

Confined Space Program



Type:	POLICY	Revision:	01
Owner:	BRL	Document Name:	HSPOL-011
Status:	Current – Nov 2014	Review Date:	September 2017
Effective Date:	01 January 2015	Total Pages:	6

Definitions:

- New** “Confined space” means a fully or partially enclosed space that is not primarily designed or intended for human occupancy and in which, because of its construction, location or contents or work activity therein, the accumulation of a hazardous gas, vapour, dust or fume or the creation of an oxygen-deficient atmosphere may occur;
- Old** Confined space means a space to which or from which access or egress is restricted and which, because of its construction, location or contents, or the work activity therein, a hazardous gas, vapour or dust, or fume or oxygen deficient atmosphere may occur;

NOTE: Effective September 2006 the definition of confined space (old) is revoked O.Reg 628/05. S.1.

Confined space program:

Bernard Rochefort Ltd., in accordance with the OHSA has implemented this written confined space program.

This program shall identify, assess and control hazards that may endanger a worker entering or working in a confined space.

Hazard Control Plan for Confined Space

BASIC Pre-Entry Preparation:

Never enter a confined space without a two-man system so that one worker acts as the stand by and has access to horn, whistle or radio with which to summon emergency assistance. When entering manholes, the worker entering a confined space must be protected by a secure fall-restraint system. Constant communication must be maintained when a worker enters a manhole and the standby worker shall keep a flashlight available in order to maintain visual contact with the worker. As part of the Plan, developed Emergency Equipment must be determined during the hazard assessment process.

Hazard	Responsibility	Control	Process
Gases in confined space	Supervisor	Gas Detection Equipment	Using an oxygen/combustible gas detector the Supervisor (who shall be trained in its operation) shall ensure that the equipment is maintained, used and calibrated in accordance to the specifications provided by the manufacturer.
	Supervisor	Checking for oxygen levels	The Supervisor will first check for oxygen content in the hole or trench (The Supervisor shall use an

Confined Space Program



			oxygen analyzer or meter and this shall be calibrated according to manufacturer specs prior to each use).
			Readings to be taken at various levels to ensure that no area or pocket of poor air quality is missed.
			Supervisor is to record readings on the confined space work log.
			If the oxygen content is less than 18% or more than 23% the space is too hazardous for entry without using specific hazard controls.
	Supervisor		If the meter records a reading that is beyond the scale capability and returns to zero, there may be a concentration of gas or vapour that is volatile and exceeds the upper explosive limit and the space should be considered dangerous to enter.
	Supervisor	Checking for toxic gases and vapours	Do not use combustible gas detectors to measure for toxic atmospheres as they do not respond to low concentrations – even low concentrations can have lethal affects. IDLH levels (immediately dangerous to life or health) based on a parts per million might be missed by that equipment. Select detectors from the following: Colour changing tube type. Toxic gas detector – electrochemical monitor and toxic gas detector that tests for gases and vapours that are toxic as well as combustible.
	Supervisor	Documentation	Record your readings on the confined space work log.
	Supervisor	Ventilation	Ensure that if fan or ventilation equipment is in use it is “explosion proof” as per the CSAO safety manual. The typical manhole is 10 feet deep by 5 feet wide and contains 195 cubic feet. Blowing in 750 cubic feet of air per minute should provide an air exchange every 15 seconds and easily dilute or displace most dangerous atmospheres. Portable fans typically provide 750- 1,000 cubic feet per minute. HOWEVER, where other toxic or explosive gases or vapours are present, this method may not be adequate. An engineer or hygienist may have to be consulted.
			Toxic atmospheres require supplied air respirators if the concentration of the gas or vapour exceeds the level considered to be immediately dangerous to life or health (IDLH).
	Supervisors / Workers	Instruction	Workers must be instructed by a competent person on the use, fit and maintenance of the device to be worn
Explosive Atmospher	Supervisors		If the concentration is greater than 50% of the Lower Explosive Limit, the space must not be entered for

Confined Space Program



es			any reason, even with respiratory protection. If less than 10%, only cold work may be done and respirators may be needed (cold work is anything not involving tools or equipment that can produce a spark or other source of ignition ie. welding)
Temperature	Supervisors	Hot Weather Plan	Using the Temperature log and Hot Weather Plan - work in a confined space should be deferred until such time as there is no requirement for a work rest schedule as the additional use of respirators and working in a confined space can increase the workers risk factors to succumbing to heat stress illness.
Physical hazards (ie. falling debris into trenches, bumping into objects)	Supervisors and all workers	Equipment not to be parked near edge of trench to reduce risk of ground failure.	Observer at top of trench to be constantly vigilant and in sight of workers in trench and to check ground space above trench to ensure there is no potential for falling tools or equipment and workers to wear hard hats and foot protection in all cases (CSA approved). Trench boxes and slopes to be provided and designed in accordance to the Construction regulations for depth and slope
ALL HAZARDS	SUPERVISORS AND ALL WORKERS	ENTRY CHECKLIST / PERMIT	No workers are to enter any confined space unless a completed entry permit and/or checklist has been completed and posted at the site and the worker has reviewed the documents and signed off on same.
Rescue Training/ Emergency Response	Supervisors and First Aid Responders	To provide emergency rescue assistance	Where possible, the worker should be rescued from outside the confined space i.e. pulling out with the fall restraining system. The rescuer must ensure that he/she does not become a victim by assessing the scene. Call 911 for emergency rescue assistance. A specific rescue plan shall be created for each confined space and assessed for hazards.
911 Call	All Employees – Supervisors		Follow the Critical Injury Guide for process
Training	Health and Safety Coordinator	Confined Space Training	The Health and Safety Coordinator is responsible for ensuring that those workers likely to be entering a confined space undergo confined space training and that this training is recorded in the training matrix.
Emergency Equipment		First Aid Kit, Fall Restraint, Warning System (horn, siren, 2 way radio). Access to 911 services, flashlight (Serious injury Tool Kit)	In the event of an emergency rescue, this equipment must be on site and available to the responder.
Communicate	Confined	Two way radio or	Must communicate with each other at no less than 5

Confined Space Program



ation	Space Work and Standby Safety Person	verbal communication	minute intervals. Standby person is not to engage in conversation with any other party so as not to distract from his duties.
-------	--------------------------------------	----------------------	---

Personal Protective Equipment:

PPE requirements shall be as specified on the Confined Space Entry Permit. Details of PPE requirements shall be listed in the Confined Space Data Sheet. The final decontamination or the task carried out in the Confined Space may give rise to a toxic atmosphere or to a deficiency in oxygen; in these cases, it is important to wear suitable air-supplied breathing apparatus, with air from medical air bottles or from a dedicated safety air compressor.

Responsibilities further defined:

EMPLOYER

1. The employer shall ensure that the program is reviewed annually and whenever there is a change in circumstances that may affect the safety of a worker in a confined space.
2. Every employer shall ensure, in consultation with a health and safety representative, that all existing and potential confined space work locations are identified.
3. Before a worker enters a confined space, an employer shall appoint a qualified worker to carry out an assessment of the hazards to which the worker may be exposed in the confined space.

This assessment shall be in writing and shall consider:

- a) the hazards that may exist due to the design, location or use of the confined space; and
- b) the hazards that may develop during work activity inside the confined space. The hazards to be considered shall include:
 - i. oxygen enrichment or deficiency;
 - ii. flammable gas, vapour or mist;
 - iii. combustible dust;
 - iv. other hazardous atmospheres;
 - v. harmful substances;
 - vi. hazardous energy; and
 - vii. engulfment, entrapment and other hazardous conditions.

The qualified worker shall sign and date the assessment and provide it to the employer. The employer shall ensure that the assessment is reviewed as often as is necessary to ensure that its corresponding plan is adequate.

4. An employer shall ensure that a written confined space entry and control plan is developed and implemented for each confined space entry before a worker enters the confined space.
5. The employer shall assign the responsibility for development and implementation of the plan to a competent person.

Confined Space Program



6. The employer shall ensure that every worker who enters, exits or occupies a confined space follows the plan.
7. The employer shall ensure that the training is reviewed, in consultation with a health and safety representative or joint health and safety committee if applicable, at least annually and whenever there is a change in circumstances that may affect the safety of a worker in a confined space.
8. The employer shall maintain up-to-date written records of the training.
9. For each confined space, every employer shall establish an entry permit system that specifies:
 - a) The length of time for which an entry permit is valid;
 - b) The identity of each worker entering the confined space;
 - c) The activity to be performed by the worker;
 - d) The location of the confined space;
 - e) The results of the atmosphere testing of the confined space, as required by section 13; and
 - f) The applicable precautions to protect the worker as outlined in the plan.
10. The employer will ensure that, before every entry into the confined space by a worker, the permit shall be completed and signed by a qualified worker.
11. A competent person shall sign the permit after the work has been completed to confirm that no workers remain inside the confined space.
12. A copy of the permit shall be posted at the confined space before a worker enters and it shall be kept posted at the confined space for the duration of the permit.
13. Every worker involved with entry into a confined space shall be trained by a qualified worker to:
 - a) Recognize hazards associated with the confined space; and
 - b) Perform safely such duties as specified in the plan. It is the employer's responsibility to ensure that this is done.
14. The supervisor will ensure that the equipment required for working in or around confined spaces is provided.
15. Ensure that a separate entry permit is issued each time confined space work has to be performed and that confined space rescue team has been scheduled if necessary.
16. Ensure that the confined space rescue team is onsite (if necessary) or that all rescue plans and equipment are readily available to effect a rescue.
17. Ensure that adequate means of entering and exiting the confined space are provided.
18. When dealing with atmospheric hazards, ensure that the space is ventilated and purged or rendered inert (by adding an inert gas) and provide the equipment or follow the requirements of the OHSA section 20 of the Confined Space Regulations
19. All entry permits and coordination documents shall be retained, by the supervisor (or office), for a period of one year after they were created.

Worker Responsibilities:

Every worker involved in a confined space entry shall comply with the applicable provisions of the program including use of required PPE and must sign off on entry permit.

Supervisor:

Confined Space Program



Responsible for all elements as noted in the Confined Space Plan and, in addition to that, for reporting all accidents and critical injuries as per the injury reporting process. He must ensure that only workers trained in confined space procedures enter confined spaces, and must sign off on entry permit.

Health & Safety Coordinator:

Responsible for ensuring that the training records are current and assisting with the development of the confined space plan.

Health & Safety Reps:

To assist with the development of the confined space plan, to inspect the completion of plan as part of their monthly inspection process and to ensure that they participate in the hazard assessment process.

General Contractor:

Final Note: When work to be done for a general contractor involves a confined space then that confined space will become the responsibility of the contractors' employees and will not be undertaken by Bernard Rochefort Ltd. workers.

Attendant / Safety Watch:

Safety watch /attendants shall have Confined Space Entry training and shall control unauthorized entry into the space, maintain contact with the entrant(s), monitor the entrant(s), conduct atmospheric monitoring. contact the rescue personnel if needed and terminate the entry if required.

**** Safety Watch personnel will never enter the confined space for any reason.**

Rescue Personnel:

Rescue personnel shall have Confined Space Entry training. A gas test of the confined space atmosphere must be done prior to any rescue personnel entering a confined space. When workers in a confined space are wearing a safety harness and lanyard, Rescue Personnel can work from the outside, without having to enter the confined space. Rescue Personnel must be physically capable of carrying out a rescue, and must be trained in First Aid/CPR. Communications must be available at the worksite to emergency response organizations i.e.; Fire Department, Ambulance. All rescue personnel shall be trained on the rescue equipment being used.

RESCUE EQUIPMENT:

Bernard Rochefort Ltd. will rent all necessary rescue equipment required for the work in confined spaces. The company doesn't own any rescue equipment per se but a thorough assessment of the confined space needs will be done by a certified worker / supervisor. A thorough hazard assessment shall be completed prior and be noted on the entry permit. Once completed, all necessary rescue equipment shall be acquired and no work shall begin until properly set up.

Confined Space Program



Enforcement and monitoring:

Contrary to the discipline policy, failure to process for confined space will result in immediate termination at the President's discretion noting the serious nature of this work.

This process will be monitored through careful inspection of confined space work entry reports by the Health & Safety Reps as part of their inspection process.

Approval & Acknowledgement:

A handwritten signature in blue ink, consisting of a large, stylized 'R' followed by a horizontal line extending to the right.

Rhéaume Rochefort

Feb 1st, 2018

Date:

-- END OF DOCUMENT