

WERI

Airside Security Considerations for Vehicles and People



Airside Security Considerations for Vehicles and People

Introduction

The airside of an airport is a specialized working environment that is governed by special rules designed to prevent accidents and minimize the risk of injury to all persons within it. This is a reference source, which combines the applicable regulations, rules and procedures related to safe vehicle operation that experience has shown to be most important in the airside working environment. Certain portions of this manual may be subject to federal authority. In the event of a conflict, the federal authority will supercede.

****Note to reader:** this document is generically written. If there are areas that do not apply to this Airport please disregard. A site specific airside plan would be created and implemented after discussion with Transport Canada and the Airport Manager.

Related Work:

- a. Provide the Airport Manager and Project Manager with a list of personnel working at the site.
- b. If directed by the Airport Manager, the Consultant may be required to provide at their expense a VHF/FM radio tuned into the Control Tower frequency (121.9 MHz) and capable of communicating with the control tower from any point on the airfield.
- c. Any vehicles which operate on an airfield are required to have flashing amber lights.
- d. Operators of vehicles on airside are required to have an Airport Vehicle Operators Permit (AVOP).

Definitions

The following are a list of definitions that WERInc and sub-contractor personnel will be informed of to promote a greater appreciation for Airport terminology. These terms will help our staff to understand how to conduct themselves safely while working airside.

- Airport Manager or Designate – is the official or the duly authorized representative in charge of the airport.
- Airside – That area of an airport intended to be used for activities related to aircraft operations and to which public access is normally restricted.
- Apron – That part of an aerodrome, other than the maneuvering area, intended to accommodate the loading and unloading of passengers and cargo; the refueling, servicing, maintenance, and parking of aircraft; and any movement of aircraft, vehicles and pedestrians to allow execution of those functions.
- Apron Traffic – All aircraft, vehicles, equipment and pedestrians using the apron of an airport.
- Controlled Airport – an airport at which an air traffic control unit is provided.
- Equipment – Any motor vehicle or mobile device, either self-propelled or towed, or of a special nature, used for runway and airfield maintenance or in the maintenance, repair and servicing of aircraft, including test equipment, cargo and passenger handling equipment.
- Groundside – That area of an airport not intended to be used for activities related to aircraft operations, and to which the public normally has unrestricted access.

- Hold Short – To remain on the taxiway at a safe distance from the runway as designated by airport control signs on either side of the taxiway that identify the airport's runway orientation and mandatory radio frequency.
- Maneuvering Area – That part of an aerodrome intended to be used for the taking off and landing of aircraft and the associated movement of aircraft, excluding aprons.
- Movement Area – That part of an aerodrome to be used for the surface movement of aircraft and includes the maneuvering areas and aprons.
- NOTAM (Notices to Air Men) – A notice that is circulated through Nav Canada systems to advise pilots of conditions that may affect a safe landing at an airport.
- Off the Runway – Indicates a vehicle that is at least 45 m (150 ft) to the side of the nearest edge of the runway in use, whenever practical.
- Operator – The person responsible for the operation and safety of the vehicle and equipment, usually referred to as the driver.
- Restricted Area – An area of an airport designated by a sign as an area to which access by persons or vehicles requires the production of valid identification.
- Taxiway – That part of an aerodrome used for maneuvering aircraft and airport equipment between the apron area and runway.
- Threshold – The beginning of that portion of the runway usable for landing.
- Uncontrolled Airport – an airport that is "non-controlled" to the extent that the airport does not have an operating air traffic control tower.
- Vehicle – An automobile, bicycle, over-snow vehicle, truck, bus, or any self-propelled vehicle or device in, on, or by which a person or thing is, or may be transported, carried, or conveyed on land.
- Voice Advisory – A notice made by radio on the airport's established radio frequency to advise pilots of conditions that may affect a safe landing at the airport.

Vehicle Operating Procedures

General

- No person shall operate a vehicle airside without a valid driver's license.
- No person shall operate a vehicle airside while under a prohibition from operating a vehicle imposed by a court or judge.
- No person shall operate a vehicle airside in a manner that is dangerous to aircraft, equipment, persons or vehicles.
- Aircraft always have the right-of-way. A vehicle operator shall yield to any aircraft. Before entering an airport movement area, the vehicle operator shall always check and ensure that aircraft are not approaching or departing.
- Vehicles and pedestrians are permitted airside only with authorization from the airport manager/designate, and after reading and signing the Airside Access Procedures. (See attachment on last page).
- Unless required for airport operational purposes, all persons shall be limited to the apron area.
- Every person operating a vehicle on airside shall yield the right-of-way to pedestrians being escorted between aircraft and terminal building.
- Every operator of a vehicle in an airside area shall yield the right-of-way to an emergency vehicle with warning devices operating.
- Every operator of a vehicle in an airside area, other than an emergency vehicle with warning devices operating, shall yield the right-of-way to:

- Vehicles and equipment engaged in snow removal, pavement ice control activities or other maintenance activities.
- Vehicles towing aircraft.
- All vehicles operating airside must be registered as required by law.
- Headlights must be turned on whenever a vehicle is operating in the maneuvering area.
- In addition to all requirements by law, every operator of a vehicle involved in an accident in the airside area of an airport shall report the accident forthwith to the Airport Manager/Designate.
- Operators and vehicles will remain clear of the scene of an accident and aircraft carrying distinguished visitors unless authorized by the Airport Manager/Designate.
- Smoking is not permitted airside. This prohibition applies to persons both inside and outside vehicles and equipment.
- No person shall park a vehicle in any area designated by a sign as an area in which parking is prohibited.
- No person shall, without the permission of the Airport Manager, park a vehicle in any area of an airport not intended for the use of vehicles.
- No person shall park a vehicle in any area of an airport designated by a sign as a loading area.
- Vehicles on the maneuvering area must be operated by persons who have read, understood and signed an Airside Access Procedures, as described in this memo.
- Vehicle operators shall remain a safe distance from areas affected by jet blast or propwash of maneuvering aircraft, and not pass in front of or closely behind aircraft with engines running.
- No person shall operate a vehicle at a rate of speed that exceeds 20 km/h or whatever speed the airport dictates.
- Every operator of a vehicle on an apron shall acknowledge and obey all instruction received from Airport Manager/Designate.
- All vehicles must be equipped with operational headlamps, tail lamps, parking lamps.
- Headlamps and non-flashing tail and parking lamps must be operated during hours of darkness and reduced lighting; they may be left on as required while engaged in service to parked aircraft.
- Equipment and vehicles shall not be parked or left unattended without the permission of the Airport Manager.

No person shall:

- Throw, deposit or knowingly leave on a road, apron or maneuvering area at an airport any glass, nails, tacks, scraps of metal, chemical substance or other material that may damage any aircraft or vehicle;
- Throw, deposit, or knowingly leave any form of trash or garbage at an airport except in a container provided for that purpose.
- All efforts should be made to ensure that aircraft maneuvering areas are kept serviceable as much as possible. If an area becomes unserviceable that condition must be communicated to the Airport Manager or the Designate, so that appropriate action such as the issuance of a NOTAM and/or Voice Advisory can be made.

Maneuvering Areas – with Vehicle Control or Advisory Service

- Non-radio equipped vehicles must be escorted by a radio-equipped vehicle.
- Vehicle operators must always report by radio to the ground controller before entering and immediately after leaving the maneuvering area.
- Every vehicle on the maneuvering area must be operated by a person who has read and signed a copy of the Airside Access Procedures.
- Vehicle operators shall immediately leave the runway when:
 1. requested by the Ground Controller, or
 2. an aircraft makes a low pass, or
 3. the runway lights are blinked on and off.

Maneuvering Areas – Uncontrolled Airports without Vehicle Control or Advisory Service

- Before proceeding onto a maneuvering area, the operator shall "HOLD SHORT" and visually check for arriving and departing aircraft. The operator may proceed onto the maneuvering area only if there is no indication of arriving or departing aircraft.
- Persons on the maneuvering area shall not leave vehicles unattended.
- Persons on the maneuvering area shall remain aware of arriving and departing aircraft and shall leave the maneuvering areas as soon as such aircraft appears.

Airside Lights and Signs

- Both vehicles and aircraft movement on the ground is guided by lights and signs on the airside, which are different from those used on roads and highways.
- Vehicle operators must adhere to all airside signage relating to vehicle speed, parking, smoking, restricted areas, etc.
- Operators working on remote and/or emergency airstrips that do not have radio communications with Air Traffic Control (ATC), a Flight Services Specialist (FSS), or aircraft radio frequency monitoring capabilities, must keep in mind and be aware of, while operating on remote airstrips, the following list of factors:
- Operators must maintain awareness of any aircraft that may need the strip while they are working on it, and clear the runway immediately if an aircraft approaches to land or take off.
- All visual warning lights available on the equipment being operated shall be turned "on". This includes beacons, flashes and headlights.
- Operators should be aware of the importance of runway and field conditions to a pilot, who may be using the runway in conditions of poor visibility. Aids such as threshold markers, cones, and windsocks become very important.

Acts and Regulations

The following acts and regulations were used to support the information in this handout:

- a) Canadian Air Regulations
- b) Airport Traffic Regulations
- c) Radio Act
- d) Transport Canada Policy

WERI

Employee Safety Handbook

EMPLOYEE SAFETY HANDBOOK

SAFETY POLICY

It is the policy of Winnipeg Environmental Remediations Inc. (WERInc) to provide and maintain a safe and healthful work environment for its employees and general public and also to protect its property from damage through a comprehensive, viable safety program.

Safe work practices on the part of all employees must be an integral part of all operations. The ideals of efficient production and optimum safety must be inseparable.

Every reasonable effort will be made to develop and promote instructions in safe work procedures, and the use of personal safety equipment, and to establish and insist upon safe methods and practices at all times.

SCOPE

1) Employees of Winnipeg Environmental Remediations Inc.:

All employees of Winnipeg Environmental Remediations Inc. (WERInc.), while on WERInc.'s properties or while performing their job functions, are to adhere to safety rules and regulations and safe work procedures as specified herein.

Employees must always be on the alert to identify unsafe conditions or unsafe work practices during their daily work routine.

Employees are to comply with the provisions of the Manitoba Workplace Safety and Health Act as it pertains to job safety and all other pertinent regulations, manuals and codes.

2) Contractors, hired trucks and rented equipment:

Operators of hired trucks and/or rented equipment shall comply with the Workplace Safety and Health Act and WERInc. Safety Regulations as outlined by foreman and supervisors of jobs to which these machines have been allocated.

Unless the lessor provides the equipment and operator with all safety devices required by the Workplace Safety and Health Act and WERInc. Safety Regulations thereunder, the equipment shall not be used by WERInc. Enforcement of this policy shall be the responsibility of all supervisory staff.

3) Visitors:

Visitors to work locations must be informed of the Safety Regulations in existence hereon, and are to adhere to such regulations in the manner specified.

4) Safety Officers have the authority to order corrective action or to immediately shut down any job until the condition deemed to be unsafe is corrected.

Every employee has an important part to play in the safety program and is expected to co-operate fully in the measures taken for safety.

Teamwork is essential to good safe operation!

Good housekeeping is the responsibility of each employee: do your part to keep your work area neat and orderly and your tools and equipment in good repair.

Employees shall be courteous and considerate of the public. Also, at all times, endeavor to further the best interests of WERInc.

Employees are expected to use good judgement and care and to perform duties in a safe manner to protect themselves and their fellow workers. All employees are expected to conform to WERInc. Safety Policy, the Workplace Safety and Health Act and all other safety regulations applicable to their particular operation.

It is the responsibility of all employees to maintain an awareness of safety issues. This can be done by reading the minutes of Safety Committee, Safety Notices and Bulletins from the Safety Branch, procedural updates provided by departments, notices provided by bargaining units, etc.

Every department in WERInc. has their own requirement with respect to safety guidelines for each specific job. Personnel are responsible to ensure they become familiar with the safety requirements of any job they are required to perform.

Departments have a responsibility to provide adequate training for all employees so that they may perform their work safely and to ensure they are made aware of all policies and legislation which may relate to any job function.

Safety Regulations

Every employee has an important responsibility in the safety program, as defined in the Manitoba Workplace Safety and Health Act, i.e.:

- (1) Every employer shall, in accordance with the objects and purposes of this Act,
 - (a) ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his workers: and
 - (b) comply with this Act and regulations.

FURTHER DUTIES OF EMPLOYER:

- (2) Without limiting the generality of an employer's duty under subsection (1), every employer shall:
 - (a) provide and maintain a workplace, necessary equipment, systems and tools that are safe and without risks to health, so far as is reasonably practicable;

- (b) provide to all his workers such information, instruction, training, supervision and facilities to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his workers;
- (c) ensure that all his workers, and particularly his supervisors, foremen, chargehands, or similar persons, are acquainted with any safety or health hazards which may be encountered by the workers in the course of their service, and that workers are familiar with the use of all devices or equipment provided for their protection;
- (d) conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons who are not in his service are not exposed to risks to their safety or health arising out of, or in connection with, activities in his workplace;
- (e) consult and co-operate with the Workplace Safety and Health Committee where such a committee exists, regarding the duties and matters with which that committee is charged under this Act;
- (f) consult and co-operate with the worker safety and health representative where such a representative has been designated, regarding the duties and matters with which that representative is charged under this Act;
- (g) co-operate with any other person exercising a duty imposed by this Act, or the regulations.

GENERAL DUTIES OF WORKERS:

- 5) Every worker, while at work, shall, in accordance with the objects and purposes of this Act:
- (a) take reasonable care to protect his safety and health, and the safety and health of other persons who may be affected by his acts or omissions at work;
 - (b) at all times, when the nature of his work requires, use all devices and wear all articles of clothing and personal protective equipment designated and provided for his protection by his employer, or required to be used and worn by him by the regulations;
 - (c) consult and co-operate with the Workplace Safety and Health Committee, where such a committee exists, regarding the duties and matters with which that committee is charged under this Act;
 - (d) consult and co-operate with the worker safety and health representative, where such a representative has been designated, regarding the duties and matters with which that representative is charged under this Act;
 - (e) comply with this Act and the regulations; and
 - (f) co-operate with any other person exercising a duty imposed by this Act or the regulations.

DEFINITIONS

ACCIDENT:

An unplanned event that results in either injury to person(s) or damage to property or both.

ADEQUATE TRAINING:

Sufficient education, experience, and knowledge to allow an employee to safely and efficiently perform the required work.

CONFINED SPACE:

A "confined space" is defined as any enclosed or semi-enclosed space that has limited openings for entry and exit, that is not intended for continuous employee occupancy, and that does not have sufficient natural or mechanical ventilation to prevent the build-up of hazardous atmosphere.

CSA:

Canadian Standards Association

DANGEROUS GOODS:

Any product, substance, or organism which meets the criteria of one of the nine classes listed in the Transportation of Dangerous Goods Legislation.

DANGEROUS OCCURRENCE:

An emission or escape from any container of dangerous goods in a quantity noted in the TDG Legislation and represents a danger to health, life, property, or the environment.

DBA:

Decibel scale—A measure of the volume of noise on a scale similar to that heard by the human ear.

EQUIPMENT CONTAINING PCB's:

Any equipment containing PCB's in concentrations greater than 50 parts per million (ppm) and may include fluorescent light ballasts, capacitors and transformers.

VISITOR:

All persons not normally employed at a work location including, but not exclusive to, contract workers, service personnel, inspectors, consultants, employees of sub-trades, etc.

FIRST AID:

The immediate care given to the victim of an accident or sudden illness at the scene of the incident until the arrival of qualified medical assistance.

HAZARD:

- (a risk of loss or harm) An unsafe act or condition that may lead to injury of persons or damage to property.

HAZARDOUS MATERIAL:

A product which by its nature may pose a health risk to persons exposed to it through inhalation, absorption, or ingestion.

HEARING PROTECTION:

A personal device used to lower noise exposure to a worker and includes muffs and plugs.

M.S.D.S.: - (Material Safety Data Sheet)

A document associated with a hazardous material which contains information on the physical and chemical properties of material; fire, reactivity and health effects; first aid and supplier information.

M.T.T.C.:

The latest edition of the Manual of Temporary Traffic Control.

PERSONAL PROTECTIVE EQUIPMENT:

Any safety clothing, equipment, or device worn or used by a person to protect that person from dangers of employment.

PLACARDS:

Warning signs under the TDG Act, the length on each side being 275mm or greater, which are located on large containers (greater than 454 litres) or on the outside of vehicles.

QUALIFIED PERSON:

A person who, because of his knowledge, training and experience, is acceptable to safely and efficiently perform the required work.

SAFETY:

Freedom from harm or danger.

SUPERVISORY STAFF:

A person who has charge of workplace or authority over a worker and shall include foremen, sub-foremen, and chargehands.

T.D.G. (Transportation of Dangerous Goods):

Federal and Provincial legislation controlling the transporting, handling, and storing of dangerous goods and hazardous waste. Components of the legislation include classification, labels, placards, documents, training, emergency response, etc.

UNSAFE ACT:

The violation of a commonly accepted safe procedure which may or could directly or indirectly lead to the occurrence of an accident.

UNSAFE CONDITION:

Any hazardous physical condition which, if left uncorrected, may lead to an accident.

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

Federal and Provincial legislation dealing with the workers right to know about hazardous materials in the work environment. The three major components of W.H.M.I.S. are container labels, material safety data sheets, and worker education and training programs.

SECTION W2

DUTIES & RESPONSIBILITY OF SUPERVISORY STAFF

SUPERVISORY STAFF SHALL:

- A. Be responsible for carrying out work in accordance with standard practices and directing and monitoring work with the objective that all safety regulations and precautions are observed. Failure to enforce these regulations will render a supervisory staff in violation of this manual liable to disciplinary action.
- B. Instruct and examine the employees in the knowledge of WERInc. Safety Policy, Workplace Safety and Health legislation, and all other codes, manuals and standards relevant to their work.
- C. Be responsible for the proper maintenance of safety equipment and guard against the use of safety equipment and material that is defective.
- D. Be responsible for protecting the public during the course of work being directed.
- E. Be responsible for ensuring that all safety equipment is supplied and is used properly, wherever and whenever necessary.
- F. Enforce the rules. Supervisory staff have the authority to suspend an employee who willfully and knowingly disobeys the rules.
- G. Study the safest and most efficient method of doing the work before undertaking it and apply it during progress of the work. Brief all workers on the plan of work before the work is started.
- H. Exercise and provide adequate supervision over their employees at all times.
- I. See that no employees is permitted to do work for which he is not qualified.
- J. See that first aid kits for use by employees are kept in the prescribed condition in accordance with the Workplace Safety and Health Act.
- K. Make certain that all fire extinguishing equipment under their jurisdiction is kept in its proper place, properly filled and ready for instant use.
- L. Continually analyze work procedures in order to identify any unsafe practice.
- M. Investigate thoroughly all safety complaints, accidents, and near accidents whether or not a Lost Time Injury has occurred. Complete the Supervisor's Injury Investigation Report and forward as directed.
- N. Ensure that a sufficient number of qualified workers are assigned to each job so that it may be performed in a safe manner.

SECTION W3

GENERAL RULES FOR ALL EMPLOYEES

- A. The rules and regulations in this book are written for your protection. They may not cover, in detail, all safety measures which can and must be observed by employees in their work. They do not replace any oral, written or other instructions which may have been issued regarding safe and proper procedures. You are expected to study this safety manual and familiarize yourself with the contents and apply them, at all times, in your work.
- B. Each rule shall be strictly enforced. Any infraction or disregard of the rules contained in this manual will not be tolerated. Employees who do not comply with safety rules will be subject to disciplinary action.
- C. All unsafe conditions or unsafe acts must be reported to the foreman, supervisor or chargehand.
- D. Horseplay and practical jokes could lead to a very serious injury and will not be tolerated.
- E. Where any hazard to the public is caused by WERInc. employees or equipment it will be the duty of any employee of WERInc. who is directly involved to guard the public from danger until relieved.
- F. Employees shall comply with Notice #1 – Policy Re Safety in the Workplace (Alcohol or any Mood or Mind Altering Drug in the Workplace) – attached as Appendix A.
- G. Employees shall comply with Notice #2 – Policy Re Safety in the Workplace (The Prevention of Employees Driving with Prohibited or Suspended Licenses) – attached as Appendix B.
- H. Materials and supplies shall be stored in an orderly manner so as to prevent their falling or spreading.
- I. All employees shall wear clothing which is suitable for their particular type of work. Minimum acceptable clothing for any worker who is working near equipment, in shops, maintenance work, or working outdoors, shall be short-sleeve shirts, ankle length pants, and appropriate footwear.
- J. All equipment and tools including electric tools, motors, switches, extension cords, etc., shall be repaired by qualified personnel only.
- K. Designated barrier ropes or warning tape (e.g. Black/Yellow – Red/White) shall not be used for any other purpose.
- L. Safety regulations as laid down in the Workplace Safety and Health legislation, and all applicable codes and standards, shall be observed at all times.

SECTION W4

DISCIPLINE FOR INFRACTION OF SAFETY REGULATIONS

WERInc. reserves the right to administer whatever discipline is necessary to ensure safety regulations are complied with.

Supervisory staff have the authority to suspend an employee who willfully and knowingly disobeys the rules.

Any employee who violates WERInc. Safety Regulations will be subject to the following disciplinary action:

- (1) For the first infraction: a written warning.
- (2) For the second infraction within a one year period: suspension of one day off from work.
- (3) For the third infraction within a one year period: suspension of three days off from work.

If the violation is of a serious nature and/or further disciplinary action is necessary, then it will be subject to the discretion of the Department Head.

It should be noted that some agreement between WERInc. and some bargaining units require written notification to the affected employee informing the employee of their right to a hearing.

SECTION W5

SAFETY COMMITTEES

Basic Objectives:

1. The establishment of Safety and Health Committee is a requirement under the Manitoba Workplace Safety and Health Act for individual workplaces or classes of workplaces or classes of workplaces.
2. Workers and employers share an equal concern in preventing accidents and ill-health arising out of conditions in the workplace. The intent of the joint Safety and Health Committee is to enhance the ability of workers and employers to resolve these concerns reasonably and co-operatively.
3. The specific objectives of a Safety and Health Committee include:
 - (a) assisting workers and the employer to identify, record, examine, evaluate and resolve safety and health concerns in the workplace;
 - (b) developing practical procedures and conditions to help achieve the highest possible degree of safety and health in the workplace; and

- (c) promoting education and training programs to develop detailed knowledge of safety and health concerns and responsibilities in each individual in the workplace.

Duties of the Safety and Health Committee:

- A. The receipt, consideration and disposition of concerns and complaints respecting the safety and health of the workers.
- B. Participation in the identification of risks to the safety or health of workers or other persons arising out of or in connection with activities in the workplace.
- C. The development and promotion of measures to protect the safety, health and welfare of persons in the workplace and checking the effectiveness of such measures.
- D. Co-operation with the Employee Occupational Safety and Health Division.
- E. Co-operation with a safety and health officer who is exercising his duties under this Act.
- F. The development and promotion of programs for education and information concerning safety and health in the workplace.
- G. The maintenance of records in connection with the receipt and disposition of concerns and complaints and the attendance to other matters relating to the duties of the committee; and
- H. Such other duties as may be specified in this Act or Regulations.

PROCEDURE FOR HANDLING SAFETY AND HEALTH CONCERNS

Note: The Employee Occupational Safety and Health Division (E.O.S.H.) of WERInc. may be contacted at any point during the following stages for assistance in resolving the problem or for advice.

- A. First Stage – Direct Resolution
 - 1. If you have identified what you feel is a safety or health concern, report it to your immediate supervisor. It is his/her responsibility to resolve the matter and, if necessary, to advise other persons of the hazard.
 - 2. If practical, you may also contact your worker member of the safety committee to assist in the resolution of the problem.
- B. Second Stage – Committee
 - 1. Where a satisfactory resolution is not achieved, the committee member or the appropriate supervisor shall ensure that the concern is placed on the agenda of the next regular meeting of the safety committee. The matter shall be placed on the agenda of each successive meeting until resolved.

Note: If a hazard is imminent and the situation warrants it, a special meeting may be held by the Committee co-chairpersons or their designate to resolve the concern.

C. Third Stage – Outside Assistance

1. If the committee members are unable to resolve the concern, they shall request assistance from the Workplace Safety and Health Division of the Department of Labour. They may also request assistance from the Employee Occupational Safety and Health Division of WERInc. or other consultation services.

SECTION W6

PERSONAL PROTECTIVE EQUIPMENT

- A. All safety equipment and fire equipment shall bear the Manitoba Fire Code, U.L., U.L.C., N.F.P.A. or C.S.A. Approval or be otherwise approved by WERInc. Safety Branch.
- B. Safety equipment shall be supplied by WERInc. wherever necessary and each employee shall be responsible for any safety equipment issued.
- C. All safety equipment shall be inspected before each use by the employee using it and by the supervisor in charge, at regular intervals.
- D. Personal protective equipment that has been issued to an employee, shall be worn, used, and maintained, as instructed.
- E. Appropriate eye and face protection in the form of safety glasses, goggles, and/or face shields shall be worn when there exists a danger of flying objects or hazardous substances entering the eyes and without limiting the foregoing shall include:
 - 1 – using emery wheels, buffing wheels, or chipping hammers.
 - 2 – using pneumatic drills or pavement breakers.
 - 3 – chipping steel, cement, stone, brick tile or any other hard materials.
 - 4 – sand blasting, welding or spray painting.
 - 5 – handling creosoted material, hot lead or solder, tars, or compounds, or fibre ducts which are with toxic materials.
 - 6 – operating chain saws, concrete saws or chippers.
 - 7 – handling/transporting chemicals when there is a possibility of splashing.
 - 8 – drilling at/or above head level.
- F. C.S.A. approved goggles or Safety eye glasses, together with protective face shield must be worn by workers engaged in electric or acetylene welding and gas torch work. Appropriately rated (UV) eye protection must be worn by all workers whenever there is danger of electric arcs or flashes.
- G. CSA approved hard hats shall be worn in all construction areas where there is a danger of head injury and in all designated areas as specified by each department.
- H. All employees shall wear appropriate footwear suitable for the safe performance of their work. CSA approved Safety footwear shall be worn where there is a danger of injury to the feet and in all designated areas determined by department policy.
- I. Hearing protection shall be provided by WERInc. and shall be worn by workers in high noise environment as subject to Section W6 of this manual.

- J. Respirators meeting the design and usage requirements of CSA shall be provided to all workers who may be exposed to hazardous substances including dusts, fumes, vapours, or gases and shall be worn as directed.
- K. Adequate training in the fit, use, and maintenance of any respirator shall be provided to any employee required to wear it.

SECTION W7

TOOLS AND EQUIPMENT

- A. Shields or barriers must be erected where the possibility of welding arcs may create a hazard.
- B. Broken or defective guards or protective devices must be immediately reported to the Supervisor or Foreman and repaired or the equipment removed from service until such time that it is repaired.
- C. Where guards or protective devices have been removed for cleaning or overhauling, they must be replaced before starting or returning the equipment to service.
- D. No power tool shall be used when it is equipped with a lock-on button.
- E. The use of "Manila" rope in the workplace shall be discontinued due to undetectable internal damage. All manila rope is to be replaced with synthetic rope (e.g. polypropylene).
- F. Extension cords:
 - 1 – only approved extension cords will be used.
 - 2 – damaged cords must be replaced or repaired by qualified personnel immediately.
 - 3 – extension cords used for portable electric tools must be three-wire type to provide a ground terminal for the tool. Two wire types is acceptable for use with double or fully insulated tools and equipment.
- G. Supervisors or division heads will be responsible to see that adequate first aid supplies are available at each work location as per the Workplace Safety and Health Act.
- H. Electric tools and similar equipment shall be grounded or shall be double or fully insulated.
- I. All electrically or mechanically operated equipment and devices where the power source is not within the immediate control of the operator or repairman shall be locked-out and/or tagged before any work on this equipment is undertaken.
- J. The worker or operator using the lock-out procedure shall use his own lock retain possession of the key until the work is completed.
- K. Where more than one person is working on a piece of equipment or machinery and a lock-out procedure is required, each person shall lock-out the controls with their own

lock to prevent accidental re-energizing of the equipment before all workers are out of danger.

- L. An employee shall not be permitted to use a hand tool or portable power tool unless he/she is qualified and is authorized to do so. All hand tools and portable power tools shall be operated and used in accordance with good industrial safety practice.
- M. Explosion proof covers must be used in the vicinity of volatile liquids or where there is a possibility of an accumulation of flammable gases.
- N. Dust proof fixtures must be used in areas of high dust concentration.

SECTION W8

HOISTING AND LIFTING EQUIPMENT

- A. Riding on crane hooks or loads is strictly prohibited.
- B. Unserviceable or unsafe lifting equipment shall be made inoperable until properly repaired or removed from service.
- C. Employees shall not stand or walk under material being lifted or lowered and they shall prohibit the public from doing so.
- D. Ropes and slings used in lifting shall be regularly inspected and maintained in good order. Ropes or slings showing excessive wear or broken strands shall be replaced. This shall include hose hoists and overhead door raising cables.
- E. Only alloy steel chain or chain specifically manufactured for the application shall be used for hoisting. All chains, slings, ropes or hooks shall be used in accordance with the manufacturer's specification.
- F. All loads must be made secure to prevent slipping before being lifted by cranes or hoists.
- G. Only qualified and authorized personnel shall operate cranes, fork lifts, or any other mechanical devices used for lifting, lowering, or moving material.
- H. Recognized hand signals shall be used when operating cranes and backhoes where operator's view is obstructed. The operator shall accept signals only from one designated trained person but shall accept an emergency "stop all movement" signal from anyone.
- I. Only qualified and authorized personnel shall be permitted to operate power machinery such as draglines, back hoes, front end loaders, etc.
- J. No crane, hoist, excavating machine, earth-moving equipment or any other equipment shall be left unattended unless the moveable components have been positioned in such a manner that they cannot move due to mechanical failure or by manipulation of controls by unauthorized persons.

- K. Operators shall ensure that loads are carried as close to the grade or floor as possible.
- L. All cranes, derricks and hoists shall be inspected at regular intervals by qualified personnel and a logbook maintained which shows the maintenance and inspection history and any structural modifications.
- M. Safety winches used for lifting personnel shall not be used for any other purpose.
- N. Approved safety belts and lanyards (subject to CSA Standard Z94.4-M1982) shall be worn when a worker may be exposed to the danger of falling
 - 1 – more than 2.5 meters
 - 2 – into or onto hazardous substances or objects, or
 - 3 – into unprotected operating machinery and without limiting the foregoing shall include:
 - a) working on suspension scaffolds or platforms;
 - b) working from buckets and aerial lift equipment whereby the lanyards must be attached to the boom as near to the basket as possible and must be kept as short as possible without restricting the movements of the worker;
 - c) working on inclined roofs;
 - d) when working over or near open water where there exists a danger of falling in;
 - e) when working from a Bosun's Chair or similar equipment;
 - f) whenever the person in charge deems necessary.

SECTION W9

LADDERS & SCAFFOLDS

- A. Ladders with defects in rungs, side rails or metal parts shall not be used. Defective ladders must be tagged and turned in for repairs or disposal.
- B. Ladders must be properly placed before being used. The foot shall be between 1/3 and 1/4 the length of the ladder away from the supporting object.
- C. Workers shall face the ladder when ascending or descending. Do not overreach – move ladder when needed. Do not “walk” or “shift” ladder when standing by on it.
- D. Workers shall have both hands free while climbing ladders. Tools and materials shall be raised or lowered by hand lines.
- E. Workers shall not stand on the top two rungs of single or extension ladders.
- F. Workers shall not stand on the top two steps of step-ladders, unless the step-ladder is equipped with a railed platform.
- G. Place ladder on firm level surface with a secure footing. Do not use on slippery surfaces. Do not place on boxes, unstable bases, or on scaffolds to gain additional height.

- H. Ladders with metal rungs or wire re-enforcing, shall not be used around live electrical equipment.
- I. Ladders shall NOT be painted. They shall be treated with a clear preservative so as not to cover any defects.
- J. Ladders shall not be placed over doors which open towards the ladder unless the door is locked or guarded.
- K. Safety shoes shall be placed on all ladders that are used on slippery or hard surfaces.
- L. Step-ladders must be fully open while being used.
- M. Unless a ladder is tied at the top, it shall be held in place by another worker whenever it is greater than 6 meters in length or whenever there is a perceived danger that a ladder could move.
- N. Wooden ladders must be stored indoors in a reasonable dry area or protected from weather. Where wooden ladders are part of a permanent installation, they shall be inspected at regular intervals and repaired where necessary.
- O. Ropes on extension ladders shall be inspected and kept in good repair.
- P. Wood used for scaffolds shall be of a grade suitable for structural purposes and shall be inspected for defects.
- Q. All scaffolds eight feet or more from the grade level shall be equipped with a guard rail not more than forty-two inches in height or less than thirty-six inches, and an intermediate rail.
- R. Scaffold planks shall:
 - 1 – be not less than two inches by ten inches nominal dimensions.
 - 2 – be cleated to prevent movement and extend not less than six inches or more than twelve inches beyond the supporting members.
 - 3 – be supported at intervals not exceeding ten feet.
 - 4 – be secured to prevent any movement.
- S. The width of the work platform shall not be less than two planks.
- T. Damaged scaffolds shall be tagged and shall NOT be used until proper repairs are made.
- U. Safe means of access shall be made to all working levels of scaffolds.
- V. Barrels, boxes, loose tile blocks, loose piles of bricks or other unstable objects shall not be used to support planking intended as scaffolds or work platforms.
- W. Approved safety belts shall be used when working from ladders over 2.5 meters (8 feet) from ground surface.