

Health and Safety

Manual

**Health and Safety Manual**

Responsibilities for Management and Employees

**1. Personal Protective Equipment**

Personal protective equipment (PPE) is designed to protect against safety and or health hazards. PPE can only protect you if it is worn.

**Requirements:**

1. ***Hard Hats*** must be worn at all times. Hard hats should be minimum C.S.A. Class E approved with no holes or damage to weaken the structure
2. ***Safety Boots*** must be C.S.A. approved Grade 1 footwear. These can be identified by the green triangle with the C.S.A. logo and square green label indicating Grade 1
3. ***Safety Vests*** must be worn at all times
4. ***Eye Protection*** must be worn at all times where there is a risk of eye injury to the worker (ie. cutting concrete, steel & asphalt, welding etc.).
5. ***Hearing Protection*** is provided and should be worn when working around noisy equipment and tools for prolonged periods.
6. ***Clothing:*** Full length pants and shirts must be worn at all times.

**2. Hygiene**

1. Workers shall keep a reasonable supply of potable drinking water readily accessible at all times.
2. Facilities shall be provided by the employer when required.

**3. First Aid**

Each crew shall have a fully stocked First Aid Kit and at least one person certified in CPR and First Aid.

**4. Traffic Control**

a) Signs must be maintained in a clean and legible condition.

b) A worker shall not direct traffic for more than one lane in the same direction.

c) A worker shall not direct traffic if the normal posted speed limit is more than 90 km/hr.

d) A worker directing traffic:

i. Shall be competent

ii. Shall not perform any other work while directing traffic

iii. Shall be positioned in such a way that he or she is endangered as little as possible by traffic

iv. Shall wear a fluorescent safety vest (retro-reflective strips at night)

**5. Equipment Safety, General**

a) All vehicles, machinery, tools and equipment shall be maintained in a condition that does not endanger a worker.

b) No vehicle, machinery, tool, or equipment shall be used:

i. While it is defective or hazardous

ii. When weather or other conditions are such that it is likely to endanger a worker

iii. While it is being repaired or serviced

c) All vehicles, machines, tools and equipment shall only be used for their intended purpose, and in accordance with any operating instructions issued by the manufacturers.

i. Any time a vehicle has stopped on site, it is required to sound the horn and pause prior to moving again.

d) No worker shall operate a vehicle at a project unless he or she is competent to do so.

e) No person other than the operator shall ride on a vehicle unless a seat is provided for the use of, and is used by the person.

f) No operator shall leave unattended the controls of:

i. a front end loader, backhoe or other excavating machine with its bucket raised.

ii. A bull dozer with it’s blade raised.

iii. A fork lift with it’s forks raised.

g) No worker shall operate an excavator, backhoe or similar excavating machine in such a way that it or part of its load passes over a worker.

h) Vehicles, machines and equipment at a project shall not be operated in reverse unless there is no practical alternative to doing so.

i) Operators of vehicles, machines and equipment shall be assisted by signallers if either of the following applies:

i. The operator’s view of the intended path is obstructed

ii. A person could be endangered by the vehicle, machine or equipment or by its load.

iii. If truck drivers lose site of the signaler, movement is to stop until eye contact is re-established. If you can’t see him, he can’t see you.

j) The operator and the signaller shall:

i. Jointly establish the procedures by which the signaller assists the operator and

ii. Follow those procedures.

k) A signaller shall:

i. Be a competent worker and shall not perform other work while acting as a signaller.

ii. Wear a fluorescent safety vest.

iii. Be clear of the intended path of the vehicle, machinery or equipment.

iv. Be in full view of the operator.

v. Have a clear view of the intended path of the vehicle, machinery, equipment.

vi. Watch the part of the vehicle, equipment, machinery whose path of travel the operator cannot see.

**6. Excavations**

Soil Types:

a) Type 1 Soil

i. Is hard, very dense and only able to be penetrated with difficulty by a small sharp object.

ii. Has a low natural moisture content and a high degree of internal strength

iii. Has no signs of water seepage and

iv. Can be excavated only by mechanical equipment.

b) Type 2 Soil

i. Is very stiff, dense and can be penetrated with moderate difficulty by a small sharp object.

ii. Has a low to medium natural moisture content and a medium degree of internal strength and

iii. Has a damp appearance after it is excavated.

c) Type 3 Soil

i. Is stiff to firm and compact to loose in consistency or is previously excavated soil.

ii. Exhibits signs of surface cracking

iii. Exhibits signs of water seepage

iv. If it is dry, may run easily into a well defined conical pile and

v. Has a low degree of internal strength.

d) Type 4 Soil

i. Is soft to very soft and very loose in consistency, very sensitive and upon disturbance is significantly reduced in natural strength.

ii. Runs easily or flows, unless it is completely supported before excavating procedures

iii. Has almost no internal strength

iv. Is wet or muddy and

v. Exerts substantial fluid pressure on its supporting system.

Refer to the Occupational Health and Safety Act and Regulations for Construction Projects Page R-174 to R-182 regarding Support Systems.

**8. Housekeeping**

In an effort to protect workers and the general public, Clarke Trenchless has established the following procedures to prevent injury due to poor housekeeping habits.

1. Each employee has a responsibility to ensure their areas are kept neat and free of debris. Remove or repair any hazards that may result in a slip, trip or fall.
2. Dispose of all waste and debris in appropriate containers.
3. Properly store and put away all tools, equipment and materials. Do not block access to safety equipment or obstruct exits and escape routes.
4. Keep equipment and machinery in as clean as possible.
5. Prior to leaving a job site at the end of a work day, ensure that all precautions have been taken to protect the general public. Special attention should be paid to proper barricades around open excavations, and trip hazards.

**9. Emergency Response Plan**

**Legal Obligations**:

Accidents and occupational illnesses must be reported to designated parties such as the Workplace Safety and Insurance Board (WSIB). All employees and management must follow all orders from the WSIB and the Ministry of Labour (MOL).

**Action Plan:**

In the event of an emergency, employees should follow the procedure below.

1. Notify the Supervisor immediately.
2. The Supervisor will take charge, assess the situation and direct activities.
3. In the event of a serious injury, protect the victim and other workers, property and equipment from further damage.
4. Give appropriate First Aid. Call 911 if warranted by the situation, or take victim to hospital if appropriate depending on the situation.
5. Guide emergency vehicles to appropriate location.
6. Accompany the victim to the hospital: Use the Emergency Response Poster for any phone #’s and hospital location.
7. Secure the accident scene to allow for investigation by MOL if required.

**10. Alcohol and Drug Policy**

All employees are required to report and remain fit for duty, free of the negative effects of alcohol and drugs. It is prohibited to be on duty or in control of a vehicle, equipment or tool while under the influence of alcohol or drugs, including the after affects of such use.

**Policy Standards**

Employees of Clarke Trenchlessmust:

1. Not use, possess, distribute, offer or offer for sale any illegal/legal drugs or drug paraphernalia.
2. Not use, possess, distribute, offer or offer for sale any alcohol.
3. Responsibly use prescribed or over the counter medications.
4. Not traffic, distribute, offer or offer for sale any prescription medications.

**Policy Violation Procedures**

If a Supervisor and/or anyone in management have reasonable grounds to believe that any of the above policy standards have been violated, the following steps will be taken:

1. The employee will be sent home without pay.
2. The Supervisor will notify the President of Clarke Trenchless of the incident.
3. The employee will have to report to the office the next day for a meeting.
4. Immediate dismissal may occur.

**11. Working Near Electrical Hazards**

When working around hydro wires care must be taken to maintain the minimum separation distance at all times as below:

* 750 volts to 150,000 volts 3.0 meters
* 150,001 volts to 250,000 volts 4.5 meters
* More than 250,000 volts 6.0 meters

The following precautions must be taken:

1. Make sure you have adequate warning devices such as “Caution Overhead Wires” signs. The warning devices must be visible to the operator at all times.
2. Make the operator aware of the electrical hazard prior to starting work.
3. A designated signaller shall be stationed so that they are in full view of the operator and have a clear view of the electrical conductor. The signaller shall alert the operator any time the equipment comes close to the minimum separation distance allowed.

**12. Fire Prevention**

1. Store flammable liquids in approved containers, cabinets and designated areas only and use the proper procedures when dispensing from these containers. Even small quantities of flammable liquids must be kept in approved, properly marked safety cans.

b) Never pour flammable liquids into sewers or drains.

1. Do not use a portable electric tools spark-producing tools or ordinary electrical equipment, especially extension lights where flammable vapours, gases or dusts may be present or generated.

1. Refill gasoline, propane and diesel-fueled motor vehicles at authorized areas only, using designated equipment. Motor should be turned off and cool before they are re-filled, and remain turned off during refilling.

 **13. Confined Space Policy**

It is the policy of Clarke Trenchless that all employees entering a confined space are properly trained and in compliance with the requirements of the Occupational Health and Safety Act.

The management of Clarke Trenchless will ensure all necessary safety precautions will be taken. Supervisors will make certain that all employees and sub-contractors are working safely, that proper precautions have been taken and all paperwork and permits are filled out as required. All employees must understand the definition of a confined space and show how steps have been taken to confirm the atmosphere is safe to work in.

**Confined Space Definitions**

A confined space is defined as a place:

1. That is partially or fully enclosed
2. That is not designed or constructed for continuous human occupancy
3. Where atmospheric hazards may occur because of its construction, location, contents, or because of the work that is done in it.

A “confined space” is a space to which access or egress is restricted and because of its location, contents or work involved, a hazardous gas, vapor, dust, fume or an oxygen deficient/enriched atmosphere may occur.

Where air cannot move freely in and out of a partially enclosed space, there is a potential for a hazardous atmosphere to be present inside.

**Confined Space Procedure**

Before a worker can enter a confined space, a competent worker must perform a written hazard assessment using the confined space entry permit (see attached). The hazard assessment should consider the following:

* The hazards that may exist in the confined space
* The hazards that may develop while work is being performed in the confined space
* General safety hazards in the confined space

Once the hazards have been identified in the assessment, a competent person must use the proper plan for that specific space. The objective of the plan is to anticipate and eliminate the hazard before confined space entry. If this is not possible, controls, measures and procedures must take place in order to ensure the workers are safe.

CONFINED SPACE ENTRY PERMIT

|  |
| --- |
| * All employees entering a confined space must be trained. Employees must have read and understood the “Confined Space Procedure”.
* In the event of an emergency, call **911.**
* If the conditions or procedures specified on this permit change, **STOP WORK IMMEDIATELY** and notify your Supervisor.
 |
| Project: Location: Date: |
| Description of confined space: |
| Description of work to be performed: |

|  |
| --- |
| CHECK ALL POTENTIAL HAZARDSHazardous Atmospheres Physical Hazards🞎Flammable 🞎Temperature 🞎Toxic 🞎Entry/Exit Limitations 🞎Irritant 🞎Noise 🞎Corrosive 🞎Entrapment 🞎Oxygen -Deficient 🞎Spark Producing Operations 🞎Oxygen -Enriched 🞎Electrical 🞎Other (list)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🞎Mechanical  |

|  |
| --- |
| HAZARD CONTROLS🞎Yes 🞎No Is lockout/tagout required? List isolation points:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_🞎Yes 🞎No Is explosion-proof equipment required?🞎Yes 🞎No Is communication equipment required?🞎Yes 🞎No Is telephone or 2-way radio for summoning rescue available?🞎Yes 🞎No Is fire extinguisher available?🞎Yes 🞎No Is safety harness and lifeline required?🞎Yes 🞎No Is tripod and winch required?🞎Yes 🞎No Have entrance and standby personnel been trained?🞎Yes 🞎No Has standby attendant been informed to remain continuously posted outside the confined space? |

Record of Entry

Monitoring equipment: Serial # Last calibrated:

 Test 1: Test 2: Test 3:

Time of Test

LEL – Flam/Combust.

O² - Oxygen

H²S-Toxic

CO-Carbon Monoxide

**Authorization By Entry Supervisor**

I certify that all required precautions have been taken and necessary equipment is provided for safe entry and work in this confined space.

Printed name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_ Time \_\_\_\_\_\_\_\_\_\_\_

**14. Workplace Violence Policy**

The management of Clarke Trenchless recognizes the potential for workplace violence and is committed to working with its employees to provide a safe work environment.

Workplace violence will not be tolerated on company premises, or while an employee is conducting company business at other locations. Any act of violence committed by or against any employee is unacceptable and will be subject to Clarke Trenchless discipline policy and/or legal action.

For the purpose of this policy, violence includes but is not limited to:

* The use of, or attempt to use, physical force by a person against an employee, in the workplace, that causes or could cause physical injury. For example: hitting, shoving, pushing, or kicking.
* Any threat, behaviour or action directed at an employee and interpreted to carry the potential to harm or endanger the safety of the employee. For example: Threatening language, shaking fists, destroying property or throwing objects.

Clarke Trenchless will take whatever steps are appropriate to protect our employees from the potential risks associated with workplace violence.

Management will investigate and deal with all incidents and complaints of workplace violence in a fair and timely manner. The policy and program will be reviewed and updated, if required, annually.

Supervisors must ensure that all measures and procedures set out in this policy and the supporting program are carried out in the workplace.

Workers are expected to comply with this policy and program and to report any concerns or complaints to their supervisor.

This policy prohibits reprisals against employees, acting in good faith, who report incidents of workplace violence or who are involved in an investigation. Management will take all reasonable and practical measures to prevent reprisals, threats of reprisal, or further violence.

**Workplace Violence – Incident Response Plan**

In the event of a violent act being committed on a jobsite, the following procedure shall be followed:

1. Notify the Supervisor immediately.
2. The Supervisor will take charge, assess the situation and direct activities
3. Involved workers should be separated and sent home if required
4. If the offending party is not an employee, attempt to calm the situation
5. If warranted by the situation, call 911
6. Notify the President of Clarke Trenchless immediately
7. An investigation will take place and Disciplinary Action may follow

**15. Workplace Harassment Policy**

The management of Clarke Trenchless is committed to providing a work environment in which all individuals are treated with respect and dignity.

Workplace harassment will not be tolerated from any person in the workplace. All employees of this company are expected to follow this policy on company premises, or while an employee is conducting company business at other locations. Any act of harassment committed by or against any employee is unacceptable and will be subject to Clarke Trenchless discipline policy.

For the purpose of this policy, harassment includes but is not limited to:

* Bullying, which means persistent or excessive negative behaviour towards a worker in the workplace including verbal abuse, belittling a worker’s opinion, racial prejudice, spreading malicious rumours, or undermining or sabotaging a worker’s work.

Clarke Trenchless will take whatever steps are appropriate to protect our employees from the potential risks associated with workplace harassment.

Management will investigate and deal with all incidents and complaints of workplace harassment in a fair and timely manner. The policy and program will be reviewed and updated, if required, annually.

Supervisors must ensure that all measures and procedures set out in this policy and the supporting program are carried out in the workplace.

Workers are expected to comply with this policy and program and to report any concerns or complaints to their supervisor.

This policy prohibits reprisals against employees, acting in good faith, who report incidents of workplace harassment or who are involved in an investigation. Management will take all reasonable and practical measures to prevent reprisals, threats of reprisal, or further harassment.

**16. CELL PHONE / ELECTRONICS POLICY:**

The goal of the policy is to ensure:

-Workers are protected from injury or harm as a result of distraction while talking or texting on cell phones during working hours.

-Workers are protected from the dangers of moving equipment and other hazards while using a cell phone.

Procedure for receiving and making cellular calls or texts:

1) Workers are permitted to bring their personal cell phone to the workplace.

2) Workers are required to move outside the work area to check for and make phone calls or send and receive texts. Safely complete your tasks prior to using your cell phone.

3) Operators and drivers may not call or text while operating equipment or vehicles.

3) **Personal call / texts can be made during scheduled breaks or prior to your shift starting.**

4) All employees with company issued cell phones must use their cell phone for work purposes only.

**Failure to comply will result in discipline.**

If you are waiting for an urgent call, please advise the Supervisor of the situation and special arrangements can be made.