

APPENIX - ✓

COR CERTIFICATION



# Certificate of Recognition

*This certificate recognizes that*

*Winnipeg Environmental Remediations Inc.*

HAS SUCCESSFULLY IMPLEMENTED ITS SAFETY, HEALTH & ENVIRONMENT PROGRAM  
AND EXCEEDED THE STANDARD AS SET OUT BY THE

**MANITOBA HEAVY CONSTRUCTION SAFETY, HEALTH & ENVIRONMENT PROGRAM**

EXTERNAL AUDIT PERFORMED IN 2004  
SHEP CERTIFICATION NUMBER MH040421W

THE PROVINCE OF MANITOBA, WORKPLACE SAFETY & HEALTH DIVISION AND MANITOBA CONSERVATION  
ENDORSES THE SAFETY, HEALTH AND ENVIRONMENT ACCREDITATION PROGRAM FOR MANITOBA HEAVY  
CONSTRUCTION CONTRACTORS

**Manitoba  
Conservation**

**Department of Labour  
and Immigration  
Workplace Safety  
and Health Division**

**MHCA - SHEP  
COR**  
Certificate of  
Recognition  
2004

**MHCA PRESIDENT**



**DIRECTOR OF WORKPLACE SAFETY & HEALTH**



**DIRECTOR OF MANITOBA CONSERVATION**



APPENDIX - K

HEALTH  $\approx$  SAFETY.

PLAN



**WERI**

Not  
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*Company Safety Policy*



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## 1.0 Introduction

### Contractor's Mission Statement

Winnipeg Environmental Remediations Incorporated's main objective through our Occupational Health and Safety Plan (hence forth known as WERInc or the employer) is to supply a safe and healthy working environment for its employees, clients, and the general public in and around the work site.

### Purpose of Occupational Health and Safety Plan (three parts)

#### Part 1 Employer's Responsibility

The Occupational Health and Safety Act places a duty on all officers and directors of corporations to ensure their corporations take all reasonable care to comply with the act and its regulations.

#### Part 2 Employee's Responsibility

The employee must recognize and practice a safety first attitude on the job site to ensure that the health and safety needs of all are met to make the site a safe place to work.

#### Part 3 Client's Responsibility

The Client's responsibility is to disclose all information that the employer and its employees would require to produce a site specific Occupation Health and Safety Plan, which will ensure the safety of all public and personnel on and off the site.

The WERInc Occupational Health and Safety Plan was written to observe and enforce construction safety measures of the following legislation:

- Canada Transport of Dangerous Goods Regulation
- National Building Code, 1995 (with all current amendments)
- Provincial / Territorial WCB requirements
- National Fire Code, 1995
- WHMIS regulation
- Applicable Occupational Health and Safety Regulations
- Provincial, Territorial, and Municipality By-Laws
- Any other applicable legislation

The above legislation/regulation is included in the company's field manuals, which are accessible upon request on the construction site.

WERInc includes in its field operations manual a copy of the appropriate Occupational Health and Safety Act for the province/territory that the employer is currently working in.

## 2.0 Duties of Supervisor/Employer

### 2.1 Supervisor

WERInc, as the employer, specifically identifies the duties of the supervisor to ensure a safe and healthy environment for its workers. To ensure this, the supervisor must do the following:

- Ensure that a worker complies with the Occupational Health and Safety Act and other regulations
- Ensure that a worker uses or wears any equipment, protective devices or clothing required by the employer
- Advise a worker of any potential or actual health or safety danger known by the supervisor
- If prescribed, provide a worker with written instructions about use of equipment and procedures to be taken for the worker's protection; and
- Take every precaution reasonable in the circumstances for the protection of workers

### 2.2 Employer

The employer must ensure that its employees work in a safe and healthy environment. To ensure this typical duties of the employer include but are not limited to:

- Ensuring the health and safety of workers
- Ensuring the health and safety of others at the workplace

- Ensuring employees are aware of their responsibilities
- Cooperating with Occupational Health Councils
- Cooperating with Safety Inspectors
- Complying with WHMIS
- Complying with first aid regulations
- Maintaining a risk-free workplace
- Providing instruction, training, and information about potential hazards in the workplace
- Ensuring safe means of egress and access
- Appointing competent persons as supervisors
- Orienting worker safety rules and practices
- Ensuring worker experience
- Examining physical structures
- Remedying unsafe conditions
- Facilitating inspections by Joint Health Committee (worker and management)
- Undertaking prescribed remedial measures
- Providing personal protective equipment and ensuring its proper use
- Posting a copy of the Appropriate Safety Regulations
- Posting Inspection Reports
- Ensuring adequate illumination (lighting)
- Ensuring proper maintenance of floors, platforms, etc.
- Ensure proper ventilation

### **3.0 Duties of Suppliers**

WERInc, in the selection of its suppliers, before entering into any rental or leasing arrangements for equipment/materials used in the workplace ensures that:

- The equipment is in good condition
- Equipment complies with recognized standards
- The equipment is maintained in good condition if it is the supplier's responsibility under the rental or leasing arrangement to do so
- Appropriate training is provided by supplier if required
- Operating manuals are supplied as required

### **4.0 Duties of Workers**

- Take care to protect own health and safety
- Take care to protect other workers
- Cooperate with site manager
- Ensure all safeguards are functional
- Report unsafe conditions
- Use protective clothing
- Undergo medical examinations as required
- Refrain from "horseplay"
- Must not remain at work while affected by drugs or alcohol
- Must not perform work that creates undue hazards
- Must not use hazardous access or egress
- Consult and cooperate with health/safety committee with regulations
- No harassment of fellow workers

### **5.0 Duties of the Owner of the Workplace**

WERInc., as the employer, will, when required, negotiate with the workplace owner to ensure that the site is maintained in accordance with the appropriate provincial/territorial acts. This will be done in writing.

## 6.0 The Rights of the Workers

WERInc will inform its employees of their basic rights, as specified by the appropriate provincial/territorial legislations, which include:

➤ 1. *The Right to Participate*

Workers have the right to be part of the process of identifying and resolving workplace health and safety concerns.

➤ 2. *The Right to Know*

Workers have the right to know about any potential hazards to which they may be exposed. This includes the right to be trained and to have current information on machinery, equipment, working conditions, processes and hazardous substances.

➤ 3. *The Right to Refuse Work*

Workers have the right to refuse work that they believe is dangerous to either their own health and safety, or to that of others.

\*The worker has access to the appropriate health and safety legislation through their supervisor and operations field manual.

## 7.0 The Right to Participate (WERInc's Health and Safety Committee)

The WERInc Workplace Health and Safety Committee is comprised of worker and management representatives that deals with health and safety matters in the workplace, which must involve the following factors:

- The committee must meet on a regular basis
- Worker representatives are selected by the workers
- The committee is co-chaired by a worker and management representative
- committee members, while performing their duties, are deemed to be at work and are paid their regular rates or premium rates, if required

## 8.0 Functions of a Joint Health and Safety Committee (JHSC)

WERInc's JHSC function is as follows:

- Research and test Personal Protective Safety Equipment
- Identify risk situations
- Make recommendations to protect employees
- Receive reports, investigate compliance with all Occupational Health and Safety issues
- Cooperate with Occupational Health and Safety agents
- Establish education programs for workplace safety
- Conduct regular workplace inspections
- Appoint two safety investigators
- Hold monthly meetings
- Record minutes of meetings – publish minutes
- Investigate work refusals
- Prevention of harassment
- Create site specific safety plans as required

Typically, the employer will assign the following duties to a JHSC:

- Recommend the establishment, maintenance and monitoring of programs, measures and procedures, related to the health and safety of workers.
- Obtain information about:
  - (a) Existing or potential hazards
  - (b) Health and safety experience, work practices and standards in other work places

- (c) Workplace testing that is being carried out for occupational health and safety purposes
- Investigate serious accidents (see attached form). Findings of the investigation should be reported to the committee.
- Inspect the workplace at regular intervals. The full workplace should be inspected at least once a year. At least part of the workplace, such as one or two departments, should be inspected monthly.

## **9.0 The Workers Have a Right to Know (Part of WERInc Company Policy)**

### **9.1 What is WHMIS?**

WHMIS is an acronym for Workplace Hazardous Material Information System. This is a system that is used for the purpose of identifying, recording, and controlling the use of hazardous materials or agents in workplaces.

Under provisions of the Occupational Health and Safety Act and the related WHMIS regulations, every "controlled" product and/or hazardous waste or agent in the workplace must be identified. Workers must be trained in the proper use and handling in the controlled products and materials.

A "controlled" product is a product, material or substance that is specified by the regulations under the Hazardous Products Act (Canada).

Some examples of controlled products or hazardous physical agents are: arsenic, asbestos, benzene, ethylene oxide, isocyanides, lead, mercury, silica, vinyl chloride, X-rays.

A complete list of hazardous substances and/or physical agents may be obtained from the Occupational Health and Safety Department of each province.

### **9.2 Requirements under WHMIS Regulations**

In meeting the requirements of WHMIS an employer is required to provide and maintain:

- An inventory of hazardous material
- Material safety data sheets
- Label and workplace labels
- Instruction and training of employees

#### **9.2.1 Hazardous Material Inventory**

The employer must maintain an inventory of all hazardous materials and physical agents used in workplace.

#### **9.2.2 Material Safety Data Sheets**

The employer must prepare or obtain Material Safety Data Sheets (MSDS) for every hazardous material in the workplace. A hazardous material is not to be used, handled, or stored at a workplace unless the requirements concerning identification, MSDS, and the worker instruction/training are met.

MSDS should be provided to the JHCS and a full set should be maintained on the job site for all to view.

MSDS is only valid for three years after the date of its publication. The employer must make a reasonable effort to obtain the necessary MSDS. If the employer is not able to obtain a current sheet for a hazardous product, the appropriate Occupational Health and Safety Branch must be notified, in writing.

### 9.2.3 Labels

The employer must ensure that every controlled product in or out of a container received at and/or in use in the workplace is labeled with a supplier label or workplace label.

If any controlled products remain in the container, it is an offense to alter supplier labels. If the label is illegible or removed it must be replaced.

If any controlled product is received without a label, the employer must ensure that a label is placed on the material container(s) immediately.

Workplace labels must be placed on all receptacles used for controlled materials after they are decanted from the supplier's container. This requirement also applies to a controlled product that is contained, or transferred, in pipes, piping systems, process or reaction vessels, and bulk transfer.

Certain exceptions to the requirements for workplace labeling are allowed, most notably when:

- the controlled product is under the control and used exclusively by the worker who filled the container;
- the controlled product is used only during the shift in which the container was filled
- the contents of the container are clearly identified
- the product is for immediate use

Labels must contain certain information and hazard symbols that are referred to in the Hazardous Products Act (Canada).

### 9.2.4 Instruction and Training

The employer must ensure that workers who are exposed, or are likely to be exposed, to a hazardous material are trained in the proper use and handling of the material. The training should include:

- the contents required on a supplier and workplace label, the purpose and significance of the information contained on the label
- the contents required on an MSDS, the purpose and significance of the information contained on an MSDS
- procedures for the safe use, storage, handling, and disposal of controlled products
- procedures for the safe use, storage, handling, and disposal of a controlled product when it is contained or transferred in pipes or piping systems, a process vessel, reaction vessel, or bulk handling systems
- procedures to be followed when fugitive emissions are present
- procedures to be followed in case of an emergency involving a controlled product
- personal protective gear required

Instruction and training should be developed and done in conjunction with the JHSC. An annual review of the training is also required.

## 10.0 The Right to Refuse Work

### 10.1 Who has the right to refuse to work?

WERInc's employees have the right to refuse work that they believe to be unsafe. The employer informs all new employees regarding the following matters about their safety:

- no worker is permitted to carry out work that is unsafe
- a worker may refuse to work if continuing to do so would endanger the health or safety of the worker or another worker
- The employer must correct the situation as it arises before the work is completed

**10.2 What happens when a worker refuses to work?**

In each provincial territorial jurisdiction, the following steps are required:

- (1) The problem is reported to a supervisor.
- (2) The problem is investigated by the supervisor with a member of the safety committee. A report is prepared.
- (3) If the worker is satisfied, he/she returns to work.
- (4) If the worker has reasonable grounds to doubt the decision a provincial safety inspector is notified.
- (5) The safety inspector examines the situation or issues an order requiring the worker to return to work or orders change to improve the condition.

**10.3 Can one worker be asked to do the work refused by another?**

In most Occupational Health and Safety legislation it states that the second worker must be told by another worker that the work was refused and why. The second worker has the same right to refuse as the first worker. WERInc recognizes that any employee has the right to refuse work on safety grounds.

**10.4 Is a worker paid while refusing to work?**

A worker continues to be paid during the initial investigation. A worker can be given alternate employment if there is a refusal to return to the job after the initial investigation.

**10.5 Can a worker be disciplined for refusing to work?**

The employer is not allowed to penalize, discipline, suspend, or threaten the employee if he/she refuses to complete work that they believe to be unsafe.

This does not apply if the refusal is made in bad faith or if the worker continues to refuse after the safety inspector finds that the work is not likely to endanger the worker.

**11.0 Construction Site Safety**

WERInc recognizes that each work site is unique and requires the company Occupational Health and Safety Plan needs to be tailored, to reflect the situation as it exists, at a specific work site. To ensure the safety and health of all personnel in and around the site, the following steps are to be taken:

- As much information is gathered about site and area as possible.
- The gathered information is used to amend employer's Health and Safety plan as necessary.
- Pre work site meeting with site staff, WERInc, and site staff on work site to discuss Occupational Health and Safety issues such as specific site rules, local medical facilities, egress and access routes, hours of work, etc.
- Workers and other interested parties are given a tour of the site and given orientation on all appropriate safety and operational concerns. This orientation is given by Site Supervisor.
- A safe work site is now laid out
- i.e.: safety equipment unpacked, tool crib set up, barricades, fencing, etc. installed to keep site secured.
- Emergency plan for health and environmental issues is posted or placed for all to view.
- Work commences with all personnel on site working together to keep site organized, orderly, and safe.
- Ongoing safety audits will be done by the Supervisor in consultation with site representative to ensure an accident free site is maintained.
- If a problem arises, make note of the appropriate steps, which will be taken in order to immediately correct the problem.
- At the end of the job, the site will be decommissioned and cleaned to the appropriate pre-construction level, or better.

### 11.1 Construction Site Safety Issues

- Observe and enforce all applicable legislation and regulations to ensure the safety of on site personnel.
- Wear fit tested half masks with non-contaminated Volatile Organic Compounds (VOC) cartridges during times of exposure.
- Supply an emergency First Aid kit on site, sufficient for all personnel, as dictated by WCB's standard.
- Comply with WHMIS regulations for use, handling, storage, and disposal of hazardous materials.
- Only authorized personnel employed on project will be allowed on site.
- Observe and enforce all handling and transport of dangerous goods regulations.
- Maintain complete records of the handling and transport of dangerous goods.
- Barricade excavation when work not in progress.
- Personnel are to wear safety boots, hard hats, and safety vests while on site.
- MSDS sheets on site.
- Company field manual with all applicable legislation required on site.
- Site safety meetings conducted.

### 11.2 Fire Safety (see WERInc Fire Safety Plan for more details)

- A person discovering a fire shall report immediately to site superintendent, site authority, and fire department and remain on site to direct fire fighting crews.
- Fire extinguishers will be on site.
- No burning permitted on site.
- Maintain safe handling of flammable and combustible liquids such as gasoline, kerosene, and naphtha, in quantities not exceeding 45 liters.

### 11.3 Company Safety Equipment Used on Site

The employer regards the safety of its workers and to ensure this, the workers should have the following equipment:

- Vehicle kit
- Barricade Equipment
- Fire safety equipment (extinguishers – hand tools)
- Portable eyewash station
- Spine Board
- Road Flares
- Cell Phones
- Portable Fencing
- Warning Signage
- First Aid Kit (WCB approved). As well, kit should be sized to match the number of staff working on site.
- Extra personnel safety gear for visitors and inspectors.

### 11.4 Examples of how Construction Site Occupational Health and Safety Issues are handled:

1. Safety Violations – Report to Project Manager, On Site Authorities and Regulatory Authorities.
2. Accidents – Provide Emergency First Aid
  - Contact medical authorities
  - Advise Project Manager and on site authorities
  - Contact regulatory authorities.
3. Emergencies – Contact Emergency Response Unit
  - Advise Project Manager and on site authorities

Advise regulatory authorities if required.

4. Personal Injury – Provide Emergency First Aid  
Contact medical authorities  
Advise Project Manager and on site authorities
5. Sickness – Provide First Aid  
Contact medical authorities  
Advise Project Manager and on site authorities

\*All Applicable WCB, OH & S, medical and accident forms are completed by site supervisor.



# **WERI**

*Health and Safety Plan*



## **Health and Safety Plan (HASP)**

### **General Comments:**

It is the policy of WERInc to provide and maintain a safe and healthy work environment for its employees and all other personnel on site. The plan is also designed to protect all site properties from damage through a comprehensive, viable safety program. Safe work practices on the part of all site personnel must be integrated into the scheme of a team-working environment. The ideals of efficient production and optimum safety must be inseparable. The WERInc Safety Officer, in consultation with the Client, will make every reasonable effort to develop and promote safe working procedures and insist that all personnel on site use protective equipment to establish safe methods and practices at all times.

The WERInc HASP will be available on site at the staging area. The plan will be posted in a highly visible area for all to see. The plan will be laminated and protected from the weather to ensure the plan remains legible and useable. All safety information such as WCB regulations, WHMIS labels, MSDS data sheets, work site safety information, *etc* will be placed near the HASP to create an on site safety center. The first-aid center and fire suppression equipment will also be located in the safety center, should any accident occur on site. Emergency response phone numbers will also be placed in a highly visible spot near the safety plan. All site personnel will be given an orientation of the safety center in order to instruct on effective use of the resources available.

### **Hazard Watch Program**

#### **STEP 1: Site Assessment**

A site assessment will be conducted to identify all major hazards after consulting with Site Manager. Some of the hazards would include but may not necessarily be limited to:

- Controlled products (WHMIS).
- Injuries associated with open excavations and heavy equipment (e.g. cave-ins).
- Exposure to hydrocarbon vapours.
- Medical emergencies.
- Environmental illness such as heat exhaustion, exposure, hypothermia, *etc*.
- Worker stress.
- Work related injuries—fatigue, back injuries, sprains, strains, *etc*.
- Overloading of work.

#### **STEP 2: Evaluation of Hazards**

Once an assessment of the site is completed it is imperative to quantify the significance of any hazards in order to put in place a procedure to eliminate or reduce the likelihood of an incident. This can be accomplished through safe work practices being instituted, substituting hazardous products with safer ones or treating and handling hazardous materials appropriately, use of protective gear, *etc*.

#### **STEP 3: Monitoring**

All personnel on site will be encouraged to always be aware of potentially hazardous situations. Monitoring will ensure that a worker is not unnecessarily exposed to any form of hazard.

**STEP 4: Take Action to Prevent Accidents**

Prevention is always the most effective means of preventing an accident and avoiding a hazardous situation. A few of the actions that WERInc utilizes while on site include but are not limited to:

- Alerting personnel to potential hazards.
- Using control measures to prevent health hazards.
- Posting warning signs.
- Erecting safety barricades.
- Daily safety meetings will be conducted in order to identify hazards and find solutions.
- Regulating work hours.
- Proper breaks for workers.
- Wearing protective gear.

**STEP 5: Review Proposed Safety Plan**

Once on site the HASP will be re-evaluated to determine if the needs and concerns of the workers are being properly addressed. If deficiencies are discovered the HASP will be modified accordingly to better suit the working environment.

*Safety Precautions*

A series of precautions will be instituted on site to minimize hazards.

- One member of WERInc will be designated a site safety officer.
- First aid kits and trained first response personnel will always be available on site.
- If necessary, volatile organic masks will be worn and test fitted. Proper training will be provided to the user.
- Work site will be kept clean and orderly.
- All tools will be stored in a proper manner.
- All products will be labeled as per WHMIS regulations.
- Dangerous Goods/Hazardous Materials emergency response guide book will be on site.
- Fire Safety Plan will be posted on site.
- Any spills will be immediately cleaned up.
- Only authorized personnel will be allowed in sensitive areas.
- Company field manual will be available on site.
- All utility companies will be brought in to mark underground utilities to prevent accidents and disruption to services.
- All safety gear will be checked on a regular basis.
- Hydrocarbon contaminated site will be regularly monitored with a portable head space vapour monitor for accurate determination of vapour concentrations.

Other safety precautions will be instituted on a site-by-site basis. The Contractor will then have access to all necessary information to create a complete HASP.

**STEP 6: Accident and Emergency Reporting Procedures**

In the event of a serious accident, medical emergency, fatality, or other significant incident(s) involving anyone at the project the proper authorities will be contacted immediately.

Emergency should continue to be dealt with by properly trained site personnel until the authorities arrive on site. The following steps will be followed after an accident is reported:

- Meet and assist responding emergency crew(s). Assist the emergency crew fully, briefly responding with all pertinent facts and assisting in any way possible.
- The Site Supervisor will contact the appropriate governing agencies depending on the nature of the incident for proper documentation, e.g. the WCB and other appropriate occupational health & safety agency.
- Document case completely with the Client and include all pertinent information. If appropriate, accident scene should be left undisturbed pending appropriate agency investigation. The only disturbance on site should have occurred only as required by the appropriate emergency response action. Appropriate safety measures will be implemented immediately in order to prevent reoccurrence. Under no circumstances will the incident be discussed without the Client's permission.

#### *Safety Information Readily Available*

The Contractor will provide the following safety information:

- WHMIS regulations & hazard labels information
- WCB guidelines
- TDG information
- Various applicable codes and regulations pertaining to safety
- Variety of safety pamphlets
- Environmental considerations

#### *Fully Trained and Experienced Safety Personnel Provided by the Contractor*

- Heavy construction personnel
- Fueling swambers
- Oil spill/hazard chemical spill response experts
- Fire fighters

#### *Safety Equipment*

The employer regards the safety of its workers and others and to ensure this the following equipment will be made available:

- Vehicle kit
- Fire safety equipment (extinguishers, hand tools)
- Portable eyewash station
- Road flares
- Cell phones
- Portable fencing
- Extra safety gear for visitors and inspectors

#### *Associated Documents*

The Contractor's HASP is superceded by the current acts and regulations of the local governing Occupational Health and Safety department.



# **WERI**

*Fire Safety Plan*



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## Introduction

### *Fire Safety Plan (definition)*

WERInc's overall objective through the creation of its fire safety plan is to provide all on site personnel and the surrounding community with optimum levels of protection from fire and other related public safety hazards. The following document is an outline that WERInc uses to ensure that the risk of fire on site is minimized as much as is humanly possible.

WERInc's Fire Safety Plan can readily be incorporated and will compliment the existing local Forest Fire Protection Agency and Fire Department plans. The Fire Safety Plan will reflect applicable local, provincial and national fire codes.

WERInc is committed to fire safety programming and this dedication is summarized in the corporate fire safety policy declaration:

*"WERInc recognizes that the inherent responsibility of this company is to prevent both loss of lives and loss of property. Coupled with these goals, we hold every employee responsible for performing in the safest manner possible in consideration of the unusual and hazardous working environments. It is also the obligation of management to provide the safest possible equipment, tools, and apparatuses with which to perform fire fighting duties. We further hold management responsible for properly training and educating each employee in all aspects of the total working milieu. It is the duty of every company employee to prevent deaths, property loss and to perform these two functions with the highest degree of safety conceivable."*

Fire is a chemical reaction known as combustion. It is defined as rapid oxidization of combustible material accompanied by a release of energy in the forms of heat and light. The following fire safety plan will demonstrate to the reader that WERInc's personnel can effectively deal with fire related problems before they become a safety issue. This is accomplished by implementing the following procedures on the work site by all company personnel:

1. Construction Site Fire Assessment Procedures
2. Construction Site Fire Prevention Procedures
3. Effective Fire Suppression Procedures

### **WERInc Fire Safety Plan Check List**

#### Construction Site Fire Assessment Procedures

- a) Areas of potential fire dangers
- b) Weather considerations
- c) Types of fuel
- d) Potential rate of spread
- e) Fire risk assessment to site and surrounding community
- f) Utility locations
- g) Available fire fighting resources from surrounding community
- h) Local medical and emergency response times
- i) Egress and escape routes
- j) Learn local authority's fire safety plan
- k) Potential hazards, i.e. fuel caches, hazardous materials, storage etc

### Construction Site Fire Prevention Procedures

Employees will be instructed of all fire safety procedures that are pertinent to the site. One specific fueling site will be designated to minimize the potential of fire starting and to localize fire spread potential.

#### Proper Fueling Procedures

- hose connections will be monitored for leaking
- fuel storage tanks will be vented and tested to ensure no leakage
- cargo hose will be grounded
- all machinery will be cooled off before fueling
- personal safety equipment will issued to fueling personnel
- all cab spaces are closed during fueling to minimize any leakage from enclosed spaces to prevent explosion
- all enclosed areas are opened after fueling to vent any fumes that may be present
- sufficient fire extinguishers will be readily accessible but far away enough from the fueling area to effectively suppress the fire, if required
- spillage of fuel or lubricants will be monitored
- should spills occur, they will be immediately cleaned up
- appropriate labels will be displayed if more than one fuel is available
- all fuel must be stored in National Fire Code (NFC) and Canadian Standards Association (CSA) approved storage vessels
- all storage tanks will be securely fastened
- general area will be kept clean and orderly

#### Other Considerations

- all flammable and combustible liquids are to be handled, stored, transported and used according to regulatory requirements
- transfer of flammable liquids will not be carried out in the vicinity of open flames or any type of heat producing devices
- flammable liquids having a flash point below 38°C, such as naphtha or gasoline will not be used as solvents or cleaning agents
- flammable and combustible waste liquids will be stored in approved containers and located in a safe, ventilated area.
- quantities of flammable and combustible waste liquids will be kept to a minimum

#### Personnel Protective Equipment (on site)

All personnel will have available to them the following protective equipment:

- fire retardant coveralls
- ear plugs
- hard hats
- safety shoes
- dust masks and carbon cartridge mask
- leather and cotton gloves
- safety glasses or goggles
- face shields
- cell phones
- reflective safety vests

- first-aid kits

#### *Personnel Training*

All personnel on site will have some basic understanding of the following elements:

- basic fire detection procedures and assessment
- proper procedure to initiate the emergency response process
- basic principles of structural and forest fire fighting suppression techniques
- fuel handling training
- basic heavy equipment operations and safety
- fire extinguisher training
- knowledge of safe handling, storage and use of handling hand tools
- instruction in the appropriate manner in using personal protective equipment
- occupational health and safety training
- WHMIS and TDG training
- proper use of hazardous materials and cleanup kit
- physical fitness is encouraged
- proper maintenance and servicing of all equipment on site

#### *Heavy Equipment Considerations*

- Site safety meetings conducted daily on site
- all equipment have at least one 20 lb. ABC Fire Extinguisher readily accessible away from engine and fuel tank
- equipment well maintained and kept clean to ensure optimum performance and prevent all liquids from leaking
- heavy equipment parked in designated spot when not being used
- all exhaust systems equipped with spark arrestors
- machinery never operated in fine fuel areas for extended periods of time to eliminate risk of starting a fire

#### Effective Fire Suppression Procedures

Note: An emergency phone list will be posted in the staging area.

##### *Fire Fighting Equipment on Site*

- one 20 lb. ABC fire extinguisher in each piece of equipment
- fire spades, fire rakes, Pulaski's, fire axes and other hand tools from tool crib (exact number determined by job size and potential fire risk)
- minimum four portable back packs full of water
- two 45 gallon plastic drums full of water or water tanker if available
- three 20 lb. ABC fire extinguishers
- every piece of heavy equipment can be an effective fire fighting tool for direct suppression or fire guard creation
- available equipment from local fire departments
- hundreds of yards of back fill material in form of sand, gravel, etc for suppression purposes

#### *Emergency Suppression Plan Developed*

The following considerations will be incorporated into the fire fighting plan.

- know the facts on the fire scene
- activate the emergency response process
- inventory the situation (workers available, water supply, equipment *etc*)
- develop plan of action
- execution of plan

The following is a more detailed check list for the fire suppression action plan once the alarm is sounded.

- type of fire (structural, fuel, grass, *etc*)
- predetermined response route
- predetermined site information
- type of building or forest fuel type
- equipment that will be responding
- water supply available
- considerations (time of day, topography, weather, environmental or hazardous material considerations)

While outside resources are enroute, the following factors will be re-evaluated:

- access response route
- review plans and sketches
- arrival time of units
- access points to fight fire
- preliminary plan for deployment of equipment
- any additional resources required

While on scene any persons will check for the following factors:

- any unusual signs of smoke explosions, *etc*
- life hazards
- fire showing or just smoke
- what is burning and how fast
- what is the path of fire travel
- type of construction or fuel type

#### *Tactical Priorities*

- rescue
- safety factors
- exposures
- confinement
- extinguish
- cleanup and ensuring that the fire is extinguished

## **Conclusion**

The WERInc staff adhere to the policy that if all potential sources of fire are eliminated through fire prevention policy no suppression activity will be required. All WERInc personnel are obligated to ensure that construction safety measures are maintained on site as per the following legislation: National Building Code, Manitoba Worker's

Compensation Board (WCB) Regulations, National Fire Code of Canada and applicable Occupational Health and Safety regulations.

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