fulfilling their duties and responsibilities.

DUTIES, ACCOUNTABILITY & RESPONSIBILITIES

PROTECTIVE DEVICES & WORK PRACTICES

Responsibility — President

The president has the responsibility of ensuring that all aspects of the Health, Safety and Environmental policies and programs are being applied at the operational levels and the program is being managed effectively. The President maintains overall control and direction of the health, safety and environmental program and may amend the objectives, policies or goals as required. The President shall review the results of the health, safety and environmental program annually.

Responsibility — Executive Managers

Executive Managers are responsible for ensuring all established health, safety and environmental programs and policies are being communicated, administered and enforced in their respective areas or divisions of responsibilities. When a worker has been injured and requires modified work, the placing of that worker in a suitable job may require the assistance of the Executive Manager, if it cannot be done at the occurrence location.

Responsibility — Managers

Managers will assist the Executive Managers in ensuring that all employees are aware of the corporate and customer established health, safety and environmental programs as they apply to the work being executed under their guidance. You must ensure that the direct supervision of our employees is "competent" as defined by the various legislations, where

as, they have the proper training and support to execute work with the highest level of safety and respect for the environment.

Work with the corporate health and safety department to ensure that the necessary hazard assessments, safety communications, training and reporting of injuries and incidents, as outlined in our program, are completed in a timely and efficient manner, implement the procedures/corrective actions identified by the corporate safety department in order to prevent any recurrences of the accident, incident or environmental spill.

The managers play a key role in the returning to work of an injured worker and are responsible for the treatment and rehabilitation of injured workers on the projects or worksites for which they are responsible.

Management support and commitment are essential for our programs to succeed. You must insist on compliance with the appropriate customer and legislated requirements for our employees and the customers' employees, as well as the general public.

Responsibility — Supervisors

All supervision of direct labour must be a "competent person" who, because of their special knowledge in health, safety and environmental requirements will be able to direct our labour to execute work while minimizing the risks of injury or environmental damage. The corporate safety officers will assist with any training; provide programs and resources to ensure that our supervisors are "competent".

The supervisor is accountable and responsible to notify the corporate safety department and to investigate and complete the necessary forms for all: incidents, accidents and environmental spills, as well as take the necessary corrective action to prevent a reoccurrence. All new employees must be orientated as to the hazards on the project or location before starting work.

> All work; tools and equipment must be inspected at least weekly by the supervisor. This inspection will ensure that corrective measures can be taken to ensure we are minimizing the risks of injury or environmental damage. Any time that an incident occurs that puts a worker or a customer at risk, the supervisor must conduct an investigation as to the cause and assist the safety department with a written investigation.

Responsibility — Corporate Safety Department

The corporate safety department is your key resource to all health and safety related issues. They have the responsibility of maintaining, updating and enforcing the corporate health and safety program, tracking worker training, arranging site and general training of our employees. By inspecting worksite locations, the safety officers will identify potential hazards and make recommendations to control those hazards. When necessary, the corporate safety department will outsource and obtain the expertise to comply with the appropriate legislation or customers' requirements with respect to health, safety and environmental issues.

The key to accident and injury reduction is worker awareness of hazards and methods of controlling those hazards. The corporate safety department will supply site-specific safety training materials and general safety information to all employees monthly.

All accident, incident, injury and environmental spill reports will be reviewed, tracked and recommendations made to all levels of management quarterly.

When a worker is injured, the corporate safety department will provide the necessary support to deal with the injury, such as; arranging for medical treatment, doctor reports and restrictions, functional ability assessments, obtaining medical aids, dealing with external notification and reporting (*Ministry, Workers' Compensation, etc*.).

Reasonability — Health and Safety Representatives

As a Health and Safety Representative, your main role is to help improve health and safety conditions in the workplace. To this end, you have certain powers and responsibilities, as outlined in the Occupational Health and Safety Act.

You have a duty to inspect your workplace, as outlined in the Occupational Health and Safety Act, which is the primary way for you to identify hazards. The workplace inspection shall be completed using the "Workplace Inspection Recording Form" and submitted to the Project Safety Committee. We will provide the information pertaining to the health and safety of an operation or material that we or our sub-contractor uses. If any questions arise about the effect of health and safety on a particular product, material or procedure, contact our safety department.

If a worker is killed or critically injured on the job, you have a right to inspect the place where the accident occurred, as well as any machine, device or thing. You must report your findings in writing, to a Ministry Director. Furthermore, you have the opportunity to join an inspector while they inspect your workplace.

In the event of a work refusal, you have the duty to become involved in the investigation and resolution of that work refusal.

You have the power to identify workplace hazards that may be associated with machinery, tools and materials used in the workplace, the production process, working conditions or anything else that may be of danger to the health or safety of workers. You must report your findings to your manager. We, as your employer, will respond in writing within 21 days to any written recommendations you make. We request that you use our Occupational Health and Safety Representative Action Report Form, when making those recommendations.

Responsibility — Subcontractors

All subcontractors shall be responsible for ensuring compliance by its employees to the duties set forth in the Occupational Health and Safety Act and its Regulations as they apply to the Company. Furthermore, the subcontractor shall ensure that they are providing adequate supervision to ensure; job specific hazard training, accident investigation, weekly inspection of their tools, equipment, machinery and fire protection for defects or hazards. Injuries resulting in the worker losing time off work shall be reported to us within 24 hours. Injuries resulting in the necessity of emergency services shall be reported immediately to our Manager.

Any subcontractor who fails to ensure that they, or their employees, are complying with the prescribed duties and responsibilities, as outlined in the Occupational Health and Safety Act and its Regulations, resulting in our company being prosecuted and fined for those failures, shall be held wholly responsible for all legal costs and fines. These costs and fines will be deducted from our transfer of payments or holdback to the offending subcontractor.

Before beginning work at a project, each contractor and subcontractor engaged in construction work shall complete the Registration of Constructors and Employers Engaged in Construction form as required by the Ministry.

A copy of the form is to be kept at the project until the contractor and the subcontractor have completed the work.

We also require a valid Workplace Safety and Insurance Board Certificate of Clearance be given to us before any work begins by that subcontractor and when each progress draw is made. In addition, only those subcontractors who are registered with the WSIB will be permitted to work for us. Furthermore, all hazardous materials regulated by WHMIS legislation, shall be reported to us along with a valid copy of the MSDS for that product.

We expect all subcontractors to abide by the policies outlined in this booklet, as well as any additional health and safety requirements made by the general contractor or owner.

Employee Pre-Construction Safety Checklist

The purpose of the "Employee Pre-Construction Safety Checklist" is to ensure we have a record of safety information as supplied to newly hired employees. Our "Due Diligence" Safety checklist is designed to help ensure we have provided orientation for a new worker.

GENERAL INSTRUCTIONS

As each item is covered, simply "x" off that item. If an item is not applicable, strike it out. If one item has some specific detail worth noting, write any notes on the back. When the list has been completed, have the worker sign it, as well as the Manager or supervisor and email it back to the head office.

Details:

1. Safety Policy Provided & Signed by the Worker — Give the worker a copy of our Safety Policy and return the acknowledgement page. If the owner or contractor has a rulebook or policy' booklet for the workers, note that you gave the worker a copy as well.
2. Safety Representative Identified — Introduce the Safety Representative and explain their function and how they relate to the worker.
3. Joint/Worker Safety Committee — Explain who the Safety Committee Members are and how they relate to the worker.
4. Emergency Procedure Reviewed — Review the site emergency procedures for fire, accidents, injuries and any special emergency procedures specific for that site.
5. Safe Work Practices/Job Duties Reviewed — Review any written or unwritten safe work practices, engineering drawings/instructions relating to the job duties and/or tools or protective equipment. On some projects, these procedures, engineering drawings instructions, may be for asbestos abatement, roof anchor safety systems, hoisting, fall protection, etc. Explain the job duties, the hazards associated with the work and the safe work practices to control the risks.
6. Employee Orientation — If there is an orientation session held by the owner or contractor; attach any details of the orientation training.
7. Personal Protective Equipment — Review the requirements in any specific area for these items. Make sure that each worker is made aware of our policies requiring CSA approvals on worker supplied protective equipment.

8. Parking, Washroom and Eating Facilities — Point out the locations for parking, washrooms, and showers, smoking areas, eating areas, garbage, recycling and clean up stations. Review the site rules for the use of these facilities.
9. Housekeeping Requirements — Location and segregation of the different types of waste containers. Explain the types of task lighting available and how to obtain these lights.
10. Tool & Material Storage Locations — Review the storage locations of tools, parking areas of hydraulic access lifts, manlifts, scaffolds, etc. Explain how we tag defective tools and equipment and where to put the defective ones for repair or disposal.
11. Waste and Environmental Spill Procedures — Review site policy on waste disposal. Explain spill reporting and cleanup procedure.
12. Landing Platforms — Explain the locations and capacities and safety requirements of the landing platforms.
13. WHMIS Basic Training Verified — Have the worker present his WHMIS card. Remember, we are responsible to review the WHMIS training on an annual basis.
14. MSDS Location Reviewed — Point out where we keep the MSDS's and how the worker may access them.
15. First Aider Identified — Review who the first aid person is for our company and for the project. If there is a first aid station, review the procedures for obtaining first aid.
16. Job Site Address, Telephone Number & Contact Person — Give the worker one of the cards with the site address and telephone number. These cards are obtained by calling the Safety Department. The worker should know how to contact the Manager or Supervisor if they are unable to work because of illness or injury. Also, if the worker's family must get in contact with the worker, they should have a contact number.
17. Off Site Medical Facilities Location — Explain how we use the pre-arranged medical facilities located near the jobsite. Show the worker the address and map of the clinic for future use.
18. Open Hole Protection Requirements — To prevent injury, ensure no holes are left open or uncovered.
19. Accident Reporting & WSIB Procedures — Review how the employee reports any injury, accident, incident or hazard. Explain our modified work program, "dear doctor" letter for WSIB procedures. Stress that the worker must inform us of all injuries.
20. Discipline Form & Policy Reviewed — Review our policy and that of the owner or general contractor for violation of safety rules or site rules.
21. Fire Protection Requirements — Some projects have requirements for "Hot Work Permits" and fire watches. If this is the case at your project, explain the procedures to the new employee. Review our requirements for fire extinguishers, fire safe work areas, etc.
22. Barricades & Signs — Review what and where our barricades and warning signs are. Explain how the worker can obtain these materials. It is strongly recommended we review the need for properly replacing any barricades.

23. Toolbox Safety Talks — Although the IHSA does not specify the frequency of "Toolbox Safety Talks", we are required to review the hazards of the project with each employee at that site. Explain the frequency forum and contents of our Safety Talks.
24. Fall Arrest Procedures Reviewed — Each project has specific fall hazards. We must ensure that before any worker uses or wears any fall arrest, they are trained in the hazards, limitations, correct fit and use. All workers who are exposed to fall hazards, must be trained.
25. Worker Competency Established — These are a sample list of hazards that may or may not require site-specific training on. Establish what level of experience that this particular worker has with these items or other specific hazards at your project. Some items, such as hydraulic access lifts, require a certificate. The forms are available from the Safety Department and are included in the supervisors Safety Kit.
26. PPE Supplied by the Worker — It is possible that some workers will supply their own PPE, such as hardhat, safety boots or fall protection equipment. If a worker does supply their own PPE, it must conform to our standards and be fit and suitable for use on your project. If the worker supplies his own harness and/or lanyard, an additional checklist (*Employee Supplied PPE Checklist*) must be completed.
27. Occupational Health and Safety Manual — The worker has received, reviewed and acknowledged receipt of the manual.

ACCIDENT/INJURY RESPONSE PROCEDURES

For a Minor Injury Requiring Only on Site First Aid

1. The worker must obtain the necessary first aid.
2. The first aider must record the first aid treatment given in the "First Aid Logbook".
3. The first aid kit contains all the injury Report Forms.

For a "No Lost Time" Injury Requiring Medical Aid (*A Visit to a Doctor or Nurse*)

1. The worker must obtain the necessary first aid.
2. Transport the worker by the most effective means to the nearest hospital or doctor's office that can handle the injury
3. The supervisor shall complete the WSIB Form 156 "Treatment Memorandum" (*for Ontario only*) or the applicable form for the province of the work and send it to the treating physician or hospital.
4. The Functional Abilities Form for Timely Return to Work shall be completed and sent with the worker to the treating health care provider. This form will outline the restrictions for us to follow.

5. The supervisor shall completely fill out a WSIB Form 7a (*Ontario only*) or the applicable form for the province of work and ensure the cause(s) and the steps taken to prevent this accident are stated. Indicate on the WSIB Form 7a; “No Lost Time” and include the name and address of the treating physician or hospital.
6. If a worker refuses medical aid during their shift, but later seeks medical attention by their own physician or other treatment facility, the worker must inform his supervisor of the details of the visit and must ensure that the following information is provided to the supervisor; name, address, telephone number of treating facility, name of the attending doctor or nurse, nature of the injury, restrictions and treatment prescribed. If the treating facility provides a letter to employers of the above noted purpose, we request that the worker obtain such a letter. Any out-of-pocket expenses relating to the injury should be documented and presented to us for reimbursement.
7. The supervisor shall email the completed copy of the WSIB Form(s) to the Safety Department, skyline@skylinecanadainc.com who will notify the WSIB, Ministry and any other off-site personnel or agencies as required of the accident.
8. The supervisor must consult with the Safety Department before they submit a copy of the “Notice of Injury to the Joint Health & Safety Committee” to the health and safety representative, committee, contractor or owner of the project. This is to protect the privacy of the worker, as some information may not be given out by the employer without the employee’s approval.

Injury When a Worker is Unable to Work Beyond the Day of Injury "Lost Time"

1. The worker must obtain the necessary first aid.
2. Transport the worker by the most effective means to the nearest hospital or doctor's office that can handle the injury.
3. The Functional Abilities Form for Timely Return to Work shall be completed and sent with the worker to the treating health care provider. This form will outline the restrictions for us to follow.
4. The supervisor shall complete the WSIB Form 156 "Treatment Memorandum" (*Ontario only*) or the applicable form for the province of work and send it to the treating physician or hospital.
5. The supervisor shall completely fill out a WSIB Form 7a (*Ontario only*) or the applicable form for the province of work and ensure the cause(s) and the steps taken to prevent this accident are stated. Indicate on the WSIB Form 7a; "Lost Time” and include the name and address of the treating physician or hospital.
6. The supervisor shall complete an accident investigation, as well as the corresponding WSIB forms and email them to the Safety Department at skyline@skylinecanadainc.com the same day.

7. Obtain copies and send to the Safety Department at skyline@skylinecanadainc.com any accident reports produced by the owner, contractor or other investigating party. If the Ministry investigates, send copies of any reports they produce (*even if they are not written or intended*) directly to the Safety Department at skyline@skylinecanadainc.com
8. Make specific note of any other contractor that may have been involved in the causation of the accident injury.
9. The supervisor shall complete the employer section of the "Functional Abilities Form for Timely Return to Work" outlining the modified work we have on site. Send this form along with the "Dear Doctor" letter to the treating medical centre.
10. The supervisor shall inform/review the modified work program with the injured worker.
11. The supervisor shall email the completed copy of the WSIB form(s) to the Safety Department skyline@skylinecanadainc.com who will notify the WSIB, Ministry and any other offsite personnel or agencies as required of the accident.
12. The supervisor must consult with the Safety Department before he submits a copy of the "Notice of Injury to the Joint Health & Safety Committee" to the health and safety representative, committee, contractor or owner of the project. This is to protect the privacy of the worker, as some information may not be given out by the employer without the employee's approval.
13. If the injury requires that the worker be taken to a hospital by an ambulance or the injury is considered critical, contact the Safety Department at 647-928-7233 ASAP at the head office for instructions.

CRITICAL INJURY

If the injury requires that the worker be taken to a hospital by ambulance or the injury is considered critical, contact the Safety Department at 647-928-7233 ASAP for instructions. The following procedures are addition to those listed for a "Lost Time" injury noted previously.

1. Get help. Assign the necessary task to specific personnel.
2. Protect the accident scene from continuing or additional hazards, de-energize electrical power, etc.
3. Get the injured worker first aid.
4. Call 911 or other emergency service as directed for an ambulance, police and/or fire rescue. Tell the operator you have a critical injury on your project.
5. Transport the injured worker to the hospital. Ensure a representative of the company accompanies the injured worker.
6. Secure the accident site. Try not to disturb anything except for the rescue of the injured worker or for the protection of the other workers.

7. Contact the Safety Department ASAP at (647) 928-7233 (*safe*). They will assist you and will contact an officer of our company.
8. Contact the Ministry for your area (*the telephone number can be found in the back of the provincial Occupational Health & Safety Act and Regulation, or the number is on emergency telephone number poster on each site*). Record the telephone number called, the time and the person's name you spoke to. Use the "Critical Injury Record" Form, if possible.
9. Contact the health and safety representative, contractor or owners' safety officer.
10. The accident will be investigated by; the police, coroner, Ministry supervisor, the Safety Department, the joint health and safety committee, and/or safety representative as required. The worksite or equipment can only be put back into service after the Ministry has given permission to do so.
11. Coordinate with the police about who will contact the next-of-kin.
12. Document as much as possible and as soon as possible such that accurate facts can be compiled, as critical injuries will almost always result in someone being charged by the Ministry.
13. Follow the procedures for completing the WSIB Accident Investigation reports noted earlier

RESPONSIBILITY FOR INVESTIGATING ACCIDENTS/INJURIES

The supervisor must investigate all accidents and incidents that involve Skyline workers. This includes taking pictures, filling out accident/incident reports, taking statements from witnesses and ensuring the injured worker has received the necessary medical aid. The supervisor must also advise the contractors' safety presentative of the details of any injury. The supervisor should contact the injured worker as frequently as the injury deems, but at least once a week. Report any changes in the worker's condition to Tyler McFadden as you see fit.

In the event that the accident involves a critical injury, the supervisor is required to submit to the Ministry (*Ontario only*), in consultation with Tyler McFadden, within 4 days after the occurrence, a report written by a professional engineer stating their opinion of the cause of the accident.

RESPONSIBILITY FOR INVESTIGATING INCIDENTS

Incidents are investigated in the same manner as an accident resulting in an injury. The only difference between the procedures is an incident does not involve an injury to a worker. Incidents or near misses can just as easily result in a serious injury to a worker.

Incidents are defined as an uncontrolled and undesired event that has the potential of causing an injury to a worker or a loss of property. All employees are strongly encouraged to report any incidents where they feel an event has occurred that may have otherwise caused an injury. All employees have the duty to report known hazards to their employer. Never wait to report hazards. Unreported hazards will always result in an injury.

The supervisor shall complete the "Hazard Incident" report form and submit it to the Safety Department and the representative for the contractor or owner if it involves any worker in their control.

FIRST AID/CPR

All supervisors must be trained and certified in first aid and CPR. All employees at each work site must be informed of who is trained and certified in first aid prior to starting the project. Post a list of the names near the first aid kit for quick reference.

All work sites and buildings are to have approved first aid kits. They should be located in an area that is accessible to all employees. Employees should be made aware of this location and the inside contents. Each first aid kit must be inspected quarterly and have a record of inspection card. For every work site, a supervisor must already be trained in the administration of first aid and hold a certificate.

1. Be sure that action is taken to furnish proper treatment immediately for all injuries.
2. Report injuries to your supervisor immediately.
3. A fully equipped First Aid Kit must be furnished by the employer at a jobsite, as well as a trained First Aider.
4. Know the location of the First Aid Kit. All projects must have trained First Aiders on site at all times and for each shift whenever we have at least 5 employees on site. Those who operate vehicles equipped with First Aid Kits must be trained as First Aiders.
5. Report to your supervisor if the First Aid Kit is missing, or if any of the materials are out of stock.
6. First Aid Kits are to be inspected on a regular basis, at least once every 3 months. The person in charge of the first aid kit shall inspect the contents and record the inspection on our First Aid Kit Inspection Record card. First aid kits are to be inspected by a trained first aider.

The telephone numbers of a doctor, hospital and ambulance service must be posted at each jobsite along with the name and location of the First Aider. Know where these telephone numbers are.

MODIFIED WORK PROGRAM

It is our policy to gainfully employ and return an injured worker back to their pre-injury job, by providing them with light duty or modified work that will not infringe upon the injury and that will not prove hazardous to fellow workers. It is our position that when a valued worker has suffered a workplace injury, we shall do our utmost to co-operate with the worker, the health provider and the WSIB, ensuring that the worker has the opportunity to be gainfully employed again.

Your cooperation will help keep our employees fully employed when they have sustained minor injuries. When an injury occurs that prevents an injured worker from performing their normal duties, we will offer various forms of light duties or modified work at that project or at another location. Modified duties will be cleared with the worker, supervisor and the treating physician to ensure that the appropriate measures are instituted. The supervisor will conduct follow-ups on the employee's physical progress with the treating physician. The supervisor will also ensure that the employee receives additional training pertaining to their area of expertise. The employee will also be monitored on their progress in the modified position so that they can return to their initial work.

After an injury has occurred, the injured worker will be contacted by their supervisor of the company's Safety Department. A "Functional Abilities Form for Timely Return to Work" form (*#2647A in Ontario*), Form 8 — Physicians Report (*Health care provider*) and Form 6 — Worker's Report of Injury, provided by the WSIB. These forms will outline the physical restrictions and instructions to be observed during their return-to-work program or modified work program and provide the WSIB with information pertaining to your injury.

These forms must be completed by the listed parties and sent to the WSIB, either by fax or mail.

> The WSIB now requires that the injured employee apply for "Lost Time" or "Loss of Earnings" benefits. In order to obtain those benefits, employees must cooperate with the employer by authorizing the release of their "Functional Abilities".

RESPONSIBILITIES

Workers Responsibilities

1. When you are injured, obtain the proper medical treatment.
2. Inform your employer as soon as possible after the injury and communicate on a weekly basis throughout your recovery. Keep them informed of your progress and status.
3. Assist your employer in identifying suitable modified work during and after your recovery. The Functional Abilities form will help identify task limitations.
4. Provide the WSIB with any information requested.
5. Cooperate with the employer and the WSIB in your early and safe return to work.
6. Report material changes in your status within 10 days. This includes any significant change in your medical condition or income.

Employers Responsibilities

1. Contact the worker as soon as possible after the injury.
2. Maintain communication throughout their recovery and return to work program.
3. Re-employ the worker.
4. Attempt to provide suitable work that is; safe for the worker, restores the worker to their previous earnings as closely as possible. Also determine what the workers abilities will allow, and the skills that they have.
5. Provide the WSIB with any information requested about the workers return to work.
6. Cooperate with the worker and the WSIB in the early safe return to work process.

SUGGESTED STANDARD RESTRICTIONS

These restrictions are meant to be very general. If specific restriction or absolute restrictions are required, they should be supported by a Functional Abilities Evaluation/Medical Support.

DISCIPLINE

Failure to follow any of the contractors, project owners or Skyline written safety policies and procedures or rules, can lead to disciplinary actions. Depending on the nature of the violation, the discipline can lead to discharge.

TRAINING

All workers are required to be aware of the hazards of the particular work that they are about to perform. It is the employer's responsibility that the workers are made aware of a potential hazard. The best way to communicate the hazards of the work and the preventative measures is by training. Some training will be specific to machinery such as manlifts and scissor lifts. Other training will deal with the hazards of the workplace such as orientation training, job box talks and, in some cases, will deal with potential hazards, WHMIS, confined spaces and propane safety.

We, the employer, will provide the time and resources to train all workers on the hazards of the project. This will require the use of specialists, experts, videos, demonstrations, written tests and periodic review of the workers performance. All employees are encouraged to speak-up at any training session or at anytime if they feel that the materials presented are not fully understood.

The training that employees will receive is based on legislation and job site specific requirements. Prior to performing a certain job, (*i.e. confined space work*) the employee involved will have the appropriate training. The following is a current list of training that is available to employees which is related to our company's activities.

1. Advanced Fall Protection
2. Basics of Supervising
3. Basics of Supervising — Federally Regulated
4. Basics of Supervising — Home Study
5. Certification — Construction
6. Communication Seminar
7. Construction Health and Safety Officer
8. Construction Health and Safety — Basic
9. Construction Health and Safety — Intermediate
10. Construction Health and Safety — Home Study
11. Construction Health and Safety Representative — Home Study
12. Construction Health and Safety Representative — Part 1 Certification
13. Construction Health and Safety Representative— Part 1
14. Contractor Safety Essentials
15. Elevating Work Platforms
16. Federal Health and Safety Competence Training
17. Gold Seal Health and Safety Preparation Coarse
18. Health and Safety Policy and Program Awareness

19. Hydraulic Aerial Equipment
20. Incident Investigation and Reporting Awareness
21. Ladder Handling Hands On
22. Managing Health and Safety in Construction
23. Occupational Health and Safety Act
24. Personal Injury Investigation and Reporting
25. Personal Protective Equipment
26. Propane in Construction
27. Propane in Construction Instructor Workshop
28. Rescue Techniques
29. Simulated Hazard Analysis — Construction
30. Suspended Access Equipment
31. Suspended Access Equipment Users' Hazard Awareness
32. WHMIS
33. Fall Arrest
34. Window Cleaning
35. Working at Heights — Fundamentals of Fall Prevention
36. Working at Heights — Fundamentals of Fall Prevention Instructor Workshop
37. Working at Heights and Rescue
38. Workplace Inspection/Hazard Recognition

Additional training will be provided as required by law or job specified.

TOOLBOX SAFETY TALKS

It is the responsibility of the supervisor to ensure that toolbox safety talks are given to the employees on site once per week. Documentation of the safety meeting should include: the names and signatures of each employee in attendance, date, time, and topic to be covered and any comments that employees may have about the topic being discussed. The talks are to promote safety awareness in the workplace and encourage employees to actively participate in health and safety matters.

WORK REFUSAL

All workers have the right to be able to perform work in a manner, which does not endanger themselves or others. If any worker feels that the work they are about to perform or the equipment/tools will endanger themselves or another worker, they must immediately report the unsafe condition to their supervisor. If the worker and supervisor cannot resolve the

issue to the satisfaction of the worker, then the worker has the right to refuse that particular work as outlined in the Occupational Health and Safety Act.

It is in the best interest of all parties to avoid work refusals and to resolve any health and safety concerns (*thereby avoiding a work refusal*) by discussing them with our management team. However, if the safety concern(s) fails to be resolved, the following is a guide in the event of a work refusal:

1. Report the work refusal to your supervisor stating the reason(s) for the refusal.
2. The supervisor shall notify the workers' Health and Safety Representative of the refusal and together with the worker, investigate forthwith the reasons for the refusal. Use the "Work Refusal Reporting Form" to record the details of the investigation.
3. Until the supervisor, workers' Health and Safety Representative and the worker have completed the initial investigations, the worker shall remain near his work area in a safe place.
4. If the work refusal is not resolved at this point, also called "Stage 1", then the provincial health and safety inspector shall be called. Until advice is obtained from the provincial health and safety inspector, follow the requirements for reassigning the refusing worker(s) that are outlined in the Occupational Health and Safety Act.
5. Work refusal advice may be obtained over the telephone by calling the Safety Department at 647-9287233 and/or the workers' health and safety representative.

If there is no health and safety representative for the worker, the worker may choose a representative from the workplace.

The events that follow the conclusions of the initial investigation (*Stage 1*) will follow those procedures as outlined in the Occupational Health and Safety Act depending on the outcome and resolution of the workers' refusal. However, until the conclusion of the initial investigation noted above, no other worker shall use or perform work on the equipment or area that resulted in the work refusal.

No representative of the employer will take any sort of reprisal against the worker for refusing to work.

EYE PROTECTION

Refer to — OHSA Regulations for Construction Projects or Industrial Establishments — Eye Protection.

Eye protection must be worn at all times when on a construction site. This will provide protection when there is a danger from chipping, drilling, grinding, cutting, welding, flying particles of dust, acid or toxic fluids, working overhead and in any other situation where there is a risk of an eye injury.
Wear appropriate protective eye and face protection when exposed to flying chips, sparks, metal filings, or when machinery or operations have the risk of potential eye or facial injuries from physical, chemical or radiation agents. Workers should keep in mind that depending on the hazard, a combination of face and eye protection may be necessary. When using a combination of eye/face the lens next to the eye must be CSA approved.

Eye injuries rank as one of the main causes of WSIB claims. The eye hazards at some projects are such that we must take particular care in choosing the correct standard eye protection. All eye protection must meet the CSA Z94.3 standards — Industrial Eye and Face Protectors. Besides frontal impact, the eyes are at risk from materials entering from the sides. When purchasing prescription eye protection, request either of the following models as they offer the best all round eye protection:

- Ovex Model 1900 "Skypers" with 6-point curves
- Eagle Eye guards, Eurolite 7900, Nassau's

HAND PROTECTION

Wear proper gloves when handling rough, sharp, hot or toxic materials likely to cause hand injury. Gloves are made from different types of materials to provide protection in different situations. Choose the right kind and discard when they become worn or damaged. When working with liquids, it is important to know that the glove used will not become damaged by the liquid. Consult the MSDS for the correct glove material to be used.

Use and Inspection of Gloves

1. Gloves must be "Certified" by a recognized agency before being used for the first time, then every 4 months after the first use of gloves.
2. Visual inspection of the gloves before use is mandatory. They must be inspected over the entire surface for any abnormalities. Roll gently between the hands to expose defects and imbedded materials. Check gauntlet, and the working area of the glove for any defects.
3. Air test gloves to ensure that no unseen pin hole leaks or punctures are present. The air test is done by rolling the cuff tightly toward the palm so that the air is trapped inside the glove. This inflates the glove and air will leak out pin holes and punctures to indicate a leak.

4. Gloves shall be kept clean of any chemical, oil, grease or any damaging substance.
5. If a rubber glove has two colour construction and either colour can be observed from opposite side, then this indicates a hole or defect, and the glove should be taken out of operation.
6. Gloves shall not be marked nor have any adhesive labels applied to them.
7. Any defect of any kind should be reported to your supervisor and taken out of service. These gloves should be marked and identified so that they cannot be used by anyone else.
8. When in doubt of the inspection, do not use. Contact your supervisor for guidance.

Not all gloves are one size fits all. Make sure that you get the proper size glove for a fit that ensures a good grip and safety. To ensure your safety, make sure that you have the correct glove for the work to be performed. Inspect the glove for defects, and any defects found, report them to your supervisor immediately. Do not take any chances in wearing the wrong glove, your safety comes first.

For the safe use of chemicals, read the MSDS on that particular product. Gloves will be provided for the handling of chemicals. Inspect all gloves prior to use for any defects such as; snags, cuts, wear and tear, and obvious defects. Any gloves having any defect should not be used and reported to the supervisor. Another pair of gloves suited for the task will be given to the employee for handling that chemical. Store gloves in a cool, dry storage area. Do not store gloves in a bent shape, this will crease the glove and decrease its effectiveness. Always wash off excess chemicals, oils, and grease. Throw out any gloves that have any visual signs of wear and tear. Not all gloves are one size fits all. Get the proper size for your hand for completing the task. If in doubt of the required glove to use for that chemical, contact the Safety Department for further information and guidance.

HEAD PROTECTION

It is our policy that every worker shall wear protective headwear at all times when on a construction project, or appropriate head protection when the risk of head injury exists if not on a construction project. All construction projects and some other projects require the use of CSA Class "E" approved hard hats or special ANSI approved hard hats for high temperature locations. All workers are required to wear hardhats that are either "Class E" protective headwear under the CAN/CSA-Z94.1-92 (*RI 998*) standard, ANSI approved, or another standard that affords equal protection. A specific colour may be required on some projects. On some projects we may require that only a specific CSA approved hardhat be worn and of a specific colour. Chin straps, winter liners, brow pads and other attachments are also available to improve the comfort and protection to the user.

The protective headwear shall comply with the following:

- Hardhats may be used up to 5 years after being manufactured.
- Hardhats must be replaced after being subjected to impact.
- Hardhats must be replaced if deep cuts or scratches are present.
- Hardhats must not be painted, as paint can weaken the plastic.
- Never remove the Styrofoam liner, as this will reduce the side impact protection.
- Use chin straps when high winds are encountered or as the situation dictates.

Stickers on hardhats do not weaken the plastic, however some marking pens might. Never paint a hardhat as the solvents in the paint may weaken the plastic.

Hardhats are generally made from polyethylene plastic. Some have Styrofoam liners; these components will weaken when exposed to heat. Hardhats must be made from suitable materials for the work being undertaken and the environment they are being worn in.

CLOTHING

Refer to — OHSA Regulations for Construction Projects, Industrial Establishments — Personal Protective Clothing, Equipment and Devices

Wear the proper clothing for the job. The key is your protection, from heat, impact, chemical, biological hazards and cold. Generally, we require full-length trousers without cuffs, natural fibres and with a shirt, keeping shirttails tucked in. Shorts, tank tops, muscle shirts, or cut-offs do not provide suitable protection for the body from scrapes, abrasions and sunburns. Therefore, shirts must have at least 3-inch sleeves and full-length trousers must be worn at all times while on the site. Wear long sleeve, buttoned shirts and gloves when doing such work where flammable liquids chemicals or acids are present.

When working with chemicals or in a hazardous environment, consult the MSDS for the correct type and material of clothing. In some cases, chemical resistant coveralls, totally encapsulated suites or fire-retardant clothing may be prescribed by Skyline. If this is the case, you will receive instructions on the correct fit, use and storage of the protective clothing.

When on the work site, workers must protect themselves by wearing the proper protective clothing to prevent contact with some of the following:

- A hazardous substance in the form of a liquid, gas, fumes, or mist.
- An object that might puncture cut or abrade the skin.

- A hot object or hot liquid.
- Radiant heat.
- Ultraviolet A or B radiation.

Do Not:

- Wear rings or jewelry on the job – enjoy them away from work. Gold and silver rings are great electrical conductors. In some cases, jewelry can be caught in the workings of machinery or descent control devices causing the finger to be pulled off.
- Wear torn, ragged or loose-fitting clothing or neckties while operating machinery or descent control devices.
- Store flammable or hazardous materials in shirt or pants pockets, specifically, butane lighter; spray paint, cleaning solvents, etc.
- Keep sharp tools in any pocket. If a fall occurs, workers have been known to be stabbed by screwdrivers and knives. When possible, use a tool belt.

RESPIRATORY PROTECTION PROGRAM

Skyline has determined that some of its employees may be exposed to airborne concentrations of such hazards as carbon monoxide, asbestos, welding fumes, chemicals, etc. at or above established action levels while performing tasks on our projects or facilities. The purpose of this program is to protect our workers from respiratory hazards. The program is intended to follow the CSA Standard Z94.4-02 Selection, Use of Care of Respirators.

This respiratory protection program applies to all company employees who are required to wear respirators while working at specific job sites and to those who choose to wear respirators on a voluntary basis. Company employees who wear disposable dust masks/respirators are not subject to the medical evaluation, cleaning, storage and maintenance provisions of this program.

Employees who are required to wear respirators shall participate in this program at no cost to them. Employees who choose to wear their own respirators, however, disposable dust masks/respirators will be provided upon request.

Respirators have limits, they place physical stresses on the user and are designed for specific gases, dust or vapour. They come in many types and sizes; disposable dust masks/respirators (*fabric or paper*), removable cartridges, half, full face, hood, powered air purifying, positive air flow, and air supply. One respirator does not protect you from all airborne hazards; they can also become ineffective from over exposure, improper filter media or poor fit. Thus, an

assessment must be made of the hazards, concentrations, and duration of use and physical abilities of the wearer.

Program Administrator Responsibilities — Safety Department

- Identifying work areas, processes or tasks that require workers to wear respirators in cooperation with the site supervisor, owner, contractor, safety committee or other regulators.
- Evaluating respiratory hazards.
- Selecting appropriate respiratory protection.
- Monitoring respirators use to ensure that respirators are used in accordance with their certifications.
- Arranging and/or conducting respirator user training.
- Ensuring proper storage and maintenance or respiratory protective equipment.
- Conducting qualitative fit-testing using one of the following, but not limited to, such fit testing protocols such as, Banana Oil, Saccharin, Bittrex, or some other equivalent testing protocol.
- Administering the medical surveillance program.
- Maintaining records required by the program
- Evaluating the program.
- Updating the written program as needed.

Supervisor Responsibilities

- Ensuring that the program is implemented on the job site.
- Ensuring that employees using respirators understand and follow the program.
- Ensuring that company employees have received respirator use training, fit testing and an annual medical evaluation.
- Ensuring the availability of respirators and accessories.
- Enforcing the proper use of respiratory protection when required.
- Ensuring that respirator users properly clean, maintain and store their respirators.
- Coordinating with the Safety Department regarding all aspects of the program, including any changes to the processes or exposure type.

Employee Responsibilities

- Wearing a respirator when and where required.
- Wearing the respirator in the manner described during training.
- Maintaining the respirator as instructed.

- Storing the respirator in a clean and sanitary location.
- Informing the supervisor if respirator no longer fits and requesting a new one.
- Informing the supervisor or program administrator of any concerns regarding respirator protection.
- Report signs and/or symptoms related to their ability to use a respirator such as shortness of breath, dizziness, chest pains or wheezing.
- Report any changes in workplace conditions that may result in an increased physiological burden on the employees.

Selection Procedures

The Safety Department will select respirators on the basis of the hazards to which workers are exposed and in accordance with all applicable regulatory standards. The Safety Department will conduct a hazard assessment for each operation, process or work area where airborne contaminants may be present in routine operations. The results of the hazard assessment for any job site will identify the hazard(s) and identify the correct respirator protection required for the hazard(s).

Updating the Hazard Assessment

The Safety Department will revise the hazard assessment each time they are informed of a change in the work process that could affect worker exposure.

NIOSH Certification

All respirators used by this company will be certified by the National Institute for Occupational Safety and Health (*NIOSH*). All filters, cartridges and canisters used by company employees will be labeled with NIOSH certification labels. Filters, cartridges and/or canisters that have missing or defaced NIOSH certification labels will be removed from service immediately and discarded.

Medical Fitness Evaluations

Employees who are required to wear respirators will receive a medical evaluation questionnaire before respirator use begins. This questionnaire can be found in Appendix M of this manual. If the results of the questionnaire are unsatisfactory, that employee will not be permitted to work in an area where respiratory protection is required until a qualified medical examiner has determined that the worker is fit to use the respirator.

Medical fitness evaluation procedures are as follows:

- The medical fitness evaluation will be conducted using the questionnaire found in Appendix M. The Safety Department will provide a copy of the questionnaire to all employees requiring medical evaluations.
- To the extent feasible, the company will assist employees who are unable to read the questionnaire. When this is not possible, the employee will be sent directly to the physician or licensed health care provider for a medical evaluation.
- All affected employees will be given a copy of the medical questionnaire to fill out. They will be treated as confidential medical information, as such, when completed by the employee, it shall be sent securely to be reviewed by the Safety Department. Respirator users will be allowed to complete the questionnaire on company time.
- Follow-up medical examinations will be granted to employees if dictated by the results of the questionnaire.
- Any employee required for medical reasons to wear a positive pressure, air-purifying respirator will be provided with a powered air-purifying respirator.

Fit Testing

Fit testing is required for employees wearing respirators for protection against exposure to the hazards identified with respect to each project on an individual basis.

Employees who are required to wear respirators with tight fitting face pieces will be fit tested:

- Before starting work requiring the use of a respirator.
- After any prolonged absents from work (*12 months*).
- When there are changes in the employee's physical condition that could affect respirator fit such as obvious changes in body weight, facial scarring, extensive dental work, etc.

Employees will be fit tested with the make, model and size respirator that they will actually be wearing. Employees will be provided with several models and sizes of respirators so that they can find the best and most comfortable fit possible. In situations where an employee must use a powered, air-purifying respirator, fit testing will be done in the negative pressure mode.

The Safety Department has determined that quantitative fit testing is not required for respirators used under current conditions. If conditions affecting respirator use change, the Safety Department will re-evaluate whether quantitative fit testing is needed.

General Use Procedures

- Employees will use their respirators under conditions specified in this program, and in accordance with the training they received on the use of the respirator they will use.
- All employees will conduct user seal checks each time they wear their respirator. Employees will use either the positive or negative pressure check depending on which works best for them.
- Employees are permitted to leave their work areas to clean their respirators, change filters or cartridges, replace parts or to inspect their respirators. Employees are instructed to tell their supervisor before leaving the work area.
- Employees are not permitted to wear tight fitting respirators if they have any condition, such as facial scars, facial hair, missing denture or any other condition that prevents them from achieving a good sea.

Emergency Procedures

Once the work areas have been identified, as having foreseeable emergencies in areas where the atmosphere will render the user unconscious, then the Safety Department will develop an Emergency Escape Plan. The Emergency Escape Plan will be explained to the employees identified as being affected by foreseeable emergencies.

Respiratory protection in these instances is for escape purposes only. Our employees are not trained as emergency responders and are not authorized to act as such.

Cleaning

Respirators will be cleaned and disinfected regularly at the designated cleaning station located in an area approved by the Safety Department.

Respirators issued for the exclusive use of an employee shall be cleaned as often as necessary, but at least once per day'.

Atmosphere supplying and emergency use respirators will be cleaned and disinfected after each use.
The following procedure will be used to clean and disinfect respirators:

- Disassemble respirator.

- Wash the face piece and associated parts in a mild detergent with warm water.
- Rinse thoroughly in clean warm water.
- Wipe the respirator with disinfectant wipes of 70% isopropyl alcohol.
- Let the respirator dry in a clean area.
- Reassemble the respirator and replace any defective parts.
- Place the respirators in a clean, dry plastic bag.

Maintenance

Respirators will be properly maintained at all times in order to ensure that they function properly and adequately protect the employee. As part of the maintenance program respirators will be inspected for cleanliness and defects. Worn or deteriorated parts will be replaced prior to respirator use. No components will be replaced or repairs made beyond those recommended by the manufacturer. The manufacturer will conduct repairs to regulators and/or alarms of atmosphere-supplying respirators.

Respirators will be inspected for the following:

Face pieces

- Cracks
- Tears
- Holes
- Distortion
- Cracked or loose lenses/face shields

Head straps

- Breaks or Tears
- Broken buckles Valves
- Residue/dirt
- Cracks
- Tears

Filters/Cartridges

- NIOSH approval designation
- Gaskets
- Cracks in housing
- Dents in housing

- Appropriate cartridge for hazard

Air Supply Systems

- Breathing air quality/grade
- Condition of supply hoses
- Hose connections
- Settings on regulators
- Settings on valve

Employees are permitted to leave their work to:

- Wash their faces, and respirator face pieces when skin irritation occurs
- Replace filter, cartridge or canister.
- When they detect leakage in the face piece; and
- For any other damage to the respirator.

Change Schedules

Employees wearing respirators and cartridges shall change the cartridges on their respirators in a manner that is recommended by the manufacturer based on the exposures. The following is a list of three rules regarding this issue, but not limited to:

- Any time they begin to experience difficulty in breathing.
- Any time they smell or taste a chemical substance; and
- According to the schedule recommendations of the manufacturer of the respirator and
- According to the schedule recommendations of the manufacturer of the respirator and filters, cartridges or canisters.

Storage

Respirators will be stored in a clean, dry area in accordance with the manufacturer's recommendations. Each employee will clean and inspect their own air-purifying respirator in accordance with the provisions of this program and will store respirators in plastic bag and place them in a designated area. Each employee will have their name on the bag and that bag will only be used to store that employee's respirator.

Defective Respirators

Respirators that are defective or have defective parts will be taken out of service immediately. If, during an inspection, an employee discovers a defect in a respirator, they will bring the defect to the attention of their supervisor. Supervisors will give defective respirators to the Safety Department, repair the respirator, or dispose of the respirator.

Training

The Safety Department will arrange training for respirator users and their supervisors on:

- This respirator protection program
- Their responsibilities under the program
- The respiratory hazards identified on specific job sites.
- Proper selection and use of the respirators to be used.
- Limitations of respirators
- Respirator donning
- Positive and negative fit checks.
- Fit testing
- Emergency procedures
- Maintenance and storage; and
- Medical sign/symptoms limiting the effective use of respirators.

Employees will be retrained as needed, such as when it becomes necessary to use a different type of respirator. Employee's will be required to demonstrate their understanding of the topic covered in the training through hands on exercises. Respirator training will be documented by the Safety Department, and the documentation will include the type, model and size of respirator for which each employee has been trained and fit tested.

Program Evaluations

The Safety Department will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records.

Problems identified will be noted in an inspection log and addressed by the Safety Department. These findings will be reported to Skyline management and will include recommendations to correct the deficiencies in the program, as well as a target date for the implementation of those corrections.

Documentation and Record Keeping

A written copy of this program is available to all employees who wish to review it. Copies of training records, medical fitness evaluations and fit test records are kept in the Safety Department.

RESPIRATORY TRAINING

HOW TO USE, MAINTAIN AND ADJUST YOUR RESPIRATOR

Respirator Description

Your respirator consists of a half mask facepiece assembly or full-face piece assembly and a pair of replaceable air purifying elements. This provides respiratory protection against hazardous vapors, gases, and/or particulate matter, depending upon the type of air purifying element used.

Those respirators that are properly selected for the specific contaminant that you need to be protected from, will in turn protect you with the following conditions:

- There is sufficient oxygen present in the contaminated atmosphere (*19.5% minimum*).
- Not used for fire fighting.
- Is properly fit tested before use.
- Inspected to see if any defects are visible. If defects are visible, don't use it and bring it to you supervisor.
- See if proper cartridges and filters, or combination of both, are still good before use.

User Requirement

To use your respirator, you must know:

- The contaminants and their concentrations. If these have not already been determined prior to beginning your work assignment, please contact the Safety Department, or your immediate supervisor for this information.
- That this is the respirator approved for use against those contaminants and concentrations. (*In case of doubt, consult an Industrial Hygienist or your immediate supervisor*).
- That the contaminated area is not immediately dangerous to life and health.

- That this respirator fits you properly. (*Should follow CSA Z94.4-02 standard for fit test procedure*).
- That you do not have any physical limitations or illness which would preclude you from using this respirator or be aggravated by an increase in breathing resistance

NOTE: YOU SHOULD NOT ENTER ANY POTENTIALLY CONTAMINATED AREA UNLESS YOU HAVE CONFIRMED ALL OF THESE FACTORS

TRAINING

REQUIREMENTS

- Learn how to inspect it.
- Have it properly fitted.
- Test its facepiece to face seal.
- Wear it in a test atmosphere.
- Was it in normal air for a long familiarity period?
- The training program should be based on CSA Z94.4-02 and other regulations promulgated by various Regulatory Authorities.

FIT TESTING

A respirator should never be assigned to a person unless the person is given a qualitative or quantitative respirator fit test and the test indicates that the face piece of the respirator fits properly.

Only clean-shaven persons can be fit tested. CSA Z94.4-02 suggests fit testing every 2 years, however, they strongly recommend every year.

SEAL CHECKS

Seal check needs to be done every time you put your respirator on, and periodically when you are into the contaminant Atmosphere.

PRE-USE INSTRUCTIONS

Face Piece:

Always visually inspect your facepiece before use. See if sealing surface is not distorted, and components like exhalation & inhalation valve flap are in place and in good condition.

Filters:

If filter pads are required, it should always be assembled before the cartridges, or filter holders are attached to the face piece.

PUTTING ON YOUR RESPIRATOR

First Step:

Remove eyewear, hearing protection or any other safety device. Then grasp the front of the respirator with one hand and the upper headband with your other hand.

Second Step:

Position narrow portion of the respirator on you noses bridge and place cradle suspension on your head.

Then hook the bottom headband behind your neck and adjust it for comfort.

Third Step:

After adjusting your respirator for comfort, you need to do a positive and/or negative fit check.

For cartridges without an ESLI (*End-of-service-life indicator*), a time schedule to establish a change of the cartridges should be put in place or the contaminant should have good warning properties so breakthrough of the contaminant can be detected by human senses.

REPLACING CARTRIDGES

To replace gas, particulate or combination cartridges, unscrew them from the inhalation connectors which are mounted on the face piece, and discard them (*follow local regulations*). Screw on new cartridge tightly to ensure an effective seal between each cartridge and the face piece.

MAINTENANCE

As needed, remove, inspect and clean the facepiece assembly so it will work normally without distortion. If any defective parts are discovered during the inspection, you must take the facepiece assembly out of service until the defective part, or parts, have been replaced with the manufacturer's recommended parts. Follow these steps when performing maintenance:

1. Remove filters/cartridges from connectors.
2. Inspect headbands for wear. Check elastomer and rubber parts for pliability and signs of deterioration.
3. Remove inhalation and exhalation valve, inhalation and exhalation connectors, exhale valve guard, head and assembly from face piece.
4. Prepare the cleaner/sanitizer solution. You may also choose to use a solution of soapy water using Sunlight dishwashing liquid.
5. Wash face piece and parts into cleaning solution.
6. Rinse component completely in clean warm water, then air dry in clean area. If you do not thoroughly rinse your components, the exhalation and inhalation valves may stick in either a closed state, or an open state.
7. Visually inspect exhalation and inhalation valve for damage. If damage is evident, the part must be replaced.

POINTS TO REMEMBER

- You are responsible for the respirator provided to you.
- You are responsible for adhering to the training with respect to the care and use of your respirator.
- Selection of the right filter elements is crucial. Do not substitute an approved filter for another, possibly more readily available filter, unless the substitution has been approved by Skyline Safety Department
- You need to be fit tested before wearing any respirator.
- You need to be in both good physical and psychological condition to wear a respirator.
- You need to get basic training on how to use your respirator.

- Always inspect your respirator before and after each use.
- Always do a seal check (*positive and/or negative*) before entering a contaminated atmosphere.
- Do a periodic seal check while you are working.
- NEVER remove your respirator in the contaminated atmosphere.
- Do a periodic cleaning/sanitizing of your respirator.
- Change parts that are damaged immediately.

HEARING PROTECTION

Hearing protection will be provided and shall be worn by workers in areas where the noise levels exceed 85dBa's for longer than 15 minutes (*Decibels, measured on the "A" weighted scale*). Hearing protection must be worn in any area where air hammers, impact tools and rotary drills are in operation. It is also strongly recommended that hearing protection always be worn when continuous exposure to excessive noise levels is experienced. Your supervisor will have a supply of most types of hearing protection suitable for your project.

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

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

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

SAFETY FOOTWEAR (*BOOTS, SHOES*)

Refer to — OHSA Regulations for Construction Projects, Industrial Establishments — Personal Protective Clothing, Equipment and Devices.

On all construction projects only, the following footwear will be allowed:

Grade 1 Protective Footwear under CAN/CSA-Z195-M92, approved high cut (*6 to 8 inches*) green patch safety boots that are fully laced with is allowed.

The safety boots must be kept in good order. The soles must have treads remaining, the metal from the steel toe must not be showing and the laces must be long enough to lace and tie all the eyelets of the boot. If your footwear is defective in any way, inform your supervisor immediately to have them replaced.

For industrial establishments the risk of foot injury will vary.

WALKMAN/PERSONAL RADIOS, TAPE OR CD PLAYERS

Walkman/personal radios, tape or CD players may appear to cause no form of safety hazard on a project. However, the sound levels these devices produce can exceed 90 dbas', given the levels of background noise the sound levels may be increased to dangerously high levels resulting in hearing loss.

Furthermore, the earphones don't provide any form of hearing protection from background noise, thus only adding to the risk of noise induced hearing loss.

Perhaps the most significant hazard is the masking of warning sounds from fellow workers. Thus, these types of personal devices are not permitted in the construction area.

CONSUMER/HOUSEHOLD 110 VOLT AC. ELECTRICAL DEVICES

Consumer/household electrical devices such as portable radios and T. V's that are not owned and supplied by the company, are not to be used in construction areas without prior approval due to the potential electrical shock. Portable radios produce noise that can mask warning calls from other workers or cause a distraction to others; thus, they are not permitted in the construction areas.

TOOLS - HAND AND POWER (*ELECTRICAL*)

It is our responsibility to supply and maintain shop tools and other power equipment in good condition. It is the worker's responsibility to use such tools properly and to report any defects to the supervisor to ensure repair is initiated and proper tagging of defective tools

is carried out. Whenever practical, all tools should be CSA approved. However, all electrical tools shall be CSA approved.

All efforts will be made to provide tools, equipment and procedures that limit repetitive strains and maintain neutral working positions for all workers.

1. Do not attempt to bypass manufacturer installed safety devices. They are put there for a purpose — your safety. Be sure that safety guards are in working order and in place before operating any power tool.
2. Maintain all hand and power tools, and similar equipment, whether furnished by the employer or employee, in safe, top-notch condition.
3. Keep tools and accessories clean and sharp for best performance. Follow instructions in the user manual for proper lubrication.
4. Do not grease, oil: clean or adjust machinery or equipment while it is in motion.
5. Use proper eye protection when working with tools.
6. Use the proper tool for each job; for example, never use a wrench as a hammer or a screwdriver for prying.
7. Use the correct size and type of tool for each job — a wrench with sprung jaws can slip and cause injury.
8. Do not use impact tools, such as drift pins, wedges and chisels if they have mushroom heads.
9. Worn and damaged tools are dangerous — turn them in for repair or replacement. Do not use tools with cracked, broken or loose handles.
10. Do not operate tools beyond their rated limits or try to increase their capacity with bypasses, "cheaters or other modifications.
11. All electric tools must be grounded.
12. Be sure switch button is off before plugging a tool cord into an electrical outlet. Surprise and accidental startups can be dangerous.
13. Clamp or otherwise secure small or light materials to free both hands before attempting to ream, drill, tap, Dr to perform similar operations.
14. Keep moving parts of power tools pointed away from your body. Do not hold a finger on the switch button while carrying a plugged-in tool.
15. Inspect electrical extension cords, weld leads and other wiring to be certain they are properly insulated Always use double insulated tools or tools with ground fault plugs. Do not use frayed or damaged cords.
16. Keep cords and hoses away from heat, oil and sharp edges.
17. Do not operate electrical tools while standing on damp or wet surfaces. Insulate yourself by wearing rubber boots and approved gloves. Use a ground fault circuit interrupter (*GFCI*) in wet locations or when working outdoors.

18. When using hand tools that may contact a power line, one should wear insulated protective gloves in work area where the exact location of underground electrical power lines is unknown.
19. Portable tools are to be protected by an approved ground fault interruption system when working in damp, wet areas or outdoors.
20. Extension cords used with portable electric tools and appliances shall be of three-wire type.
21. Protect extension cords against accidental damage that may be caused by traffic, sharp corners or projections and pinching in doors or elsewhere.
22. Do not fasten extension cords with staples, hung from nails or suspended by wire.
23. Check electrical cables, extension cords and electrical power tool cords for damage or excessive wear such as broken, cut or frayed insulation; broken or exposed wire; damaged plugs and missing ground terminals. Damaged or otherwise unsafe electrical cables, cords and plugs must be repaired or replaced.
24. Inspect and ensure the continuity of the equipment ground path, cord sets, receptacles (*temporary*) and equipment connected by cords and plugs.
25. Take special precautions when using power tools on a scaffold or other locations with limited movement areas. Get good footing, use both hands, and keep cords clear of obstructions, and do not overreach.
26. Be sure that a power too is off and motion stopped before setting tool down.
27. Do not use hoses or electrical cords for hoisting or lowering tools or other materials. Never yank the cord to disconnect it from the receptacle.
28. Disconnect tool from power source(s) before changing drill bits, blades or attempting repair or make adjustments. Never leave a running tool unattended.
29. Compressed air used for cleaning purposes shall have its' pressure reduced to less than 30 PSI *(-200 Kpa*), and then only with effective chip guarding and proper personal protective equipment. Higher pressures, where approved can be used for cleaning purposes.

LIGHTING

Stairs and work areas must be adequately lit at all times. An area in which a worker is present and the means of entering and exiting that area shall have lighting that is at least 55 lux (*lumens per square metre*). Dark areas should not be entered without the assistance of portable lighting or flashlights.

At any time, a worker finds the lighting inadequate in the work area they are about to enter, inform the supervisor who will supply task lighting as required. Missing or burnt-out lamps

shall be replaced before other work is performed in the area. All lamps in the area shall be shatterproof or be protected from damage.

HOUSEKEEPING

Keep your project clean All scraps and waste must be disposed of in properly marked containers or disposal areas. In some cases, we may be required to separate the waste into cardboard, paper, plastics and metals. Failure to do so may not only make for an unsafe project but may cost the company money due to clean up charges.

All materials, goods, and things shall be stored and placed in such a manner that the maximum safe load carrying capacity of the floor or other supporting structures is not exceeded.

No materials, shall be stored in a manner that may:

- Reduce the distribution of light.
- Obstruct or encroach upon passageways, traffic lanes or exits.
- Impede the safe operation of material handling equipment.

Stack and pile materials and equipment solidly on a firm foundation. Ensure that the weight of the materials will not exceed the load capacity of the supporting surfaces. Use chocks or blocks to keep heavier or round materials from shifting or rolling.

Keep aisles and walkways clear of tools, equipment, cables and other materials. Ensure that we do not pile materials within 6 feet (*1.8metres*) of an opening in a floor, roof or edge of a trench.

Remove any nails, rebar or other protruding objects that may be a tripping hazard to others. Use signs and barricades (*including barricade tape*) to warn others of any tripping or falling hazards.

Remember:

- Materials and equipment should be stored, moved, piled and transported in a manner that will not endanger workers.
- Waste material and debris shall not be stored in areas of access and egress.
- Waste material and debris should not be thrown from one level to another but be carried down, lowered in containers or deposited in a disposal chute.

- Material to be lifted by a hoisting device shall not be stored under overhead power lines.

MATERIAL HANDLING/LIFTING

1. Whenever practical, heavy lifts should be done with mechanical lifting devices.
2. When manual handling is required, dollies, trucks and similar devices should be used where practical.
3. Workers should know their physical limitations and the approximate weight of materials they are trying to lift. Workers should be encouraged to get help when a lifting task may be more than they can safely handle.
4. The right way to lift is the easiest and safest. Take a firm grip; secure a good footing; place the feet a comfortable distance apart; bend the knees; keep the back straight and lift with the leg muscles.
5. Use gloves or hand patches as required when handling sharp, rough, heavy or hot materials.
6. Never carry a load so large that it obstructs vision or is too heavy to be safely lifted without assistance.
7. If steps and hand-ails are provided, use them. Walk only on sturdy clear paths.

WORKPLACE INSPECTIONS

Refer to — OHSA Regulations for Construction Projects — Inspection and Testing.

Purpose

The purpose of this policy is to control losses of human and material resources by identifying and correcting unsafe acts and conditions.

To achieve this commitment, it is necessary to look for hazards as they develop on a new or existing project. When a specific hazard is found, corrective action must be taken by the supervisor to prevent those hazards from becoming uncontrolled.

Policy

Each supervisor shall inspect the workplace weekly or more often as deemed necessary by completing the "Worksite Safety Inspection" form. Deficiencies and their resolution shall then be noted on the form. We are committed to maintaining a comprehensive program of safety inspections at all facilities and projects.

Responsibility

The project manager is responsible for the overall operation of the program, with the assistance of the company safety department.

Supervisors are responsible for directing formal inspections on job sites that they control and for involving workers in such inspections. Formal inspections will be conducted by the supervisor or his designate once every week. Informal inspections or areas where their crews are working are to be made on an ongoing basis.

It is important to maintain a safe work area and work site. It is the responsibility of every employee on the site to maintain a safe working environment. Inspection must be performed. The workplace should be checked, and all tools and equipment are safe to use, that signs and labels are legible, for safety, health and ergonomic hazards.

Workers are responsible for participating in and contributing to the inspection program. Copies of the inspection report shall be forwarded to the project manager and to our safety department via email at skyline@skylinecanadainc.com

An overall review of the workplace inspection would include, but not be limited to, the following:

- Personal protective equipment.
- Equipment and tools.
- Housekeeping.
- Ladders, scaffolds.
- Vehicles, powered lifts, and other machinery, etc.
- Material storage.
- Barriers, guardrails, warning/danger signs, etc.
- Access stairs and platforms.
- Site specific conditions and any other conditions that exist.

FIRE PROTECTION - GENERAL

Precautions shall be taken at all times to prevent the outbreak of fire in the workplace. Fire extinguishers must be readily accessible, properly maintained, regularly inspected weekly, monthly, annually and promptly refilled after use. A record tag shall be attached indicating the date for the annual recharging and a record of the monthly inspections.

In addition to being familiar with the operation and location of all fire fighting equipment, all employees should be aware of the various categories of fire extinguishing equipment found on the jobsite. Portable extinguishers are classified according to their capacity for handling

How to use the Extinguisher

Aim the extinguisher at the base of the fire to extinguish the flames at their source.

Employees must be trained to operate each kind of fire extinguisher. Extinguishers have a very short-term discharge time, about 60 seconds. Always aim for the base of the fire.

Follow these fire safety' rules:

1. Smoke in approved areas only. Obey "No Smoking" and "No Open Flames" signs. Refer to smoking policy in this manual for further information.
2. Know location of FIRE EXITS AND FIRE ALARMS.
3. Remove trash and debris from your work area at least once each day.
4. Keep solvents and other flammable/combustible materials in approved properly labeled containers and stored in proper locations — not in stairways or passageways.
5. Keep sparks, flames and excessive heat away from solvents and other combustible materials.
6. Do not use flammable liquids or solvents such as, benzene, gasoline or paint thinner for cleaning purposes, unless methods (*approved by your supervisor*) are employed for their safe use.
7. Keep fire fighting equipment and fire exits and passageways clear and ready for immediate use.
8. Maintain metallic contact between the two containers. (*Use bonding and grounding cables*) when pouring gasoline or other flammable materials from one container to another.
9. Shut off engines of vehicles and other equipment before adding fuel.
10. Report all fire hazards to your supervisor immediately.
11. Know the location of the fire extinguishers nearest your work area. Know how to operate each kind. Know the type of fire on which each kind should be used. Use of improper types of extinguishers can cause fire to spread.

PROPANE STORAGE & DISPENSING

Refer to — Ontario Propane Storage, Handling and Utilization Code

Propane fuel (*not attached to a lift truck, etc*.) must not be stored inside a finished building or plant but must be stored outside. Furthermore, propane cylinders must be secured from tipping, protected from damage and abuse, with the valve upright (*unless designed otherwise*) with the valve cap installed and the regulator disconnected (*where applicable*).

Where any flammable liquid (*fuel or otherwise*) is stored or dispensed, a ULC fire extinguisher with at least a 4A-40BC rating shall be within easy reach.

Propane Cylinder Inspection, Handling and Storage

All cylinders must be inspected before use. Inspections of cylinders include:

1. Rotating cylinder and inspecting for damage such as dents, cracked welds, or other major damage.
2. Check that the date stamped on the collar is within 10 years and that the inspection meets the legislation requirements. If out of date do not use. Check for proper labeling
   i.e. TDG (*transportation of dangerous goods*) and WHMIS workplace labels. If not properly labeled, then it must be returned to the supplier.
3. Check that bleed valve is closed tight.
4. Check that pressure relief valve has protective cap.
5. Check that the liquid service valve is closed tight with a straight stem, not bent and there is no damage to toe hand wheel. Ensure that there is an “o ring” and a flat washer inside the nozzle end of the liquid service valve.

Zero Tolerance — Designated and trained personnel will inspect and sign for each cylinder delivered; the receiver reserves the right to refuse a propane cylinder if they feel it is in noncompliance, unsafe or questionable upon inspection at the time of delivery. The safety of personnel will not be compromised under any circumstances.

Propane Cylinder Changing Steps (*for most propane powered equipment*)

1. Put on PPE's (*neoprene gloves, safety glasses, etc.)*
2. Close wheel on liquid service valve.
3. Run engine until it: stalls.
4. Turn off ignition.
5. Disconnect man fuel line coupling.
6. Unstrap the cylinder.

7. Inspect new cylinder and its components.
8. Install new cylinder.
9. Align pressure relief valve at 12 noon.
10. Strap down cylinder.
11. Connect main fuel line coupling hand tight.
12. Open liquid service valve. SLOWLY.
13. Check for leaks.

Ontario Regulations Requirement — Under the Energy Act, anyone who handles propane or propane fueled equipment must be the holder of a certificate or in possession of an accepted Record of Training. This record of training is only valid for 3 years from date of training.

FLAMMABLE LIQUIDS

The MSDS for all hazardous materials must be kept on site. Before using any hazardous material, workers must be made aware of the hazards as well as the safe use, handling and storage requirements of that material. The supervisor is responsible to ensure that workers have the necessary information to work safely with those flammable and combustible materials.

When any quantity over 5-gallon (*23 liters*) containers of open flammable liquids are to be stored, they shall be stored in an approved (*FM, CSA, UL, ULC*) cabinet, or stored outdoors away from any heat, fuel or oxidizer source. Furthermore, a 4A-40 BC rated fire extinguisher shall be readily available.

All containers shall be identified according to WHMIS legislation, and signs must be posted on the cabinet or storage area stating; "DANGER - FLAMMABLE, NO OPEN FLAME, SPARK OR SMOKING".

When flammable liquids are being used in the work area, no more than one day's supply shall be stored at that location

Portable flammable liquid (*gasoline, diesel fuel, etc*.) containers shall have a flame arrestor and a spring-loaded cap. Furthermore, when dispensing a flammable liquid, ground and bond the pouring container to the equipment that is being filled. If gasoline or other flammable liquid is required to be stored inside, it will be stored in a "safety can" with a maximum capacity of 5 gallons (*23 liters*) and the correct WHMIS labels and information must appear on the containers.

Where any flammable liquid (*fuel or otherwise*) is stored or dispensed, a ULC fire extinguisher with at least a 4A-40BC rating shall be within easy reach.

CONFINED SPACE

Confined Space Definition:

A Confined space is a space which is subject to developing an oxygen deficient, flammable or toxic atmosphere and has a limited means of exit, including, but not limited to tanks, process vessels, pipe trenches, sewers, sumps and other similar spaces. A confined space means an enclosed or partially enclosed space that:

1. Is not designed or intended for human occupancy except for the purpose of performing work.
2. Has restricted means of access and egress.
3. May become hazardous to an employee entering it due to a) its design, construction, location or atmosphere. b) The materials or substances in it, or c) any other conditions relating to it.

Flammable Atmosphere:

An atmosphere which contains more than 10% of the lower explosive limit (*L.E.L.)* of a flammable gas or vapor. "Hot work" means any work where flame is used, or a source of ignition may be produced.

I.D.L.H. (*Immediate Danger to Life and Health*):

Atmospheres which include oxygen deficiency and atmosphere approaching L.E.L. (*Lower Explosive Limit*) The L.E.L. of flammability of gas, vapor or dust or any combination of these at ambient temperatures.

Oxygen Deficient Atmosphere is an atmosphere where the oxygen content is less that 18% (*18 kilopascals partial pressure*).

Respiratory Protection:

Self Contained Breathing Apparatus (*SCBA*)

A unit with an air cylinder which contains at least a nominal 30-minute supply of respiratory air with a full-face piece, operating in the positive pressure mode.

Air Supplied Breathing Apparatus (*work mask*)

A unit with a 1²1.111 face piece and equipped with an auxiliary self-contained air cylinder for escape capable of operating in the positive pressure mode. This apparatus normally draws its air through an air hose connected to; a large, pressurized source of breathing air such as one or more large cylinders, or an air compressor with suitable filters. to ensure air meets the CSA breathing air standards.

Air Purifying Respirators

A unit which absorbs or filters dusts, fibres, mists, vapors or gas from the ambient air. Note: Do not use air purifying respirator units in oxygen deficient or other I.D.L.H. atmospheres.

Portable Instruments

Usually, handheld instruments used to test an atmosphere electronically or chemically for the presence of toxic gases and vapors, flammability, oxygen content or particulate contaminant. Some instruments detect more than one contaminant, and some operate continuously for several hours and may be placed in or near the working area. Operators must know the capabilities and limitations of these instruments and ensure an instrument is functional before using it to test an atmosphere. Wear respiratory protection when testing an unknown atmosphere.

Breathing (*Compressed*) Air

Compressed breathing air that meets the purity requirements of CSA Standard for Compressed Breathing Air.

Toxic Atmosphere

An atmosphere which contains greater than the Occupational Exposure Limit (*O.E.L.*) of a gas, vapor or particulate according to the values established by government regulation, or the Ministry, Chemical Hazard Regulation, whichever is applicable to the work location.

Carbon Monoxide (*CO*)

Carbon monoxide is a toxic, flammable, chemically reactive, colourless, odorless gas produced by the incomplete combustion of materials containing carbon. Some sources of carbon monoxide include internal combustion engines, gas heaters, and welding. A hydraulic access lift or other propane powered equipment can produce sufficient carbon monoxide levels in various amounts or concentrations in enclosed areas/confined spaces, low lying areas or indoor applications in buildings that can be hazardous to your health.

Carbon monoxide enters the body through the lungs and is absorbed very readily by the blood. The affinity of the hemoglobin in the blood for carbon monoxide is greater than 200 times its affinity for oxygen. Therefore, this limits the ability of the blood to carry oxygen, which will affect all the major organs, muscles and other body functions. High level brief exposure or long-term exposure to carbon monoxide can lead to unconsciousness, permanent brain damage or death. Early indications of carbon monoxide poisoning are headache, drowsiness, dizziness, rapid breathing, nausea, vomiting, confusion, convulsions and unconsciousness.

Effects of repeated exposure to low concentrations of carbon monoxide can be undetectable and may compound existing or pre-existing health conditions.

Effects of Carbon Monoxide Levels on the Body:

These effects will vary according to age, sex, weight, pre-existing conditions and current state of health. Work in an area where there is significant ventilation when using equipment that produces carbon monoxide. If working in a confined space, make sure that adequate ventilation is supplied. First aid for any victim of carbon monoxide poisoning is to supply with fresh air and seek medical attention immediately.

CONFINED SPACE PROCEDURES

Hazard Assessment

Hazards inherent in confined space entry can be avoided or overcome if the following procedures are applied every time a worker enters a confined space. Remember, even a partial entry (*i.e. head and shoulders*) may be dangerous to life and health if toxic or inert odourless gases such as nitrogen are present.

Where it is likely that a person will, in order to perform work, enter a confined space, we as the employer shall appoint a qualified person to:

1. Carry out an assessment of the physical and chemical hazards to which the person is likely to be exposed in the confined space or the class of confined spaces.
2. The assessment shall be in writing and shall consider the hazards that may exist due to the design, locating or use of the confined space and the hazards that may develop during work activity inside the confined space.
3. The hazards to be considered shall include:

    a) Oxygen enrichment or deficiency.
    b) Flammable gas, vapour, or mist.
    c) Combustible dust.
    d) Other hazardous atmospheres.
    e) Harmful substances.
    f) Hazardous energy, and
    g) Engulfment, entrapment and other hazardous conditions.

The qualified worker shall sign and date the assessment and provide it to the Safety Department. This assessment will then be reviewed as often as is necessary to ensure that its corresponding plan is adequate.

Definitions

"Adequate", in relation to a procedure, material, device, object or thing, means,

a) Sufficient for both its intended and its actual use, and
b) Sufficient to protect a worker from injury or death.

"Confined space" means a fully or partially enclosed space that is not primarily designed or intended for human occupancy and in which, because of its construction, location or contents or work activity therein, the accumulation of a hazardous gas, vapour, dust or fume or the creation of an oxygen-deficient atmosphere may occur.

"Plan" means a confined space entry and control program

"Program" means a confined space program

"Purging" means displacing contaminants from a confined space.

"Qualified worker" means in respect of a specific duty a worker who, because of knowledge, training and experience, is capable of performing that duty safely and properly.

"Safe atmosphere" means that:

a) The oxygen content of the atmosphere remains at least 19.5% but not more than 23% by volume; and
b) The atmosphere concentration of any explosive or flammable gas or vapour does not exceed 10% of the lower flammable limit of gas or vapour.

"Tending worked' means a worker outside a confined space who is able to provide assistance to workers occupying the confined space and who is able to summon assistance in order to initiate a rescue of such workers if required.

THE FOLLOWING PRDCEDURES ARE TO BE FOLLOWED

Prepare Written Plan

Prepare a plan for the work to be performed and document it on a safety permit and safety meeting report form. Include considerations contained in this guideline, plus additional information needed to accomplish the task safely. Write procedures for hazards particular to the job (*i.e. window cleaning, chemical use, and rescue procedures).*

The Written Plan shall take into consideration as many of the following as are applicable:

1. Isolation, lockout and tagging of hazards.
2. Control of source of ignition.
3. Movement of materials.
4. Ventilation and purging.
5. Explosive and flammable atmosphere.
6. Lighting.
7. Alarms and other means of communication.
8. Means and methods of access and egress.
9. Personal protective and safety equipment.
10. Atmospheric testing.
11. Emergency equipment.
12. Emergency response procedures.
13. Warning signs and barricades.
14. Tending workers, including the frequency of checks of workers in confined spaces.
15. Any additional procedures necessary to ensure the safety of workers during entry to a confined space.

A written confined space entry and control plan must be developed and implemented for each confined space entry before a worker enters the confined space. This plan will include methods, procedures and practices for controlling all hazards identified by an assessment for the confined space entry. The responsibility of implementing this plan shall be assigned to a competent and qualified person.

Every worker who enters exits or occupies a confined space must follow this plan.

Entry Permit System

For each confined space; every employer shall establish an entry permit system that specifies the following:

1. The length of time for which an entry permit is valid.
2. The identity of each worker entering the confined space.
3. The activity to be performed by worker.
4. The location of the confined space.
5. The results of the atmospheric testing of the confined space, and
6. The applicable precautions to protect the worker as outlined in the plan.

Before every entry into the confined space by a worker, the permit shall be completed and signed by a qualified worker. A competent person shall sign the permit after the work has been completed to confirm that no workers remain inside the confined space. A copy of this permit must be posted at the confined space before a worker enters, and it shall be kept posted at the confined space for the duration of the permit.
A safe means of access and egress shall be provided for all workers required to enter and exit from a confined space.

Appoint Tending Worker

Ensure a safety person is appointed for the job and is aware of their responsibilities. The Tending Worker is positioned at the confined space entrance and is equipped with respirator protection and applicable emergency equipment. The person must be capable of rescuing if required and must be able to communicate constantly with the worker(s) inside. The Tending Worker does not leave the post unless relieved by a qualified person. The supervisor is notified by the Tending Worker of dangerous situations which arise in the confined space.

Set-Up Sign In/Out System

Set up a log system adjacent to the vessel or confined space. Persons entering the vessel sign in and out and record the time of entry and exit.

Set-Up Communications

Ensure a communications system is in place between the Safety Person and worker(s)

Define Responsibility

Work is performed under the direction of a supervisor who is familiar with possible hazards, fire and accident prevention requirements, first aid and rescue. During the confined space work, it is the supervisor who is responsible for safety. This includes taking steps to eliminate or control hazards.

Identify Hazards

Hazards commonly encountered in confined spaces include; toxic vapors in excessive concentrations. These result from known materials in work areas, which are inadequately ventilated naturally or mechanically. Other instances may be due to the gradual release of toxic substances from sludge scale or slow chemical reactions, which, in time, permit significant gas or vapour concentrations to develop.

Lack of oxygen causing asphyxiation may result from chemicals absorbing or replacing oxygen to reduce possible explosions.

Flammable gases, vapours and liquids with potential for fire or explosion.

Electric shock from portable lights, tools or associated electrical equipment. Ignition from static electricity.
In areas where moisture exists, portable lighting equipment shall be operated at a maximum of 24 volts.

Injury from mechanical equipment inadvertently activated.

Bodily injury or harm from chemical hazards and contaminants.

Pyrophoric iron (*iron sulfide*) deposits.

Burns from steam or other hot fluids.

The Safety Department will be responsible for identifying hazards in the confined space.

Identify Safety Equipment

Wear personal protection (*i.e. clothing, gloves, boots, face shields and respiratory apparatus)* to meet job requirements. Respiratory protection may range from chemical cartridge NIOSH approved respirators to self-contained or air supplied breathing apparatus.

WARNING: Chemical cartridge respirators protect against specified concentrations of contaminants. NOT TO BE USED IN OXYGEN DEFICIENT ATMOSPHERS.

When combustible gas concentrations or vapors are below 10% of the lower explosive limit, entry into a confined space is allowed provided the appropriate respiratory and/or skin protective devices are used.

Entry without respiratory and/or skin protection is allowed only if the atmosphere is tested for contaminant(s) and monitored throughout the job to ensure concentrations remain below the Occupational Exposure Limit. These values are the maximum average atmospheric concentrations of contaminants(s) workers may be exposed to during an eight-hour day.

When the confined space work calls for workers to wear self-contained or air supplied breathing apparatus and rescue in an emergency may be difficult, provide workers with a body harness and lifeline attached. If this is unworkable due to space limitations, provide an alternate system. Have this alternate system approved by the Safety Department before the job starts.

Train and Instruct

Every worker involved with entry into a confined space shall be trained by a qualified person to recognize hazards associated with the confined space and perform safely such duties as specified in the plan. All workers connected with or performing confined space work before entry of possible hazards, precautionary measures and emergency rescue methods as per government regulations or to their applicable guidelines.

The tending worker must be in attendance outside the entrance to the confined space. They must be in constant communication with all workers inside the confined space (*the means of communication will be determined in the assessment and written in the plan*) and must be provided with an adequate alarm for summoning assistance.

No worker shall enter a confined space unless the worker is adequately protected against drowning, engulfment, entrapment, suffocation and other hazards from free-flowing material.

The company shall ensure that the training is reviewed, in consultation with a health and safety representative or joint health and safety committee, if applicable; at least annually and whenever there is a change in circumstances that may affect the safety of a worker in a confined space. Records of training will be maintained by the company.

Testing

A competent person shall test for airborne contaminates (*combustibles, oxygen, toxic gases and chemical hazards*) in the confined spaces. The atmosphere shall be tested for those contaminates determined by the Safety Department and as often as necessary. All the results of these tests shall be recorded.

Isolating of Confined Space

The confined space shall be isolated from all sources of hazards and energy, such as flooding from chemical or water, mechanical actions, steams, electrical, etc. All lines will be blanked and purged. Lock power driven equipment and power sources in the off position at the main fuse or breaker panel and tag out. Before entry, operate the machine control switch to ensure the power source is de-energized. Use double block and bleed for hydraulics or purge base systems.

Where purging is necessary to remove hazardous atmospheres in the confined space, use water, sweet gas, steam and/or inert gas. CONDUCT TESTS BEFORE ENTRY to determine the level of toxic, explosive atmospheres and oxygen content.

Ventilation

If a hazardous atmosphere exists or is likely to exist in a confined space, the confined space shall be ventilated or purged or both, as the case may be, before entry to ensure that a safe atmosphere exists. Mechanical ventilation shall be provided if required to maintain a safe atmosphere in the confined space during work.

If mechanical ventilation is required, a failure warning system or procedure shall be provided that gives adequate warning to workers to ensure adequate time for their safe egress.

Open confined spaces and ventilate as necessary with a positive method of mechanical ventilation. Arrange to produce sufficient fresh air and remove contaminants from pockets or corners to avoid re-circulating contaminated air.

After the confined space is cleaned and ventilated, keep the mechanical ventilation equipment operating to provide secondary protection in case of accidental introduction of harmful substances and to remove contamination or heat produced by the work.

Additional air or supplied air cooling may be necessary to maintain desirable workplace temperatures.

Cleaning

Depending on the confined space contents, empty the vessel of residual material.

Enter only after thorough review of these guidelines as well as any site-specific instructions that have been complied with.
Complete Job

At the end of a job the supervisor shall ensure no tools equipment or workers have been left behind. Double check and ensure that personnel are accounted for before leaving the confined space. Sign off on the permit that all workers are out of the confined space, post this information.

Ensure blinds are removed and valves returned to correct positions. Return Work Permits to the responsible supervisor for finalization before the unit is returned to service.
Rescue Planning

The following operating procedure ensures an effective rescue plan is included as part of the jot plan prior to commencing work within a confined space.
Preparation or pre-Job meeting
The supervisor and engineering staff conduct a pre-job meeting to determine the confined space preparation, type of work to be performed, personnel required. Establish an emergency gathering area.

A qualified worker shall set out in writing the emergency response procedures to be followed in the event of an accident or other emergency in or near a confined space, including a p ᵖrocedure for the immediate evacuation of the confined space if; the alarm is activated, there is a significant change in the oxygen content of the confined space or there is a hazardous atmosphere in the confined space.

No person shall enter or remain in a confined space unless an effective rescue can be carried out. There must be workers trained and certified in first aid and CPR when working in confined spaces.

Documentation of the Rescue Planning

The written rescue plan shall consider; entry style (*i.e. off ladder, scaffold, from ground level*) and safety equipment required (*i.e. basket stretcher, lifelines, air equipment*) and emergency alarm or signals. In addition, rescue procedures to remove workers from the confined space must be examined.

Emergency Equipment

Emergency equipment shall be appropriate for entry into the applicable confined space. It shall also meet or exceed current applicable standards. This equipment must be available and in good working order to affect a timely rescue in case of an emergency in the confined space. Inspection of the rescue equipment must be done on a regular basis, and records must be kept supporting this.

Written Instructions

All workers are to receive written instructions to be followed for the specific confined space. Furthermore, a checklist of all the hazards and precautions developed for that site will be completed and signed by the supervisor before anyone enters the confined space. Detail the control of workers entering and leaving confined space.

Flammable and Explosive Atmospheres

Where a gas or vapor in a confined space is or might likely be explosive or flammable, a worker may enter the confined space only if;

a) The concentration of gas or vapour does not or is not likely to exceed 50% of its lower explosive limit.
b) The worker is performing only cleaning or inspection work, and
c) The work does not create any source of ignition.

FALL ARREST PROTECTION

We as your employer are required to ensure all workers are protected against falling. To simplify compliance with the applicable regulations, all workers who are at risk of falling must be protected:

- Falling through air opening in a work surface.
- More than a vertical distance of 10 feet (*3 metres*).
- Into open machinery.
- Into water or another liquid.
- Into or onto a hazardous substance or object.
- When using any elevated work platform regardless of height.

Typically, guardrails are the first choice to provide the protection. However, this is not always the case, and an alternate means must be used. Furthermore, workers using or moving any elevated work platform must wear a full body harness that is securely attached to the machine with a shock absorbing lanyard, regardless of if the platform has guardrails, a bucket, a basket or not.

Workers must be protected from falling by at least one of the following methods:

- Guardrails
- Protective coverings
- Travel restraint systems
- Fall restricting systems
- Fall arrest system
- Safety net

1. Each method must be designed and/or have been constructed and approved in accordance with the applicable regulation or code.
2. All workers who may use a fall protection system must be adequately trained in its use and given adequate oral and written instruction by a competent person.
3. Records of training must include worker names and date of instruction and be available to the Ministry of Labour on request.
4. Proof of adequate training will include a written questionnaire signed by the worker and kept at Skyline's head office.

The key to ensuring the proper use of any fall protection system is worker training. We have video-based training to help any supervisor correctly demonstrate the proper use of a fall protection method or system.

When working within 10 feet of an unprotected opening in a work surface, and the worker may fall more than 8 feet, guardrails must be installed or the worker must use travel restraints or fall arrests. Travel restrains must consist of a CSA approved full body harness, lanyard, secured to a fixed support able to withstand a static force of 450 pounds. Alternately, it may be permissible in special cases of a worker who is more than 10 feet from any edge to use "bump lines", flags, rope, chain or barrier tape to mark the 10-foot location from the opening. The "bump line" must be 1.1 meters above the floor and be secured from falling.

When working on a flat roof, consideration must be given to the wind, weather and obstacles when choosing the best method(s) for fall protection.

The following is a guideline to determine "adequate training" for experienced and inexperience workers:

Our safety department will supply all necessary training materials, track the egress training and provide the "train the trainer" program.

- Before any use of a fall arrest system by a worker, the supervisor shall develop a written rescue plan. The written rescue plan shall consider entry style and safety equipment required and emergency alarm or signals. In addition, rescue procedures to remove workers from the elevated work must be examined.
- The fall arrest system shall be attached to the structure or to an engineered support or attachment point.

The CSA Z259.2.1 code requires rope grabs to have a panic locking feature or be restricted to a two-foot lanyard.

All lanyards must be CS approved shock absorbing and equipped with manufactured ends that are double locking. The lanyard must be protected from damage and use a recommended anchor that is able to withstand a static force of 5000 pounds.

Position the lanyard such that in the event of a fall, the worker will be arrested no more then 5 feet below the point they were positioned. If in doubt about any anchor point, consult with your safety department.
When working on a ladder and any of the above noted conditions apply, fall arrest or restraint systems must be used.

Definitions

Fall Arrest System — An assembly of components intended to arrest the fall of a worker if they should fall from a work surface. The system will not allow the worker to strike the surface below and will limit the dynamic forces applied to the worker to less than 900 pounds. All workers must be trained on the use of the fall arrest system and its intended application.

Fall Restraint System —An assembly of components intended to limit the workers fall to 2 feet.

Fall Protection System An arrangement of components such as; barriers, guardrails, work platforms or planking, that prevents a worker from falling from a work surface.

Full Body Harness — A device made primarily out of straps for containment of the torso and pelvic areas. They are designed to support the user during and after the arrest of an accidental fall, during rescue operations or during work activities.

Travel Restraint System An arrangement of components intended to restrict the workers' travel so the work cannot fall over the edge of the unprotected opening.

Lanyard — A strong short strap with a permanently attached metal ring. It is located between the fall arrestor and the worker's safety harness.

Shock Absorber — Part of the fall arrest system that is attached to the body support device and that dissipates kinetic energy and limits deceleration forces during fall arrest to 900 pounds. It prevents injury to the worker and the amount of force transferred to the lifeline and anchor.

Self-locking Double Snap Hook — A self-closing, self-locking gate snap hook that remains closed and locked until it is intentionally unlocked and opened for connection/disconnection.

Lifeline — Part of the system that is attached to the anchor point and the user of the lifeline system. It can be rigged vertically or horizontally.

Anchorage Point — An anchorage must be capable of supporting our recommended static load of 5000 pounds in any direction. If anchor is exposed to the elements, it must be corrosion resistant.

All workers must have 100% fall protection where the risk of falling exists. Fall protection systems consist of the full body harness, lanyard and an anchor point. Some fall arrest

systems are designed to allow the worker to travel along an "l" beam, floor, catwalk or climb a ladder or scaffold. Because of the vast differences in fall arrest systems, before any worker uses any fall arrest system, the supervisor must ensure that the worker has received training and instruction on the use of that system. All fall arrest systems must be engineered for the intended use and comply with the provincial, contactors or owners' requirements. The requirements for either vertical or horizontal fall arrest systems for the project shall be determined by the supervisor in consultation with the company safety department.

When using fall arrest Dn an elevated work platform, always choose the "best method" of securing the lanyard, to either the platform or building structure. Depending on the surface conditions, wind, weather, etc., securing the lanyard to the structure may be preferred instead of the platform. If you secure the lanyard to the building structure, ensure that no one can operate the controls of the work platform or you may run the risk of being pulled off the structure. Secure to the designed fall arrest attachment point. If no such point exists, attach to the middle rail.

If your work must be performed outside the confines of the guardrails on the platform, 2 lanyards are required. Secure ore to the building structure first, then release the one on the platform (maintain 100% fall protection). Reverse this operation when returning to the lift.

FALL ARREST - EMERGENCY RESCUE PROCEDURES

A. Crane Safety Rescue Basket — for Rescue over 80 feet (*typical*)

Step 1

The person who first identifies that an emergency has occurred will sound the air horn with 3 long blasts. Wait for instructions from the designated person who will coordinate the rescue effort. The designated person will contact all necessary internal/external emergency services after receiving all the pertinent information from the person who discovered the emergency. The designated person will then appoint persons for certain tasks to aid in the effort to rescue the person(s).

Step 2

The designated safety person will assess if the crane Safety Rescue Basket or Hydraulic Access Lift can easily access the worker. If a Hydraulic Access Lift will be used, go to the next set of procedures. Secondary hazards must be identified and neutralized first before rescue, i.e. electrical energy, public protection, etc.

Step 3

Attach the crane Safety Rescue Basket as per the engineered drawings and instructions. A one-inch wire rope choker will be secured with a one-inch shackle above the ball of the crane hook. In the event of a hook or shackle failure, the safety one inch wire rope will secure the primary support slings. The capacity of the basket (*occupants & tools*) cannot exceed 25% of the crane rated capacity. Tag lines may be required to be attached to the basket to stabilize or guide (*depending on winds, etc.).* All workers inside the basket must wear fall protection attached to the independent points and in the basket, i.e. secured to the crane's hook/ball.

Step 4

Hoist the Safety Rescue Basket up to the injured worker(s) and proceed to rescue one worker at a time. A new fall arrest lanyard will be attached to the injured worker and tied off to the Safety Rescue Basket prior to disconnecting the worker from the suspending supports. A splint kit will be located on the Safety Rescue Basket.

Step 5

Once the Safety Rescue Basket is on the ground, the first aider, while waiting for outside assistance, will provide care as required for the injured worker(s). Our company's guidelines or the guidelines of the company where the project is located, will be followed once the worker is on the ground. A rescue basket will be available on the ground to transport the worker.

B. Hydraulic Access Lift Rescue Plan (*typically less than 80 feet*.

Step 1

The person who first identifies that an emergency has occurred will sound the air horn with 3 long blasts. Upon hearing the 3 blasts from the air horn, wait for instructions from the designated person who will coordinate the rescue effort. The designated person will contact all the necessary emergency services after receiving all the pertinent information from the person who discovered the emergency. The designated person will then appoint persons for certain tasks to aid in the effort to rescue the person(s).

Step 2

Once the designated safety person, in conjunction with the hydraulic access lift operator, has assessed that a hydraulic access lift or scissor lift can easily access the injured worker(s),

position the equipment directly under or within reach of the injured worker. Care must be taken to avoid and/or neutralize any tools, bolts, supports, electrical, etc. from falling down to the rescue crew.

Step 3

Rescue workers (*one of which will be the qualified first aider*) must tie off to the mid-rail or the designated fall arrest attachment point on the hydraulic access lift or scissor lift. Consideration must be given to the weight capacity of the hydraulic access lift or scissor lift, to avoid overloading and creating another problem.

Step 4

The hydraulic access lift or scissor lift will then proceed upwards and rescue one injured worker at a time. A new fall arrest lanyard will be attached to the injured worker and tied off to the appropriate location on the lift prior to disconnecting the worker from the suspending supports. A splint kit will be located on all Safety Rescue Baskets to be available during the rescue if needed.

Step 5

Once the Safety Rescue Basket is on the ground, the first aider, while waiting for outside assistance, will provide care as required for the injured worker(s). Our company's guidelines or the guidelines of the company where the project is located will be followed once the worker is on the ground. A rescue basket will be available on the ground to transport the worker(s).

SPECIFICATIONS

1. All materials and equipment being used must be designed and certified by a professional engineer and deemed suitable for all fall arrest and rescue.
2. All components and procedures to be used for rescue shall comply with OHSA and its Regulations for Construction Projects or those for the province we are working in at the time.
3. Inspections of the Safety Rescue Basket will take place during fabrication and annually by a certified inspector.
4. The rescue equipment will be used as supplied. No modifications or substitutions of components will be made.

5. Only CSA and or ANSI approved components are to be used. The suppliers for all components must be qualified manufacturers of fall arrest and rescue systems.
6. The hydraulic access lift operator (*not the worker in the basket*) must have access to an electronic communication device that has been tested before the lift and is capable of contacting emergency services if necessary. The telephone numbers of the local city; fire, ambulance, medical services will be supplied to the designed person who will contact these internal/external services.
7. An air horn will be supplied to the designated site safety person to be used as a warning to all on site that an emergency has taken place. Three long blasts will indicate that a person has been injured and requires rescue. This will summon the rescue team (*to be determined at the beginning of the job*) to meet at a pre-determined location or to activate their electronic communication devices for instructions. A qualified person trained in first aid/CPR will attend the rescue.
8. A fully stocked first aid kit will be maintained and installed (*or nearby*) on the Safety Rescue Basket.
9. During rescue procedures, the designated contact person will also proceed to contact the necessary emergency response vehicles and follow the internal emergency procedures (*if any*) at the site of another company. This must be communicated before the job starts.

ELEVATED WORK PLATFORM OPERATION

Refer to your applicable provincial — OHSA Regulations for Construction Projects or Industrial Locations — Cranes, Hoisting and Rigging. Elevating Work Platforms, Equipment, General.

All workers have the responsibility to use elevated work platforms (*hydraulic access lifts, Up-ups, Sky Jacks, Scissor Lifts, Genie Lifts, etc.)* as designated and within the compliance of the Occupational Health and Safety Act and its Regulations. No person shall use, operate, set-up, move make adjustments to any elevating work platform unless they have received oral and written instructions by the employer.

It is every workers responsibility to notify their supervisor or project manager if they do not feel qualified to use any elevated work platforms regardless of the "trade" training or certification they may have. Each make end model will differ slightly and training on one type, make or model of equipment may not be sufficient to make the operator aware of "new' safety features or limitations. When a work.er is faced with a new process or equipment or it has been a long time since that person has operated this type of equipment, the worker shall request refresher training or familiarization training.

Workers are required to be trained and certified by a qualified instructor for the operation and limitations of all hydraulic access lifts (*or similar lifting devices*) before they are used. The supervisor shall ensure that this training has been conducted for the employees.

Inspections

We, as your employer, have the added responsibility of ensuring that all elevated work platforms are maintained in a safe condition as specified by the manufacturer.

Accidents involving elevated work platforms usually result in critical or fatal injuries, thus we require that, before the first time a worker uses any elevated work platforms that day, they shall visually inspect it for damage or missing safety devices. The project manager or site supervisor shall notify the company immediately if defects are found.

Operator Training

Every operator of elevated work platforms, shall be instructed and trained by the employer in the procedures to be followable for the:

- Inspection of the equipment.
- Fueling of the equipment, where applicable.
- Safe and proper use of the equipment.

Every employer shall keep a record of any instruction or training given to an operator of equipment for as long as the operator remains under his employment. The company is responsible for ensuring that the maintenance is performed and the appropriate records are kept. Our company is responsible for such training and can be contacted by the supervisor to arrange the necessary training session.

A. No worker shall operate equipment unless they have been trained on the type of equipment they are operating and hold a valid certificate.
B. A trainee may operate equipment only if all of the conditions below are met:

- The trainee is in the process of qualifying for a particular certificate corresponding to the equipment being operated.
- The trainee is directly supervised by a worker who holds a required certificate for that particular equipment.
- The supervising worker who holds the required certificate is positioned to see the operation of the equipment by the trainee and is in continuous voice contact with the trainee.

- The trainee is in visual contact with the supervising worker while the equipment is being operated.
- The supervising worker does not perform any other tasks during the operation of the equipment by the trainee.

Proof of Certification

A worker, supervising worker, or a trainee must carry proof of the required certificate, apprenticeship, registration or accreditation, while operating equipment. The proof must include proof of training on the type of equipment being used.

ELEVATED WORK - METHODS

Refer to — OHSA Regulations for Construction Projects — Elevating Work Platforms.
Elevated or overhead wok may be carried out in several fashions on:

- Ladders of portable stairs
- Scaffolds; wheeled & suspended
- Powered lifts: (*i.e. hydraulic access lifts, skyjacks, etc.).*
- Roofs, flat and sloping, fixtures or equipment

Aerial Work Platform Safety

Any piece of equipment can be dangerous if not operated properly. You are responsible for the safe operation of this equipment. The operator must carefully read and follow all warnings, safety signs, and instructions provided with or located on the equipment. Do not remove, deface, or render inoperable any of the safety devices or warnings on this equipment. If any safely devices or warnings have been removed, defaced, or rendered inoperable, DO NOT USE THIS EQUIPMENT! If this equipment requires the use of diesel fuel make sure that there is proper ventilation in the work area as diesel engine exhaust and some of its constituents are known to cause cancer, birth defects, and other reproductive harm.

ELECTROCUTION HAZARD!

Check for overhead obstructions and high voltage power lines. A minimum distance of 10 feet from energized high voltage conductors shall be maintained at ALL times.

DO NOT OPERATE UNLESS AUTHORIZED AND TRAINED TO RUN LIFT!

1. Ensure that hydraulic access lift is on firm and level surface. Do not drive on soft or uneven terrain. Failure to take caution could cause lift to tip over. The aerial work platform shall not be driven on grades, side slopes, or ramps exceeding those for which the manufacturer rates the aerial work platform.
2. Inspect the work area thoroughly for all obstacles, debris, drop-offs, holes, slopes, and depressions.
3. Inspect the lift thoroughly before each use. Test all functions before raising platform. Check fluid levels, tire pressure, hoses for leaks, breaks in the cable and elevating assembly. NEVER OPERATE A DAMAGED MACHINE!
4. Ensure that all guardrails are properly secured and gates and openings are closed. Do not sit, stand, lean, or place loads on the guardrails.
5. Personnel shall maintain a firm footing in the basket at all times. Do not use ladders or other objects on the lift to gain greater height unless they are designed by a professional engineer to be mounted on the aerial lift. ALWAYS KEEP YOUR FEET ON THE PLATFORM.
6. The operator should always wear a hardhat, safety glasses, and safety shoes.
7. If the unit has outriggers, do not raise platform until outriggers are extended fully and stabilizers are down.
8. Know the rated capacity of the aerial lift. Distribute the load evenly over the platform. DO NOT OVERLOAD. SERIOUS INJURY COULD OCCUR.
9. Do not operate the lift when the wind velocity exceeds 25 MPH or in thunderstorm conditions. EXTREME WIND CONDITIONS COULD CAUSE THE LIFT TO TIP OVER!
10. Do not drive with the platform raised! When raised, move only to maneuver.
11. Do not allow ropes, cords, etc. to become entangled in the elevating parts.
12. STUNT DRIVING AND HORSEPLAY COULD RESULT IN INJURY OR DEATH! BE SAFE!
13. The operator is responsible for ensuring that all personal protective equipment is used. * All workers must wear fall arrest protection. Fall arrest must be put on before starting the elevated work platform. * The shock absorbing lanyard must be attached to the designated fall arrest attachment point. * If there is not a designated fall arrest attachment point, then attach the lanyard to the mid-rail ONLY. Never loop the lanyard around the rail and connect the snap back onto the lanyard. Use a ladder hook or choker (*rated at 1800 lbs. in basket or choker mode*).
14. The aerial work platform shall not be used as a crane.
15. Before operating any aerial work platform, operators shall have read and be familiar with the operator's manual and shall abide by the safety rules and practices.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. If there is any doubt as to the operation or safety of the equipment, DO NOT USE AND CALL. SKYLINE IMMEDIATELY.

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

DETERMINATION OF THE BEST TRADE PRACTICES FOR THE PERFORMANCE OF ELEVATED WORK

Notwithstanding, any elevating work platform or ladder shall be used in accordance with the CSA standard (*or other standard*) it was certified for and as instructed by the manufacture. Consideration must always be given to the stability and fall protection requirements when choosing a suitable elevated work platform.

Scaffolds Use

Scaffolds should be used when:

- Working above a 5-foot level
- Working on a continuous basis (*the better part of the shift*) at one location.
- Assembling complete or bulky equipment at an elevated height, (*i.e. the equipment*) which itemise cannot be most assembled on the ground and lifted into place.
- More than one worker is required in close proximity to each other installing the equipment.

Special Purpose "Non-Conventional" Ladders

1. Trestle ladders, platform ladders, extension trestle ladders or other special purpose "nonconventional" ladders used shall be examined on a case-by-case basis to assess if these ladders are a more practical means of performing the required task.
2. Notwithstanding, any ladder shall be used in accordance with the CSA Standard (*or other standard*) it was certified for and as instructed by the manufacturer.

OUTRIGGERS FOR PERSONNEL LIFTS

Refer to — OHSA. Regulation for Construction Projects — Elevating Work Platforms.

A worker who operates an elevated work platform shall, before using it for the first time, be given oral and written instruction on the operation and be trained to operate that class of elevated platform. Instruction must cover; manufacturer's requirements, load limitations,

hands-on demonstration of all controls and limitations of surface for which platform is designed.

The genie lifts, personnel lifts (*or other similar brand name personnel lifts*) are designed to be narrow in length and width for the ease of transportation only. They become unstable if outriggers are not correctly installed when the basket is raised. Furthermore, outriggers must be set-up on a hard, stable surface and the base must be level before the basket is raised. If outriggers are not used correctly and/or the base is not level, the personnel lift may tip over when in the raised position. Workers using elevated lifts for any job must wear a safety harness and clip to the appropriated anchoring points on each lift before operating the lift at any time. Elevated work platforms are designed for different use. Ensure you have the right machine for the job.

In specific cases, space may not permit the use of one or more outriggers. If this problem arises, do not use the personnel lift but contact supervisor who will contact the safety department for advice and written instructions dealing with that specific case.

Powered Elevated Work Platforms

Conduct a thorough pre-operation and function test before each work shift. This should include:

1. Check platforms/guardrails — guardrails in place, access ladder in good condition.
2. Check that all decals and placards are legible and in place.
3. Check operator and safety manuals that are stored in the protective storage container.
4. Check the engine oil, coolant, fuel and all fluid levels on internal combustion engines.
5. Check the battery level on electrical models.
6. Check tires for inflation (*if applicable*), or for any damage, and lug nuts on wheels.
7. Check level of hydraulic oil in reservoir, supply lines and cylinders for leaks etc.
8. Check ground and platform control panels. Ensure that switches are operable, and there is no visible damage.
9. Check hydraulic access lift extension cables and wear pads.
10. Check drive and turntable motors and torque hubs.
11. Check limit switches, horns, alarms and beacons to ensure they are in working order.
12. Check for any damage or dents to hydraulic access lifts.
13. Check that compartment covers are in place and latched.

Report any machine damage or malfunctions to supervisor immediately. Tag and remove from service.

Every elevating work platform must

- Not be loaded in excess of its rated working load.
- Be used on a firm level surface.
- Be operated according to manufacturer's written instructions.
- Not be loaded in ways that will affect stability or endanger a worker.
- Not be moved unless each worker aboard is protected by a safety harness attached to the platform.

Pre-use Job Site Inspection

It is essential to inspect the work area before you operate an elevated lift. Some existing hazards can be high voltage areas, overhead hazards, poorly lit areas, floor debris and obstructions, high winds or inclement weather, uneven floor surfaces, slippery floor surfaces, and other existing hazards that are specific to that work site. These should all be inspected before use of the lift to avoid any unforeseen events.

SCAFFOLDS

Refer to — Ontario — OHSA — Regulations for Construction Projects & Regulation for Industrial Establishments — Scaffolds, Work Platforms.

Scaffolds should always be erected under the supervision of a person EXPERIENCED in their construction and use. Although scaffold systems vary between manufacturers, certain fundamental requirements are common to all scaffold systems. Frame scaffolds over 50 feet in height must be designed by a professional engineer and supervisors must ensure that they are constructed in accordance with the design.

Foundations and Support Surfaces

Scaffolds must be erected on surfaces that can adequately support all loads applied by the scaffold. Floors are adequate to support scaffold loads of workers, tools and light materials. As loads become greater, the floors (*especially the older wooden types*), should be examined to ensure that they will support the anticipated loads. In some cases, shoring below the floor and directly under the scaffold legs may be necessary.

To support scaffolds, backfilled soils must be well compacted and leveled. Mud and soft soil should be replaced with compacted gravel or crushed stone. Embankments that appear unstable or susceptible to erosion must be contained otherwise the scaffold must be set far

enough back to avoid settlement or failure of the embankment. Where mudsills must be placed on sloping ground, leveling the area should be done wherever possible, by excavating rather than backfilling.

Scaffolds erected on any type of soil should be on a mudsill. The mudsill should be a minimum of 2-inch x 10-inch planks full size and should be continuous under at least two consecutive supports. Scaffold feet should rest centrally on the mudsill, and the sill should, where possible, project at least 2 feet beyond the scaffold foot.

Scaffold Use

1. Planks must be cleated when used on scaffolds.
2. 2-inch-thick full cut planks of sound rack free lumber or fabricated steel planks must be used for scaffolding.
3. Planks must be free of ice or slippery material. Clean mud, grease and snow from boots and ladders before climbing scaffolding.
4. Scaffolding must be used on solid footing.
5. Scaffolding wheels must be locked.
6. When using scaffolding higher than three sections or the height to width ratio exceed 3:1, outriggers or equivalent are required to prevent tipping.
7. Only authorized persons are to be on the scaffold and/or ladders. Keep all other persons off.
8. Compensate for unevenness of floor or ground by blocking and adjusting screws.
9. Guardrails and toe boards are required on all elevated work platforms.
10. All workers are required to use a fall arrest system (*fully body harness, shock absorbing lanyard*) lanyard secured in such a manner as to arrest the fall of a worker and does not exceed the load limits of the structure in the event of a fall.
11. Parts, materials and tools must not be left loose overhead at any time.
12. Compatibility of components.
13. Ensure there are enough components for the job.

All parts, fittings and accessories required for a scaffold assembly should be installed in accordance with the manufacturers' instructions. Base plates should always be used. Frame scaffold coupling devices should always be used and installed properly on every leg of the scaffold at every joint as assembly proceeds. Wheels or castors, when used, should be securely attached to the scaffold end equipped with brakes.

Inspection

Before use, scaffold should be inspected for damage to:

- Frames, braces and other structural components.
- Hooks on manufactured platforms.
- Splits, knots and dry rot in planks.
- Lamination in laminated veneer lumber planks.

Check structural components. Bent, damaged or severely rusted should not be used. Similarly, platforms with damaged hooks should not be used until properly repaired. Planks showing damage should be discarded and removed from the site so that they cannot be used for platform material.

Before erecting a scaffold, check the location for

- Ground condition
- Overhead wire obstructions
- Variations in surface elevation
- Tie-in locations and methods

Care must be taken when installing a scaffold near power lines. For voltages of 750 to 150,000 volts, the scaffold must be 10 feet away. Shielding may be necessary in some cases if contact to the power lines is possible.

ROLLING SCAFFOLDS

Refer to — OHSA Regulations for Construction Projects — Scaffolds, Work Platforms.

Rolling scaffolds have the same falling and collapsing hazards as fixed scaffolds. In addition, they have the problem of unexpected movement (*BRAKE FAILURE*). Ensure that the:

- Height does not exceed 3 TIMES the least lateral dimension. OUTRIGGERS may be used to enhance stability. ENSURE ALL OUTRIGGERS ARE FULLY EXTENDED AND LOCKED BEFORE MOUNTING.
- Brakes on each wheel are in good condition, and <u>brakes are applied</u> when working on the platform.

Furthermore, scaffolds exceeding 10 feet, SHALL NOT be moved with someone on top, unless they are equipped with a fall arrestor or guardrails.

SAFE WORK PRACTICES FOR STEP LADDERS

Refer to — OHSA, Regulations for Construction Projects — Ladders

1. All step ladders must be built to, or better than, CSA Grade 1 and be constructed from materials suitable for the intended use.
2. The total combined weight of tools and personnel shall not exceed the design requirements for a CSA Grade 1 ladder of 250 lbs, or if the ladder is a CSA grade IA, then 300 lbs.
3. Only those repairs approved by the manufacturer of the step ladder shall be made. Defective ladders shall be repaired in accordance with the manufacturers design and by those who are qualified and authorized by the employer and manufacture to do so.
4. No modifications to the step ladders shall be made from the original design. This includes painting of the ladders but does not include the installations of identification markings made by the tool and equipment managers in accordance with the manufacturers' instructions.
5. Each step ladder must be inspected prior to use for defects.
6. When in use, spreaders must be fully opened and locked in place. When possible, only ladders with 5 poi Its or centre pull spreaders should be used.
7. The maximum length must not exceed 40 feet.
8. Fall arrest is required when working above 10 feet in height.
9. The ground shall be level and firm enough to prevent any leg from sinking. The use of "Mudsills" or suitable materials is encouraged.
10. No rubble, planks or other non-engineered materials or structures shall be placed under any of the legs to increase the reach of that step ladder. The step ladder must have a firm footing at all times.
11. Only one person shall use the ladder at any time.
12. Do not use a step ladder to support any equipment or materials.
13. Step ladders are not to be used as a support for planks or scaffold platforms.
14. Do not straddle the top of the step ladder.
15. Do not use the top of the step ladder as a rung.
16. Do not climb above the 3rd rung from the top.
17. Never lean the centre of the body beyond a side rail.
18. Always work facing towards the steps of the ladder in such a way that the body can be supported against the steps and side rails (*if necessary*).
19. Worker training shall be conducted on the safe practices for step ladders in their project orientation or via the current "Job Box" safety talk forum.
20. Never use excessive pushing or pulling of tools or equipment while standing on the rungs of a ladder. Keep in mind our policy limits this force to 20 lbs.

21. Never use a step ladder near the opening of a floor, edge of a building or around hazardous material or equipment. Where there is a risk of falling through that opening, the worker shall be protected with a fall arrest system (*regardless of how far off the floor*). Consideration shall be made to securing the ladder to prevent it from falling through the opening.
22. Three-point contact (*1 hand and 2 feet, or 2 hands and 1 foot*) shall be maintained while ascending or descending a step ladder.

Duration and Scope of Ease

The following is applicable to the common "Step Ladder" not to Trestle Ladders, platform ladders, extension ladder, special purpose "Non-conventional" ladders. These other forms of ladders which may be used shall be examined on a case-by-case basis to assess any potential hazards to a worker when used. Notwithstanding, any ladder shall be used in accordance with the CSA Standard it was certified for and as intended by the manufacturer.

1. Step ladders can be used for short duration work. Short duration work can be defined as those operations taking 10 to 20 minutes for each singular operation.
2. Step ladders may be used <u>when repetitive ascends/descends</u> are required.
3. Step ladders are intended to be used for working with tools and equipment that would require the worker to support or apply thrust of no more than 20 lbs in any direction.

The 20 lbs of force also must take into account and include the weight of the tools being used or materials being supported by the worker on the ladder. The thrust limits must be observed in all directions but is critical in the horizontal directions and when applied vertically off centre of the ladders geometric centre. These forces if not respected, can result in the ladder becoming unstable and overturning. The width of the ladder is prone to tipping when a side force is applied. However, when a worker and any tools are on a ladder, the geometric centre and the centre of gravity are not necessarily in the same location hence, a smaller side force could cause the ladder to overturn.
Whenever practical, step ladders should not exceed 12 feet in length when measured along the length of the side rails. 1.When ceiling or equipment elevations exceed the limits of an 8-footstep ladder, consideration shell be made to use alternate methods before selecting a higher ladder. In all cases involving a step ladder, consideration must be made on the possible methods of stabilizing that particular ladder when performing the task at hand.

PORTABLE EXTENSION LADDERS

Refer to — OHSA Regulations for Construction Projects — Ladders.

Extension ladders are basically straight ladders; except they collapse for easy handling and storage. This collapsing also gives the advantage of adjusting the height above the landing surface to meet the "three-point contact" and 3 feet above. The following principles shall be adhered to when using extension ladders.

- Ropes, pulleys and other moving parts must be kept in good repair and lubricated as required.
- The moving sections must be locked before mounting.
- The overlap between sections must be at least 3 or 4 rungs, in order to transmit all forces from one section safely to the other.
- Because of the difficulty in setting up the ladder, weight and length, at least 2 workers are required.
- Shall not exceed 40 feet for a 2-section ladder.

Ropes, Slings and Chains

With respect to the use. and maintenance of any rope or sling or any attachment or fitting thereon used by an employee, all employees shall follow the accepted practices outlined in the "*Rigging Manual*" published by the Infrastructure Health and Safety Association. Alternatively, follow the practices set out in CSA Standard B75-1947, Code of Practice for the Use and Care of Chain, dated May 1947.

Take wire rope out of service when one of the following conditions exist:

- In running ropes, 6 broken wires in one lay or 3 broken wires in a strand with one lay.
- Wear of 1/3 the original diameter or outside individual wires.
- Kinking, crushing. hoist caging, heat damage or any other damage resulting in distortion of the rope structure.
- In standing ropes, more than two broken wires in one lay in sections beyond end connections, or more than one broken wire at an end connection.

Rigging Equipment

1. Never exceed the safe working loads of slings and rigging hardware. Determine load weight before rigging it.
2. Discard or destroy defective hardware and tackle.
3. Keep wire rope away from cutting and welding operations.
4. Rig loads to prevent them from loosening or coming apart.
5. Use taglines to guide heavy or awkward loads.

6. Stand clear when loads are being lifted or lowered and when slings are being pulled out from under the load.
7. Avoid hoisting in high wind or with poor visibility.
8. Keep rigging, loads and hoisting equipment away from overhead power lines. 9. All hooks shall have proper maintenance and functional safety catches.

WORKING NEAR ENERGIZED ELECTRICAL CABLES

Refer to — OHSA Regulations for Construction Projects — Electrical Hazards

Once the voltage of overhead powerlines has been identified, the minimum distance that any part of machinery or equipment may be located to the energized power lines is as follows:

ACCESS TO WORK AREAS

Refer to — OHSA Regulations for Construction Projects — Access to Work Area.

Ladders, scaffolds, swing stages, ramps and runways are to be constructed, erected and secured in accordance with the provincial regulations. When work areas are above or below ground, access to and egress from the work area shall be provided and maintained in a safe condition. Proper and sufficient warning signs, tags or lockout devices shall be installed whenever hazards exist, such as moving machinery, open excavations, temporarily removed manhole or access covers and electrical hazards.

On most construction projects and some industrial establishments, there is usually a designated construction entrance. Other locations and areas may seem to be suitable to be used for entrance or exit, however, given the dynamic nature of a construction project, unknown hazards may exist, such as tripping, slipping or falling in those areas not designated as construction entrance. Use only the entrance(s) designated. Where the access to a project is strictly controlled via a security pass, sign in system or badge, keep in mind that the system is in place to protect your safety as well as the security of the owner. Never take shortcuts when operating on a secure project, follow the security system that is in place.

GUARDRAILS

Refer to — OHSA Regulations for Construction Projects Guardrails and Protective Coverings.

Guardrails consisting of a top rail, mid rail and toe board must be provided around work platforms on all scaffolds, floor opening, ramps and open areas where a worker can fall from one level to another (*8 feet*). A guardrail shall consist of a top rail, intermediate rail and toe board secured to vertical posts and shall be capable of resisting any load that may be applied to it. Construct and use guardrails as required by the Occupational Health and Safety Act.

When guardrails or opening covers are temporarily removed, workers in the area must be protected by a safety harness and shock absorbing lanyard secured to a supporting structure. Barricades, guardrails and cover must be replaced properly and immediately after work is completed.

All barricades, guardrails and covers must be of adequate strength and properly secured to withstand all potential loads likely to be applied to them. Ensure that proper signs are posted warning of hazards. Use barricade tape as described in the next section.

BARRICADES, BARRICADE WARNING TAPE

"Due Diligence" and "Common Care" issues in terms of negligence must be addressed when installing barricades. We are required to ensure:

1. Signs are to be posted in prominent locations and in sufficient numbers to warn workers of a hazard.
2. No person shall enter an area in which a sign is posted other than a worker authorized to work in the area.
3. A sign having the word "DANGER" written in legible letters that are at least 6 inches in height and states that entry by any unauthorized person to the area where the hazard exists is forbidden which shall include, but are not limited to, the following:

    - Under a boatswain's chair, a suspended scaffold or a suspended platform.
    - At the cutlet from a chute.
    - At a means of access to a place where there may be a noxious gas, vapor, dust or fume, or hazardous substance or a lack of oxygen.
    - Where there is a potential hazard from an energized overhead electrical conductor at more than 750 volts.

Barricades are intended to prevent the normal passage of personnel or vehicles through a "Danger" area. The word "Barrier" or "Barricade" has been loosely used in construction and has various meanings to different people. We must ensure our barricade is suitable to protect against unauthorized or accidental passage into the danger area. Rigid barricades are

commonly used as temporary protection. Intelligent use of signs will increase the effectiveness of the barricades. Signs should never be used that have wording other than that for the work in progress, i.e. "Danger Worker Above" used for a height or fall hazard. There is a vast assortment of wording on barrier tapes. Some of the wording doesn't really reflect the purpose or meaning of the tape Furthermore, we tend to overuse this barricade tape and then it becomes meaningless.

Barricade tape comes in different colours; yellow with black printing, white with green printing, white with red printing, and may other possible combination of colours. Some customers have standardized colours and pictograms for warning signs and barricade tape and others have not. It is always best to use the international recognized colours and pictograms that outline the hazards. Note the following:

- Red - DANGER STOP
- Yellow —CAUTION
- Green - NO HAZARD

The text used on barricade tape ranges from: "CAUTION DO NOT ENTER", to "CAUTION WET FLOORS".

When using barricade tape ensure that you include and consider:

- Identification — Who put up the tape?
- Removal — When s it to be removed and by whom?
- Area — What area is necessary to be protected and by what means?

Always:

Install and build the barricade or guardrail as the hazard(s) require. The regulations clearly spell out what minimum protection hazards require. Check what the general contractor or owner requires and how they are to be used. The use of barricade tape to protect an unsupervised opening in a floor or demolition site does not meet the intent of the OHSA for common care or due diligence.

Use sufficient signage that clearly indicates the hazards and desire we want to convey. Avoid confusing signs such as; "Caution, Do Not Enter". The sign is either "Do Not Enter" or "Danger, Do No Enter". The word "Caution" is not a strong enough word.

To help avoid problems with the use of barricade tape, we have adopted the following procedures:

- Our too cribs will stock "DANGER _____" signs that meet the requirements of the Regulations.
- Barricade tape will be supplied with the following words: "DANGER DO NOT ENTER" followed by our logo.
- When ordering barricade tape, ensure the wording is what is required. Consult with our safety department: if necessary.
- Review the training on the use of barricades and signs.
- Remove the temporary barricades and barricade tape as soon as practical. Do not loan our custom worded barricade tape to other contractors.

Always check the provincial safety regulations for your area and the rules for your project as they pertain to the installation and construction of barricades, guardrails or covers.

FLOOR AND WALL OPENING PROTECTION

Floor holes and openings must be protected with proper covers, guardrails or barricades to prevent accidental falls — both persons and materials. Floor holes create a tripping hazard no matter how small the opening or how deep the hole. Install guardrails on all exposed sides of any floor or wall opening, except at entrances to stairways. Always provide adequate protection for any opening in a floor

Floor opening covers shall be capable of supporting the maximum intended load and be installed to prevent accidental displacement. Replace immediately, any barricades or other protection temporarily removed for work operations. Floor and wall openings shall be protected by guardrails or covers that are installed and built as required by the provincial safety regulations for your area.

WORK AREA PROTECTION - TRAFFIC CONTROL PLAN (*TCP*)

When maintenance or construction is required on public roadways, you must juggle many important concerns; available personnel, budget, weather and public relations. But these interests must be balanced with safety. Safety must always be the highest priority. When the work being performed involves traffic control, the supervisor must ensure that the correct procedures are being followed for the area of work. The reference to use is the "Traffic Control

Manual for Roadway Work Operations" from the Ministry of Transportation.

Traffic persons are more frequently in contact with the public than other construction workers. In addition to training, they should have:

- Intelligence and common sense.
- A courteous but firm manner.
- Sound health especially sight and hearing.
- Mental and physical alertness.

Managing the Work Site and Traffic Areas

Work area protection is designed to enhance the safety of motorists and workers. Careful design of work and traffic areas will safeguard motorists, pedestrians, and workers. When designing a TCP (*Traffic Control Plan*), keep these points in mind:

- Guide motorists in a clear and positive manner through warning, delineation, and channelization.
- Restrict traffic as little as possible.
- Recognize that it can be difficult to persuade motorists to slow down, therefore, avoid reduced speed zones when possible.
- Avoid abrupt changes in traffic patterns, such as lane narrowing, dropped lanes, or translations that require rapid maneuvers.
- The traffic control zone, detours and traffic control devices are the keyways to safely separate work and traffic areas.

The Work Area Protection Program is designed to maintain and promote safety. It consists of four key elements:

Communication Plan

Motorists, pedestrians, businesses, schools, police, fire department, government agencies and other contractors on site; these are some of the people and entities you must inform of the scope of your project. They must be informed as to when and where work will take place, when the job is finished and that normal traffic patterns are restored. This is accomplished through a communication plan. This plan describes on the job procedures that ensure communication among employees, the public and other workers in the area. Emergency response plans also are covered.

TCP (*Traffic Control Plan*)

A formal TCP, required by most provinces and cities explains all aspects of the upcoming job. The more complex the project, the more detailed this document will be.

All involved parties should understand the TCP before they occupy the work site. A TCP covers:

- Traffic flow patterns.
- Persons in charge
- Speed and volume of traffic.
- Economic and community concerns
- Use of traffic control devices.
- Design of zone and diagrams.
- Emergency phone numbers.
- Copies of permits.
- Weather conditions.
- Project time frame.
- Personnel requirements.

TCP Maintenance

Responsibility for maintenance is that of the supervisor. The supervisor must conduct a thorough drive through after all traffic control zones and devices have been created and installed, before motorist; are allowed in the area. Conduct a nighttime drive through if the work area will be kept in place overnight.

Some key elements to check for:

- Are warning signs obvious?
- Are cones properly spaced?
- Do motorists have enough time to merge into alternate lanes?

Working conditions such as weather and traffic volume continually change. Carefully evaluate and modify your TCP as necessary. For example, during long term construction projects, traffic control devices tend to move from their original alignment. Bulbs on lighting devices need frequent replacement. Icy roads may require longer traffic zones. One of the most important reasons for routine monitoring; unauthorized individuals often move barricades, or they steal cones, flashing lights, sig and other devices.

Locate construction equipment away from the possible path of vehicles that might run off the road.

Employee Training

Training is not only vital io both job safety and efficiency but also required by law. As required, all employees, from management to field personnel to contract workers, need training relevant to the jobs they perform. Training covers the following areas:

- Regulations and codes.
- Selection and use of traffic control devices. Design of traffic control zones.
- Creation of a TCP
- Emergency and first aid procedures.

Training programs shall be developed, presented and tracked by the safety department. The project manager at the project requiring traffic control must arrange this with the safety department and the supervisor shall ensure that only trained workers perform traffic control functions.

The Zone

The following five traffic zones must always be created:

Zone 1

The advance warning area alerts drivers as they approach a work area. It should be clearly marked and long enough to allow drivers to slow down. The advanced warning area should fit the needs of your work project. The type and size of the work project, weather conditions, speed limit, volume and visibility are among factors that affect its design.

Zone 2

The alternate route created around the work area in place of normal driving lanes. Translation areas should be clearly marked and be obvious to motorists. Tapers are used within the translation area to deliver traffic from its normal path.

Zone 3

The buffer space provides a margin of safety for both oncoming traffic and workers, as is the open road between the transition and work area. The buffer space is to be kept free of equipment, workers and vehicles.

Zone 4
The work area is reserved for workers and equipment. Barriers or channelizing devices surrounding the area separate the area from traffic and pedestrians.

Zone 5

The termination area allows traffic to clear the work area before returning to normal lanes. It extends from the end of the work area to the final "END OF CONSTRUCTION" sign.

Signs

Because many work projects last for a few days or even weeks, all devices must either be reflectorized or illuminated to ensure nighttime visibility. The use of signs, including their colour, size, shape, and placement, is governed by federal, local or provincial agencies.

There are three basic types of signs: regulatory, warning and guide. Regulatory signs include commands such as "STOP", "DO NOT PASS", "YEILD", and "SPEED LIMIT ". Existing signs may be removed temporarily or covered to accommodate substitute signs related to your work project. Regulatory' signs are normally placed at the exact point to which the command takes effect.

Warning signs advise motorists of an upcoming hazard. They are placed well in advance of the hazard to give motorists plenty of response time. Guide signs refer to destinations, service areas and points of interest. Use these signs to provide drivers with route directions or destination information.

Sign Selection

In most cases, use the same shapes, colours and sizes as standard highway signs. In all cases they must meet the requirements by federal, provincial or local agencies. The following are some guidelines regarding highway signs:

- Most permanent warning signs are diamond shaped with black legends on a yellow background. Diamond shaped temporary seaming signs have an orange background.
- Rectangles, octagons, inverted triangles and squares are standard regulatory sign shapes.
- Motorists don't have time to read long or unusual messages. Instead, use standard legends that are familiar to drivers. Stripes (*other than the standard border*), geometric patterns, or nonstandard colours also divert attention from the message.
- Increase or decrease sign size in 6-inch increments.

- Signs always should be professionally made and printed.

Cones

Cones are lightweight and easy to store, place and remove. Some have weighted bases for stability. They are blazing orange in colour and may have flashing or reflective devices attached to them.

Vertical Panels

Like cones, tubular markers are lightweighted, easy to install and minimally restrict traffic flow.

Use vertical panels to separate traffic or to barricade road shoulders where space is limited. Panels are orange and white stripped and are marked with reflectors.

Barriers

Use barriers to prevent traffic from entering a work area, to separate two-way traffic or for channelizing. Use light colored barriers to channelize traffic. At night supplement channelizing barriers with delineators or channelizing devices and lights may be installed on continuous barriers.

Lighting Devices

Floodlights

At night or when driver visibility is poor, use lighting devices to supplement signs, barriers, and channelizing devices that have reflectors on them.

Floodlights are used for illumination. They are typically used for around the clock construction and maintenance operations. Make sure floodlight glare is not a problem for motorists, to ensure this, drive through the area several times in a car (*not a truck*).

Flashing Lights

Flashing electric lights are typically used for long term projects because of the time involved installing them. Use flashing electric lights to call attention to and mark hazards.

Warning Lights

Waming lights either steady burning or flashing, are lightweight and easy to move. They should emit yellow light. Mount low intensity, flashing warning lights on barricades, drums, and other advance warning signs to continually alert drivers of an upcoming hazard.

Hand signaling Devices

Flaggers use hand signaling devices to safely move vehicles and pedestrians through or around a work area. They also are responsible for protecting work crews and construction equipment from motorists.

Flaggers

Because they are in contact with the public, flaggers should be courteous, professional in attitude and appearance and be highly committed to safety. Conversations with stopped motorists should be limited to answering questions about the traffic delay. Outer clothing, such as vests, shirts, and jackets, should be orange.

Follow these rules to increase the effectiveness and safety of the flagger.

- At night, outer garments need reflectors.
- Flaggers should stand alone either on the road shoulder or in the barricade lane.
- A flagger should never stand in the lane used by traffic.
- Communication between flaggers enhances safety. Radios or cellular phones are recommended for flaggers who are located at each end of a job site.

Summary and Checklist before the Work Project Begins

- Coordinate with government agencies; secure permits
- Create communication plan.
- Create traffic control plan (*TCP*)
- Design traffic control zones.
- Create maintenance plan.
- Develop emergency procedures.
- All employees involved must be trained for this project.
- Install traffic devices.
- Inspect and drive through area before motorists are allowed in the area.
- When the project is completed, restore normal traffic patterns in an orderly fashion.

- Remove all traffic control devices (*begin at zone farthest from work site*).
- Monitor traffic during removal of traffic control devices to reduce hazards.

SIGNAL PERSONS (*SIGNALER*)

Around heavy trucks, equipment and cranes, a signal person (*signaler*) is required when the operators view is obstructed or when the equipment is driven where the operator or another person may be endangered, as in backing up. The signal person shall communicate with the operator by way of two-way radio or, by use of pre-arranged visual signals when a clear visual path (*between signal person and operator can be maintained*) with the operator can be maintained.

A signal person shall be a competent worker and shall not perform other work while acting as a signal person. A signal person shall:

- Be clear on the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load.
- Be in full view of the operator of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine.
- Have a clear view of the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine.
- Watch the part of the vehicle, machine or equipment or crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load whose path of travel the operator cannot see.

TRUCKS

No vehicle, machine, or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine shall be operated unless the operator is assisted by a signal person where:

- The operator's view of the intended path of travel or any part of it or its load is obstructed.
- It is in a location in which a person may be endangered by any part of it or its load.

An operator of a vehicle, machine, equipment, crane or similar hoisting device, shovel, or backhoe similar excavating machine who is required to be assisted by a signaler shall operate it as directed by the signal person. Charts and decals of roadwork, crane and hoist hand signals are available from the Infrastructure Health and Safety Association. When loading or

unloading any type of truck or trailer with a crane or filling a dump truck with a power shovel, remember:

- Position the truck as close to the crane loading/unloading area as possible to avoid overreaching by the crane or shovel.
- The truck should be positioned on terrain as level as possible.
- Keep the truck and crane away from overhead power lines.
- Any truck backing up should be directed by a competent signal person.
- Truck wheels should be blocked or chocked during unloading.
- Before mounting e truck, scrape off boot soles to avoid slips.
- Mount the truck platform in full view of the crane operator or signal person so that you do not get struck by the load or the crane hook.
- Climb up and down facing the truck, maintaining 3-point contact at all times
- Never sit in the cab while the loading/unloading operation is underway, unless the truck cab is designed to provide overhead protection from a falling load.

MOTOR VEHICLE POLICY

It is the purpose of this policy to deal with the safe management of our company vehicles and operators in accordance with the applicable legislative authorities.

The Provincial Highway Traffic Act, and the Occupational Health and Safety Act and their associated regulations regulate how we operate, maintain and track company vehicles and transport goods. This policy is designed to ensure compliance with those Acts and Regulations, such that both public and employee safety is protected.

The scope of this policy governs any company vehicle that is leased or owned by the company, and which may or may not have the company's markings affixed. A vehicle is any truck, van, car and trailer that requires a license plate to be attached in order to operate on a public road.

Operator Authority

Company Operating Class Definitions

There are 3 possible classes of operator authority which are granted to our employees:

- "Named User — Exclusive"
- "Named User" class 1 and 2

Named User — Exclusive

Those who operate a company vehicle that is exclusively for their use and does not have any company markings affixed. These vehicles will not. in most cases. have a commercial license plate. These vehicles a-e used as part of our Company Automotive Policy as defined in our

Company Operations Manual.

Named User

Those who have been assigned a company vehicle for company business use only.

Class 1

These vehicles will have, in most cases, commercial vehicle license plates. This group of vehicles will include pickup trucks and vans under 4500 kg with no towing capacity.

Class 2

This group of vehicles include vans and pickup trucks for business use only, up to 4500 kg including towing capacity over 4500 kg.

Authority Standards

Skill Level

All drivers must hold and maintain a valid provincial drivers' license in the class required for the vehicle that they are operating. Drivers must obey the limitations and restrictions outlined on their particular license or they are in violation of this policy and open to discipline.

Fitness

All drivers are responsible for adhering to the medical requirements of their particular license, including being "fit for safe driving" and not being "impaired" in any way. This includes obeying the provincial and our company limits as they pertain to alcohol, prescription and nonprescription drugs or any' other impairment. When a driver becomes impaired or is believed to be impaired by a co-worker or they are medically unfit to operate any vehicle, their condition must be reported to their direct supervisor forthwith and then forwarded to the equipment manager.

Proof of Provincial Driver License and Driving Records

It is the Division Managers responsibility to ensure that a current copy of their workers driver's license and abstract are forwarded to the equipment manager and human resources department. For new hires, it will be the responsibility of Human Resources to obtain the driver's license and abstract from the new employee before that employee is granted permission to operate a company vehicle. If an accident or incident occurs involving a company vehicle, submit all prescribed information to the equipment manager, regardless of the cause of the accident.

Emergency Call — Outs

In the event of an emergency call out when a non-designated driver is required to drive any company vehicle, the direct supervisor must submit to the Human Resources department within 24 hours or the next business day, particulars of the driver involved including a photocopy of their driver's license.

Driving Records

The company will require all drivers to sign a release or provide at the company's cost, a driver's abstract, when requested. The abstract will be reviewed, and a determination will be made on the driver's risks. If the driver's abstract indicated an unacceptable risk, driver privileges will be denied.

Responsibilities and Procedures

All drivers shall:

a) When required, provide a driver's abstract at the cost of the employer;
b) Supply a copy of their driver's license, medical fitness when accepting a company vehicle.
c) Submit all prescribed information to the equipment manager, in the event of a accident or incident, regardless of the causation involving a company vehicle;
d) Complete and supply other documents relating to the operation of their vehicle as may be required at the prescribed intervals (*i.e. maintenance logs, pre tip inspections etc.*);
e) Comply with all provincial, municipal or federal laws and any company rule or the rules of a customer while on their property;
f) Report any violations of the laws or rules forthwith while using any company vehicle.

Regardless of if any Conviction or other Actions Pending:

a) Comply with requests of the equipment manager;
b) Operate their vehicle in a manner that is concurrent with the company's image;
c) Submit the vehicle assigned to them to spot inspections;
d) Comply with prescribed maintenance schedules;
e) Operate the vehicle in accordance with the owner's manual or company's operator's manual whichever is applicable.
f) Inspect their vehicle prior to each use following the prescribed checklist and report forthwith to their supervisor any defects or damage.
g) Ensure they are fit for safe work and not be impaired by any medical condition or be under the influence of any drug or alcohol, before using a company vehicle.

No driver shall:

a) Operate his vehicle in an unsafe, unfriendly, dangerous manner or when the mechanical fitness of the vehicle or trailer being towed is in question. This includes the placement, security and weights of the cargo;
b) Overload, load, unload in an unsafe manner or abuse the vehicle;

c) Tow any equipment, article or thing, that has not been specifically designed or authorized by the company for towing (*i.e. boats, campers, home built trailers, etc*.).
d) Leave any company vehicle parked in an unsecured or unsafe manner (*i.e. keys in the ignition, door unlocked, engine running while unattended, etc.*).
e) Park any company vehicle that has commercial plates and company markings on any private driveway or parking lot operated by a licensed "liquor serving" establishment (*bar, tavern, adult entertainment facility*) for any other purpose other than to service the equipment in or on the property, unless authorized by the employer or at a company function.
f) Use their vehicle for illegal activities.
g) Loan their vehicle to any person not qualified or authorized to operate it.

The driver's direct manager shall:

a) Forward all prescribed documentation to the appropriate department and manager.
b) Confirm and ensure the vehicles in their charge are used as designed and intended.
c) Ensure that their employees are qualified and trained to operate said vehicles, if not, arrange for the suitable training where required.
d) Forward any defects and damage reports to the equipment manager, forthwith and not allow the operation of an unfit vehicle that they are aware of.

e) Review this policy and any prescribed rules or regulations governing company vehicles with their drivers.
f) Not permit any driver to transport dangerous goods unless qualified and trained to do so.
g) Take every precaution to ensure our vehicles are operated in a safe manner.

Equipment Manager

The Equipment Manager Shall:

a) Determine and arrange the scheduled maintenance and/or repair of any company vehicle.
b) Approve and issue the "letter of authorization" for any "named user".
c) Prescribe the driver standards required for the operation of any vehicle.
d) Monitor the drivers abstract and take the necessary disciplinary actions for all drivers as the results of infractions of this policy.
e) Report on the causation and prevention of any accident to the controller, safety department and human resources department.
f) Develop or arrange for any required or prescribed driver training.
g) Specify the safety equipment, other than first aid and personal protective devices required under the Provincial or Federal Occupational Health and Safety Act or the Canada Labour Code Part ii.
h) Specify and if required, source the necessary and adequate vehicle for the driver's intended use.
i) Ensure that the frequency of the inspections, are adequate to ensure this policy is being complied with.
j) Not knowingly allow any defective vehicle to be operated.
k) Notify division managers of any changes to the law affecting the Commercial Vehicle Operators Regulations (*CVOR*).
l) Obtain, track and report on all driver abstracts, license's, suspensions and discipline and submit the reports to the necessary managers.
m) Prepare reports for our CVOR as required.
n) Maintain driver's employment files and records.
o) Arrange the defense of any violations of provincial, municipal or federal traffic law.

Director Workers' Compensation and Safety

The Director, Workers' Compensation and Safety shall, for other than "Named User — Exclusive Use" vehicles:

a) Provide the necessary MSDS's for products transported by the vehicles.
b) Arrange for and regulate the TDG training and documentation.
c) Ensure that random spot checks of the safety supplies in each vehicle occur.
d) Specify first aid supplies and arrange first aid training as required for each driver.
e) Specify the personal protective safety equipment and personal protective devices required under the provincial or federal Occupational Health and Safety Act or Canada Labour Code part ii specific for the work that the drivers are to perform.
f) Afford assistance to any department, manager or worker to ensure safe use of a company vehicle.
g) Track, recommend and comment on all motor vehicle accidents so that we may prevent other similar incidents or accidents in the future.

Discipline

a) In the event a driver is charged under any applicable legislation regulating the operations of a vehicle, the driver must forthwith inform the Human Resources manager immediately.
b) The company reserves the right to selectively defend at our costs, any traffic violation committed by any driver of a company vehicle.
c) Successfully defending any traffic violation does not advocate internal discipline as noted below.
d) An internal discipline system will be used to qualify all drivers. The "demerit points" will be assigned as follows and will be presented on the prescribed form to the offending driver, his direct supervisor and Human Resources manager.
e) All violations will be required to be reported in writing on the prescribed form.

Demerit Point System

Each employee will be credited with 25 internal points to start with. If an individual is charged with a violation as listed below, the demerit points that correspond to the violation will be deducted from the starting balance of 25 points. When the individual's credit points have been reduced by demerit points to a balance of 15, they will be required to explain their actions and remedial plans during an interview with the equipment manager. This first interview will be documented as a warning, and the individual will be put on probation. If the credit points are further reduced by demerit points to a balance of 10, all driver privileges will be suspended immediately, and the individual will have a second interview with the equipment manager. If at that time the equipment manager is not satisfied with the outcome of the interview, driver privileges may be suspended for a time period set forth by the equipment manager.

If, in the opinion of the equipment manager, the severity of any action of violation (*including an accident or incident*) is such that it warrants further disciplinary action, the driver's privileges may be revoked and/or the driver may be discharged. Any manager or supervisor who has accumulated demerit PDint thus reducing their total credit balance to 15, will be subject to disciplinary actions set out by the president.

All demerit points will remain as part of the employee's employment record for three years. The demerit points may be reduced, thus allowing credit points to be made up, if the employee, at their expense, obtains remedial training. The level of reduction of the demerit points as a result of the noted remedial training will be determined by the equipment manager.

VIOLATION

The following list is typical violations that will result in the driver being assigned company disciplinary demerit points. The number of demerit points will be determined by the equipment manager and will correspond with the nature and severity of the violation(s)

DRIVER CHECK

It is illegal to drive e vehicle in a dangerous condition. A police officer or the Ministry of Transportation inspector can examine your vehicle, company vehicle, its equipment and any trailer attached to it at any time. If the vehicle is found to be unsafe it will be taken off the road until the problem is fixed. Fines of up to $1000 will be laid if you refuse to have the vehicle examined. If the vehicle is found to be unsafe during the inspection, then the license plates can be taken away.

Every vehicle should be physically inspected before use. This means walking around the vehicle and visually and physically inspecting equipment. A checklist will aid in inspecting for defects or problems:

- Check tire pressure regularly. Properly inflated tires get better mileage and are safer for driving. Check for wear and tear on tires.
- Check that all lights are working. Check windshield wipers are properly attached to blade.
- Check under the hood (*when engine is cold*) check for; fluid levels — oil, windshield wiper fluid, coolant level, brake fluid. Check all hoses for cracks or leaks and check fan belts for wear or slackness. Look for fluids under the vehicle if any are leaking onto the ground.
- Check that all seat belts are in working order and that there is enough for each passenger.

- Check that brakes and emergency brakes are in working order.
- Check that the vehicle registration and permit are located in the vehicle.
- Report any defects or problems to your supervisor. If the situation cannot be immediately corrected do not use the vehicle.

RAILWAY CROSSINGS

Although almost all public road crossing is protected by automatic warning signals, motorists and truck driver frequently disregard them and dash across, sometimes just ahead of a speeding train. A chief factor for these collisions (*which often end up in fatalities*) is the carelessness of the drivers of the vehicles who fail to observe safety signals.

There are 2 types of railway crossings: controlled and uncontrolled. A controlled crossing has barriers and warning devices (*flashing lights and bells*) to inform you that a train is approaching. The uncontrolled crossing will not have barriers only warning signs (*i.e. remote country dirt road*). There are different safety rules for each type of crossing:

Controlled Crossings

1. If crossing gate is down, you must come to a complete stop until the gate is fully raised.
2. If there is a light flashing, you must come to a complete stop until the light stops flashing and the track is clear.
3. Never rely on the mechanical devices at controlled railway crossings. The devices may not be working properly, and it is unwise to assume they are.
4. Always approach any controlled crossing with caution and alertness. Look and listen before crossing the tracks.

    - Remember that in some areas, trucks carrying dangerous cargoes and buses are legally required to stop at crossings whether there is a train approaching or not. Be prepared to stop behind these vehicles.
    - Never change gears while crossing railway tracks and never stop on the tracks.
    - If your vehicle stalls on the tracks, and a train is approaching, immediately leave the vehicle and run parallel to the train in the direction of the train to avoid being hit by flying debris.

Uncontrolled Crossings

1. As you come to a crossing, slow down, listen and look both ways to make sure that the track is clear before crossing. (*This may require turning off radio and rolling down a window*).
2. If a train is approaching, stop at least five metres from the nearest rail. Do not cross tracks until you are sure all trains have passed.
3. If there is more than one set of tracks, wait until passing train is well down the tracks so that you can make sure that another train is not coming from the opposite direction.
4. If you are in a line of cars going over the track, wait until the car ahead of you is well off the tracks and there is room for your vehicle to cross safely to the other side.
5. It is dangerous and illegal to drive around, under or through a railway gate or barrier while it is being opened or closed. Company vehicles must not be parked within 2 metres of any railway tracks. Cross only at designated crossings.

ENVIRONMENTAL POLICY

Introduction

Skyline must comply with Federal and Provincial Hazardous Waste Management Regulations. In general, these regulations set forth requirements for generators, transporters, and owner/operators of treatment, storage, and disposal facilities that allow tracking hazardous waste from generation to final disposal.

Regulatory Authority

Ontario Waste Management Regulation 347

Applicable To

Skyline facilities or job sites that generate, store, transport, or dispose of solid and liquid waste.

General Guidelines

1. In general, any solid, liquid, semi liquid, or containerized gaseous material which is either discarded, has served its intended purpose, or is a manufacturing by product may be a hazardous waste if it contains a waste specified in published lists or exhibits the characteristics of a hazardous waste (*i.e. ignitable, corrosive, toxic, reactive*). Generating hazardous waste at your facility starts the tracking system requirements. Storing hazardous waste, transporting hazardous waste, or treating/disposing of

waste has specific legislative requirements. Hazardous Waste Management training is also a requirement for the individuals that handle hazardous waste.

2. Chemicals or materials suspected as being hazardous waste shall not be:

    a) Disposed of in the plant/project solid waste trash cans.
    b) Disposed of into the storm or sanitary sewer drains.
    c) Disposed of by dumping on site.

Specific Characterization, Accumulation and Storage Guidelines for Hazardous Waste Generators

1. Each facility must determine if any waste that it generates is hazardous through the acquisition of analytical data or knowledge of the process and the chemical and physical properties of the waste.
2. Wastes that are determined to be hazardous waste must be registered with the province which also must De notified when new waste streams are added. Upon review of the registration form, the province will issue the facility a registration number.
3. Wastes may be stored on site in an appropriate area for up to 90 days. The area must be:

    - Within 50 feet of the facility property line
    - Separated from sources of ignition
    - Contained in such a way to minimize the environmental impact of spills or leaks.

4. Containers in which waste is stored must be Labeled with the date accumulation began

    - Clearly labeled as to contents, including the phrase "hazardous waste".
    - Compatible with the material being stored.
    - Stored in e, manner which avoids ruptures or leaks.
    - Closed during storage and are opened only to add or remove waste.

5. For each load of hazardous waste transported off-site, a manifest form must be completed by the generator, carrier and receiver.
6. Copies of completed manifest forms must be maintained on file at the site for 5 years. A copy of each completed manifest must be sent to corporate EHS.
7. Preparedness arid contingency planning required for compliance include:

- Reporting of any spill which may impair the quality of the natural environment (*air, water or land*) or damage property.
- Containment and clean-up of any spilled waste.
- Restoration of the spill to essentially pre-spill conditions.
- Employees must be able to respond effectively to emergencies.

Note: Copies of completed generator registration forms shall be maintained at the site and sent to corporate EHS. The facility manager shall ensure that each year the "Hazardous Waste Inspection Checklist", which forms as part of this guideline, is completed and submitted to corporate EHS.

Facility Hazardous Waste Inspection Checklist — Introduction

All facilities must ensure safe storage and handling of hazardous chemicals to protect personnel, property and the environment.

Applicable To

All facilities where hazardous chemicals are used in the workplace or stored on site.

Definitions

Hazardous Chemical Any substance or mixture of substances with the capacity to produce injury or harm. Such substances can be toxic, corrosive, irritating, strong sensitizers, flammable or can generate heat and pressure through decomposition or reaction with other materials.

Guidelines

1) Hazardous chemicals shall be stored properly to prevent possible fires, property damage, or personal injury The best way to store large quantities of hazardous chemicals is in a separate, isolated building or in an isolated portion of a building. Smaller quantities shall be stored in areas separated from vehicle and pedestrian traffic and stored in such a way as to minimize the environmental impact of spills or leaks.
2) The storage and dispensing of flammables (*Flash Point <100 degrees Fahrenheit*) shall be done in a room with fire resistant walls, doors, ceiling and floors or flammable storage cabinets. Mixing of flammables shall be done in a room equipped with an automatic fire protection system, provided with portable fire extinguishers and equipped with explosive proof electrical fixtures.

3) Incompatible materials such as acids and alkalis or oxidizers and solvents shall be mixed together in storage.
4) All hazardous chemical storage areas must have the appropriate fire symbol and/or warning sign attached to the outside of the building or special room.
5) Small quantities of hazardous chemicals shall be kept in approved and properly labeled storage cabinets. Small quantities of flammable chemicals shall be stored in approved safety containers in a flammable storage cabinet.
6) The contents of all chemical containers shall be identified on the container label with a hazard warning statement. The appropriate personal protective equipment shall be available for use.
7) An audit of the safe and appropriate storage of hazardous chemicals shall be included in all normal workplace audits.
8) Dispose of all waste chemicals according to the EHS Compliance Guideline.

Regulatory Authority (*Federal and Provincial*)

1) Ontario Environmental Protection Act
2) Canadian Environmental Protection Act and regulations
3) CANADIAN ENVI RONMENTAL PROTECTION ACT R.S.C. 1985, c. 16 (*4th supp.)*
4) Environment Act and regulations
5) Environmental Protection Act and regulations
6) Environmental Assessment Act and regulations
7) Clean Air Act and regulations
8) Clean Environment Act and regulations
9) Clean Water Act and regulations

HEAT STRESS PREVENTION

General

Heat Stroke and Heat Stress

Heat stroke or stress is when, with extremes of heat and work conditions life is endangered as the body is pushed to its physiological limits. If conditions of climate and work are such that there is any possibility of heat stroke, then medical opinion should obviously be sought immediately.

Heat Discomfort

Heat discomfort is caused by conditions of climate and work such that workers become very uncomfortable. Life is not endangered. At the heat discomfort level, it's not certain that there is an increase in accident rates or whether productivity is reduced. The research literature on the subject is neither consistent nor has it reached any consensus.

Effects of Heat

There are six main factors involved in causing heat stress. They include:

- Air temperature
- Amount of humidity in the air
- Air movement
- Radiant temperature of the surroundings
- Type and amount of clothing that the person is wearing
- Amount of physical activity

As the environment warms, the body's internal thermostat adjusts by pumping more blood to the skin and by increasing sweat production. This in turn cools the body. When the body is unable to cool sufficiently the internal body temperature starts to climb.

Changes in blood flow and excessive sweating reduce a person's ability to do physical and mental work- Manual work produces additional metabolic heat and adds to the heat burden. Performance of mental task deteriorates when the environmental temperature exceeds 30 degrees Celsius.

Illness Caused by Heat Exposure

Heat Rashes — are tiny red spots on the skin. The sufferer feels a prickling sensation during heat exposure. The spots are the results of inflammation caused when the ducts of sweat glands become clogged.

Heat Cramps — fluid and electrolyte depletion can result in slow, painful skeletal muscle contractions (*cramps*), usually the muscles most heavily used. There is almost always a history of vigorous activity just preceding the on set of symptoms. Recovery occurs with rest in a cool environment and the intake of fluids.

Heat Exhaustion — is caused by the failure to replace the body water and salt lost through excessive sweating. Signs and symptoms of heat exhaustion include weakness, dizziness, and visual disturbances, intense thirst, nausea, headaches, vomiting, diarrhea, muscle cramps,

breathlessness, palpitations, tingling and numbness of the hands and feet. Recovery occurs after resting in a cool area and consuming cool salted drink.

Heat Stroke — is the most serious heat illness. It is caused by prolonged work in hot environments. Signs of heat stroke include dry, hot skin (*due to failure of sweating*), elevated internal body temperatures (*41 Celsius or more*), delirious behavior, complete or partial loss of consciousness, or coma. Prompt medical attention is required. In the meantime, move the victim to a cool place. Cool the person by sponging them with cool water and fanning them. Offer a conscious person 4-oz of water every 15 minutes.

Prevention

The body adapts to heat by the process called acclimatization. Complete acclimatization generally takes six or seven days although some individuals may need longer. Rest breaks should be given as needed during this time and a lighter workload to be gradually increased as acclimatization occurs. Acclimatization is lost after being away from heat for a week. Upon return to a warm environment, the acclimatization process must be repeated.

It is critical to replace water lost through sweating. Amounts ranging from 1 cup every half hour to 1 litre per hour are recommended. Thirst is not a good indicator of dehydration. During prolonged exposure to heat a carbohydrate-electrolyte beverage is beneficial.

The salt content of a well-balanced diet is usually adequate to prevent dehydration through excessive sweating providing that frequent fluid is consumed.

Clothing should be lightweight and loose fitting preferably a breathable fabric such as cotton. Eat light, preferably cold meals. Fatty foods are harder to digest in hot weather.

Overindulgence in alcohol will increase the possibilities of heat related illnesses.

Some drugs decrease the body's ability to cope with heat. These medications include but are not limited to hypotensive (*drugs causing low blood pressure*), dietetics, antispasmodics, sedatives, tranquilizers, antidepressants and amphetamines.

Anyone who has had previous heat stress disorders might be more susceptible to heat stress. Also, at risk is anyone who is ill, overweight, or not physically fit.

Modifying Work and the Environment

Management and the Joint Health and Safety Committee where applicable can reduce heat stress in the following ways:

Engineering Controls

- Control the heat source through the use of insulating and reflective barriers.
- Exhaust hot air and steam produced by specific operations.
- Reduce the temperature and humidity through air cooling.
- Provide air-conditioned rest areas.
- Increase air movement if temperature is less than 35 degrees Celsius. • Reduce physical demands of work through mechanical assistance.

Administrative Controls

- Health and safety committees should assess the demands of all jobs and have monitoring and control strategies in place for hot days.
- Increase the frequency and length of rest breaks.
- Schedule hot jobs to cooler times of the day.
- Provide cool drinking water near workers and remind them to drink a cup every 20 minutes or so. Workers should salt their food well, particularly while they are acclimatizing to hot job (*workers with a low salt diets should discuss this with their doctor*).
- Assign additional workers or slow down work pace.
- Train workers to recognize the signs and symptoms.
- Make sure everyone is properly acclimatized.
- Train workers to recognize the signs and symptoms of heat stress and start a "buddy system" since peoples are not likely to notice their own symptoms.
- Pregnant workers and workers with medical conditions should discuss working in the heat with their doctor.

Personal Protective Equipment

- Light summer clothing should be worn to allow free air movement and sweat evaporation.
- Outside, wear light colored clothing.
- In high radiant heat situations, reflective clothing may help.
- For very hot environments, air, water or ice cooled insulated clothing should be considered.
- Vapour barrier clothing such as acid suits; greatly increases the amount of heat stress on the body and extra caution is necessary.

Examples of Permissible Heat Exposure Threshold Limit Values ** (*Values are given in degrees Celsius and degrees Fahrenheit WBGT*)

As workload increases, the heat stress impact on an unacclimatized work is exacerbated. For unacclimatized worker performing a moderate level of work, the permissible heat exposure TLV should be reduced by approximately 2 — 5 degrees Celsius.

Heat Index or Humidex

Heat index (*or apparent temperature*) is how the heat and humidity in the air combine to make us feel. Higher humidity plus higher temperature often combines to make us feel a perceived temperature that is higher than the actual air temperature. See the chart.

Humidex (*Heat Index*) Heat Stress Response Plan

Acclimatized Worker is one that has been exposed to 5 days of hot weather.

Hazard Summary

Outdoor workers who are not acclimatized (*i.e. have not gradually become used to high temperatures*) may suffer serious effects from heat stress when hot weather suddenly begins. In the Ontario construction industry, workers have suffered heat stress injuries over the years. With worker awareness and adequate preventive measures, such injuries can be prevented in the future.

Heat stress, the stress that heat put on the body, can cause disorders ranging from heat cramps to heat stroke. This occurs when heat causes the body's cooling system to fail, so that the core body temperature rises to critical levels of 41 degrees Celsius or more. Heat stroke is often fatal, even when the patient is given aggressive treatment. It can occur in young, healthy people engaged in moderate to heavy physical activity as well as in older people.

Symptoms of heat stroke include confusion, irrational behavior, hot, dry skin (*usually with lack of sweating)* loss consciousness and collapse. Co-workers who do not know about heat stroke and its symptoms may think the victims is upset, intoxicated or just "acting strangely" and fail to ask for help.
Heat stroke and other heat related disorders are more likely to occur among workers who have not been acclimatized over at least two weeks. In Ontario, hot weather often arrives too

quickly for outdoor workers to acclimatize. People vary in their reaction to heat, and it is difficult to predict which worker will be seriously affected. Factors that make a worker more likely to develop heat stroke or other heat stress disorders when working in hot conditions include age, weight, physical fitness, degree of acclimatization, metabolism, decreased fluid intake, exertion, consumption of alcohol and drugs before or during work and various medical conditions, including high blood pressure.

SPECIAL CONDITIONS

The following items are conditions that present special exposures and need a detailed review. There may be a standardly control, but in most cases each condition will vary greatly from one job to another. Therefore, specific controls should be reviewed with your safety coordinator as early into the project as possible. Also note that most of these conditions present both a worker's compensation and public liability exposure.

EXPOSURES

- Hazardous Substances
- Flying/Uncontrolled debris
- High work
- Asbestos
- Night/Shift
- Transportation and traffic proximity
- Occupied Building
- Fuel use and storage
- Temporary heating
- Working with or over water
- Confined spaces

MATERIAL SAFETY DATA SHEETS (*MSDS*)

The Material Safety Data Sheets (*MSDS*) database helps us to comply with Hazard Communication, WHMIS and other right-to-know requirements.

The MSDS database is available online at skylinecanadainc.com

General Guidelines

1. DO NOT use any controlled product that does not have an MSDS or MSDS with incomplete information or that is more than 3 years old. Please call Tyler McFadden at 647-928-7233 (*647-928-safe*) to get an updated MSDS.
2. If you obtain MSDS that is not in hard copy book, CD ROM, or online, please forward a copy of the MSDS to Tyler McFadden. We will then update all our records.
3. Worker Education and Training: You have the right to know when a product you are dealing with is dangerous. You must be trained before you handle any hazardous substances. You must be taught about hazardous substances and trained in the handling of the particular materials you will be working with. Never take a substance for granted. If you are asked to use any substance that is not labelled if you see a product that is not labeled, ask your supervisor for the MSDS or call Tyler McFadden. Annual update training is made available to all workers.

PERSONAL CELL PHONES

The purpose of the policy is to reduce worker's risk to the hazards associated with unauthorized use of personal cell phones.

While at work employees are expected to exercise the same discretion using personal cellular phones as is expected for the use of company phones. Excessive personal calls during the workday, regardless of the phone used can interfere with employee productivity, safety and be a distraction to others. A reasonable standard the company encourages is to limit personal calls during work time to only break periods. However, if there is an urgent call to be made or received by the worker, 'the worker must request permission from his or her supervisor prior to making any calls. The worker will be granted permission on a case-by-case basis and requested to exit the immediate work area.

The company will not be liable for the loss or damage of personal cellular phones brought into the workplace.

Safety Issues for Cellular Phone Use

Employees whose job responsibilities include regular or occasional driving and who are issued a cell phone for business use are expected to keep safety as their first consideration. Regardless of the circumstances, including slow or stopped traffic, employees are strongly encouraged to pull off to the side of the road and safely stop the vehicle before placing or accepting a call.

Employees whose job responsibilities do not specifically include driving as an essential function, but who are issued a cell I phone for business use, are also expected to abide by the provisions above. Under no circumstances are employees allowed to place themselves at risk to fulfill business needs. Disciplinary action will be brought against any person failing to abide by the policy.

Company Issued Cell Phones and MIKE Units

Supervisors who have been assigned a Company issued cell phone or MIKE unit are excluded from this policy. Supervisors using cell phones at the project must be aware of their surroundings and only utilize the phone when it is safe to do so.

PERSONAL USE OF COMPANY TOOLS & EQUIPMENT

Tools and Equipment are not to be used outside of a company construction project or premise.
Tools and equipment are not to be used for personal use or loaned to anyone without the prior approval of the Tool and Equipment Manager. The following tools and equipment are prohibited for personal use:

- Powered tools
- Battery charged tools
- Compressed gas tools, machinery and equipment
- Fuelled equipment and machinery
- Heaters
- Suspension equipment
- Fall arrest equipment
- PPE's

Any tools that require i certificate or license. (*Example — scissor lift, hydraulic access lift, suspended access and rigging equipment, propane tanks*).

EMPLOYEE SUPPLIED PERSONAL FALL PROTECTION (*PPE*) CHECKLIST

When an employee supplies their own fall protection equipment (*PPE*), we must ensure it is equipment suitable for the intended work and is safe to use. This checklist has 17 items that must be reviewed before the fall protection equipment can be used.

1. Identify the project.
2. Each harness and lanyard has a model and serial number. If you can't read either, then don't use the equipment. They must all be CSA approved.
3. Check the back "D" ring for wear, cracks, distortions, burns, nicks and cuts. The harness may have side or front "D" rings, if so, they must also be checked.
4. Check the stitching for wear, breaks, burns, cuts, missing loops and looseness.
5. Check the webbing for wear, cuts, burns, weld splatter, discoloration, paint and signs of stress.
6. The back "D" ring must be positioned between and slightly above the shoulder blades. Have the worker put on the harness and check the location of the back "D" ring. If the harness has side and front "D" ring, check that these are in the property position as well. The side "D" rings are positioned near the hips and the front "D" ring in the middle of the body at or below the chest.
7. Check the adjustment of all chest straps. They should be snug and positioned at or near the chest, but not above the chest. Check the condition of all buckles for wear, damage and security, when fastened, they must not be able to come undone on their own.
8. Check for a snug fit and location of the waist and thigh straps. They should be snug and comfortable, yet allow the worker to walk, bend and reach. Check the condition of all buckles for wear, damage and security when fastened, they must not be able to come unfastened on their own.
9. Lanyards must be CSA Z259.11 – M92 approved. The CSA certification must be visible on the lanyards. Two lanyards may be required at certain times, depending on the work.
10. All lanyards must have a shock absorber, check for the warning flags or markers that show the lanyard has been used in a fall. The shock absorber must state that the maximum arresting force is 4KN (*900 lbs.*). The only exception would be if the system the worker intends to use is designed to be used without a shock absorbing lanyard.
11. Check the snaps on the lanyard for wear, burns, cuts, nicks, elongation, distortion and cracks. The double locking mechanism must work as designed.
12. Check that the length of lanyard is suitable for the intended purpose. Make sure that the deployed length is not too long allowing the worker to contact the ground or other surface.
13. Check the lanyard webbing for burns, paint, welding splatter, wear, discolouration, cuts, nicks and any other damage.
14. Check that the opening of the snaps is the correct size for the harness and system to be used. Does the worker need a ladder hook on the end?
15. Ladder snaps should be stamped with at least a 5,000 lbs capacity (*2,300kg*).
16. Review the need to attach the fall protection system to limit the workers free fall to 5 feet. Some lanyards will allow a 6-foot free fall distance.

17. Review that all components of the full body harness and lanyards are to be used and stored such that they are protected from damage.

    Always consult the owner's handbook for more details.

USE OF STEP LADDERS

3 Point Contact

When ascending or descending a ladder, 3-point contact shall be maintained at all times. 3point contact is defined as 1 hand and 2 feet or 2 hands and 1 foot. 3-point contact is not 2 feet and chest, knee, etc.

Fall Protection

When on a ladder and working above 3 meters (*10 feet*) fall protection must be provided to the worker by the employer and used by the worker. Remember fall height is measured at the height of your feet.

Top Rail

The top rail or pail shelf of a step ladder is not to be used. Fall protection devices are not a suitable alternative. For example; a person who stands on the top rung of a step ladder while wearing fall protection is unacceptable.

Selection of Equipment

A supervisor is responsible for assigning work and ensuring the tools and equipment to perform the work is suitable and adequate. A supervisor must take every precaution reasonable and practicable to protect the health and safety of a worker. Prior to commencement of work, perform a Pre Job Safety' Instruction to assess and control hazards.

Using a Step Ladder

The Construction Regulation requires that all tools be used in accordance with the manufacturer's instructions.

The following safe practices should be used when using a step ladder:

PHYSICAL DEMAND ANALYSIS (*PDA*)

What is a Physical Demands Analysis (*PDA*)?

The physical demands analysis describes the manner in which the job is currently being performed. This includes the physical tasks required to perform the job (*i.e. standing, walking, climbing, pushing, pulling, lifting, etc.*).

Our physical demand analysis (*PDA*) database will enable the medical community, rehabilitation coordinators and workers to better understand the physical components and risk factors associated with the job.

Why is a Physical Job Demand Analysis needed?

When an employee is injured on the job, the medical community, rehabilitation coordinators face the difficult challenge of determining when this person is able to return to work. Likewise, employers often face the challenge of finding appropriate duties, modified or alternative work for an employee.

The PDA database will offer everyone involved a better understanding of the physical demands of a job. This will result in better post-injury assessments and pre-assessment of training required to prevent or reduce further on-the-job injury.

Much of the challenge involves identifying parts of the job an employee can safely perform. While many job descriptions specify duties and responsibilities, the physical demands are not often measured. Without a measurement of the physical demands, it is difficult to assess which duties are safe for which employee.

On occasion, an employee goes back to a position that isn't suitable given the injury, or an employee doesn't return to a position because no alternate work is made available.

To obtain a Physical Demand Analysis, please contact the Safety Department at (647) 928-7233

HANDLING OF FUEL ON CONSTRUCTION PROJECTS

Purpose

To provide safe handling procedures to the fueling of vehicles and equipment, protection against spills and the safeguarding of the environment from hazards associated with accidental spills.

Applicable Standards

Environmental Protection Act and Regulations (*Sec. 23*) —FEDERAL TSSA Liquid fuel handling code - ONTARIO

Applicable To

Job sites that store or use bulk fuel tanks greater than 25 L, and less than 1000 L in capacity.

Guidelines

1) Where a refueling tank is in use, and there is a danger of spillage contaminating a stream, waterway or sewer it shall comply with diking requirements of Sec. 3.3.1 of the Liquid fuels handling Code unless double walled tanks are used.
2) Refueling tanks must be properly labeled in accordance with the Transportation of Dangerous Goods regulations and have an applicable WHMIS label present.
3) Signs shall be posted prohibiting smoking, sparks, flames and other sources of ignition within 3 meters.
4) Fire extinguishers must be present with a minimum rating of 4A, 60-B, C.
5) Emergency spill k.it (*minimum 10 gallon for tanks up to 100 litres or 20 gallon for tanks up to 1000 litres*) must be available within the fuel storage area.
6) No more than one 208 L drum may be stored on site; however, secondary means of containment are required with a minimum of 50% drum capacity.
7) Bonding of the fuel tank to the equipment being filled is required, with either a hose designed to do such, or by using #6 copper wires to a clean electrically conductive part of the machine and the tank.
8) Refueling must only be done in the presence of a competent person in attendance at all times.

WEAPONS POLICY

Possession of weapons is prohibited at any time on company or customer property, construction projects, including parking lots and vehicles parked thereon or while conducting company business. Violations of this policy may result in disciplinary action up to and including termination. Where appropriate, the company will report the

possession, transfer, sale, or use of weapons or dangerous instruments to the local law enforcement authorities.

The possession, transfer, sale or use of weapons or dangerous instruments as defined below (*even if the offending party is licensed to carry a weapon*) or any paraphernalia associated with such a weapon, is prohibited on company or customers' property, construction projects, including parking lots and vehicles parked thereon.

WEAPONS COVERED BY THIS POLICY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING

- Firearm (*including a BB gun, whether loaded or unloaded*)
- Knife (*including hunting knives, a switchblade or other knife having an automatic spring release device*).
- Stiletto (*excluding a small pen or pocketknife with a blade under 4 inches in length, box cutters*).
- Police baton or nightstick.
- Any other martial arts weapons.
- Electronic defense weapons.
- Mace.
- Explosives or explosives making materials, or
- Object or item identified as weapons by the criminal code of Canada.

A dangerous instrument: is defined as any instrument, article or substance that, under the immediate circumstances, is capable of causing death or physical injury.

Any employee that has; a question as to whether an instrument, article or substance is considered a weapon or dangerous instrument in violation of this policy should ask for clarification from their supervisor, manager or Health and Safety Specialist prior to bringing the instrument, article or substance on company owned or leased premises.

Exceptions to the weapons policy must be approved beforehand in writing by senior management. Any weapon or dangerous instrument found on company or customers' property, construction projects, including parking lots and vehicles parked thereon may be confiscated. There is no reasonable exception of privacy with respect to such items in the workplace. Employees' desks, toolboxes, workstations, offices and files may be subject to security searches in accordance with applicable law.

EMERGENCY CONTACT NUMBERS

CONTACT	TELEPHONE NUMBER
Government of Canada – Environment Canada	1-800-268-6060
Ontario Poison Control Centre (*OPC*)	1-800-268-9017
Government of Ontario – Local Emergency	911
Government of Ontario – Ontario Provincial Police (*OPP*)	1-888-310-1122
Government of Ontario – Ministry of Labour, Immigration, Training & Skills Development (*MLITSD*)	1-877-202-0008
Skyline Canada Building Services – 24hr Emergency Service	(647) 928-7233 (647) 928-(safe)
Red Cross-National Head Office	1-613-740-1900
Government of Canada – Canadian Coast Guard	1-800-267-7270
Government of Canada – Emergency Management Ontario (*EMO*)	1-877-314-3723
Government of Canada – Transport Canada	1-613-996-6666
Canadian Pacific – Police Services	1-800-716-9132
Alcohol and Drug Referral Service	1-800-663-1441

NOTES: