

CONFINED SPACE PLAN

Confined Space Name/Location/Identification #:	Written by:	Date:

This plan is specific to the confined space named and identified above and is written in accordance with Ontario Regulation 632/05, Confined Spaces made under the Occupational Health and Safety Act of Ontario and the University of Guelph Confined Spaces Management Program.

1) Hazard Identification and Control

The list below indicates the hazards and the control measures that have been identified for the confined space name above. The list includes actual and potential existing hazards that have been identified based on the hazard assessment. It also includes the hazards that may develop during the work activity inside the confined space. The hazards assessed include atmospheric and physical hazards as well as general safety and health hazards present in the space.

Identified Hazards	Hazard Control Measures

2) Duties of Entrants in the Confined Space

University of Guelph Entrants/Other Related Personnel: 1. Name _____ Duties _____ 2. Name _____ Duties 3. Name _____ Maintenance Contractor(s) Entrants/Other Related Personnel: 1. Name _____ Employer _____ Duties _____ 2. Name _____ Employer _____ 3. Name _____ Employer _____ Duties _____ 4. Name _____ Employer _____ 3) Multi-Employer Involvement O Yes If "No" proceed to #4; if "Yes" continue below O No Where the workers of more than one employer are to perform work in the same confined space or related work with respect to the same confined space, and before any worker enters the confined space or begins related work with respect to the confined space, the University of Guelph as the lead employer is required by Ontario Regulation 632/05, Confined Spaces made under the Occupational Health and Safety Act of Ontario, to prepare a co-ordination document to ensure that the duties imposed on employers by the regulation are performed in a way that protects the health and safety of all workers who perform work in the confined space or related work with respect to the confined space. Co-ordination Document attached: O No O Yes

4)	<u>Attendant</u>		
Na	me Employer		
res	attendant is a worker who is trained in the hazards of confined spaces and whose primary sponsibility is to monitor the safety of the worker(s) and to communicate with the workers in the offined space.		
5)	Entry/Exit Procedures		
	adequate means for entering and exiting must be provided for all entrants who enter a fined space.		
•	Opening(s) into the confined space are large enough to permit the entry of workers wearing safety equipment: O Yes O No		
•	Opening(s) into the confined space are large enough to permit rescue workers' personal protective equipment and rescue equipment: O Yes O No		
•	Ladder or other suitable means provided to give ready access/egress: O Yes O No O NA		
•	Other provisions for safe entry/exit:		
6)	Protective Equipment		
<u>Op</u>	erational Protective Equipment		
	erational protective equipment is used to secure the worksite and to address general hazards in the affined space and/or adjacent work areas. Protective equipment required (\checkmark):		
O F	Warning Signs O Barricade Tape or Cones O Ventilation Equipment Fire protection Equipment O Ground Fault Circuit Interrupter (GFCI) ntrinsically Safe O Grounding/Bonding Equipment O		
ŏ.	O O		
•	All confined space jobs shall be barricaded (as appropriate) to provide a clear work area and to keep unauthorized personnel out O Yes		
•	All portable electrical equipment shall be equipped with a ground fault circuit interrupter O Yes O NA		
•	If flammable or explosive atmospheres are possible, all interior or entryway lighting shall be rated for use in hazardous locations (eg. low voltage, explosion-proof lighting or 110V explosion proof lighting equipped with a GFCI or air driven lights) O Yes O NA		
•	Any equipment that could generate a static charge, shall be adequately grounded and bonded (eg hose nozzles, air movers, hydro blasters, etc) O Yes O NA		

Personal Protective Equipment (PPE) Personal protective equipment required (♥): O Airline Respirator (Supplied Air) with 5-minute Egress Bottle O Hearing Protection O Self-Contained Breathing Apparatus O Chemical Splash Goggles O Safety Glasses O Specify Other Respiratory Protection ___ O Fall Protection O Boots O Gloves (Type) O Retrieval Ropes for Horizontal Entry O Rain Gear All entrants and other related personnel shall be equipped with appropriate PPE O Yes All entrants and other related personnel using respiratory protective equipment shall be appropriately trained O Yes O NA 7) Isolation of Energy and Control of Materials Movement (\(\forall \) where applicable below) Before working in the confined space, all energy sources, which are potentially hazardous to workers in the space, shall be identified and de-energized, secured, relieved, disconnected, restrained or otherwise controlled. Also, entrants shall be protected against any collapse or shift of material. All connecting supply lines, which are potentially hazardous to workers in the space, have been depressurized, vented and disconnected with a blank inserted into the line. Blinds or blanks have been sized for proper pressure and diameter O Yes O NA O Other adequate means: All electrical components, which are potentially hazardous to workers in the space, have been disconnected/de-energized, locked out and tagged (group lockout procedures shall be used for all authorized entrants) O Yes O NA O Other adequate means: All hydraulic and pneumatic systems and moving parts of equipment, which are potentially hazardous to workers in the space, have been disconnected/de-activated/de-energized, mechanical components have been blocked or supported in place and have been locked-out and tagged

Before entry, all heated or steamed spaces have cooled to an acceptable temperature
 O Yes O NA O Other adequate means:

• Entrants are adequately protected against drowning, engulfment, entrapment, suffocation and other hazards from free-flowing material

O NA O Adequate protection:

8) Ventilation and Purging (check ✓ where applicable)

O Yes O NA O Other adequate means:

<u>"Purging"</u> involves *removing contaminants* inside the confined space by displacement with air to achieve acceptable atmospheric levels. After the contaminants have been removed (purged), the confined space may be ventilated. <u>"Ventilation"</u> means the continuous *provision of fresh air* into the confined space by mechanical means to maintain acceptable atmospheric levels. It must be continued while work is being carried out within the space, to maintain an acceptable oxygen concentration, to provide protection in case of accidental release of chemicals, to remove contaminants generated by the work performed or to cool the enclosure.

- If atmospheric hazards exist or are likely to exist in the confined space, the confined space shall be purged O and/or ventilated O, before any worker enters it, to ensure that acceptable atmospheric levels are maintained in the confined space while any worker is inside.
- If mechanical ventilation is required to maintain acceptable atmospheric levels, an adequate warning system (a flow or pressure switch in the air stream) and exit procedure shall also be provided to ensure that workers have adequate warning of ventilation failure and are able to exit the confined space safely O Yes

9) Procedures for Working in the Presence of Explosive or Flammable Substances ()

The accumulation of flammable, combustible or explosive agents in confined spaces can present a significant risk to workers; as a result, very stringent criteria are applied to work performed in such atmospheres.

No worker shall enter or remain in a confined space that contains or is likely to contain an airborne combustible dust or mist whose concentration may create a hazard of explosion. The confined space contains or is likely to contain an explosive or flammable gas or vapour O Yes If "No" proceed to #10; if "Yes" continue below O No In the case of a worker performing **only inspection work** that does not produce a source of ignition: the atmospheric concentration of the explosive or flammable gas or vapour is less than 25% of its lower explosive limit O Yes O No: If "No" specify control measure(s): O Purging O Ventilation O Inerting O Other adequate means: In the case of a worker performing only cold work: the atmospheric concentration of the explosive or flammable gas or vapour is less than 10% of its lower explosive limit If "No" specify control measure(s): O Purging O Ventilation O Inerting O O Yes O No: Other adequate means: ____ In the case of a worker performing **hot work**: the atmospheric concentration of the explosive or flammable gas or vapour is at 0% of its lower explosive limit O Yes the atmospheric concentration of oxygen is not likely to be greater than 23% O Yes the atmosphere in the confined space will be monitored continuously O Yes the entry permit includes adequate provisions for hot work and corresponding control measures O Yes an adequate alarm system and exit procedure are provided to ensure that workers have adequate warning and are able to exit the confined space safely if either or both of the following occur: O Yes A. the atmospheric concentration of the explosive or flammable gas or vapour exceeds 5% of its lower explosive limit B. the atmospheric concentration of oxygen exceeds 23% If "No" to any of the above under "hot work", specify control measure(s): O Purging 0 Ventilation O Inerting O Other adequate means: **10) Atmospheric Testing** (check ✓ where applicable) Atmospheric testing is required for entry and work in confined spaces. Testing shall be performed by an adequately trained person using continuous monitoring, before and while a worker is in the confined space O Yes. Test results shall be recorded at adequate intervals O Yes Recording Interval(s): _____ The atmospheric hazards of concern are:

O LEL O Carbon Monoxide

O Hydrogen Sulphide

O Oxygen

Ο	Ο	0	Ο

conditions. Rescue plans must be prepared to respond to unanticipated situations.

11) On-Site Rescue -- Procedures, Equipment and Method of Communication ()

Well-designed confined space entry and work procedures should eliminate or control hazardous

The following shall be in place before any worker enters the confined space:

- Adequate written on-site rescue procedures have been developed (see attached plan/procedures) and are ready for immediate implementation O Yes
- All emergency procedures, including procedures relating to emergencies outside the confined space shall be reviewed with all entrants and other related personnel
 O Yes
- An adequate number of appropriately trained persons (see attached plan) shall be available for immediate implementation of the on-site rescue procedures that apply to the confined space. This training includes: on-site rescue procedures that apply to the confined space first-aid and cardio-pulmonary resuscitation use of the pertinent rescue equipment
 O Yes
- The rescue equipment identified in the attached plan/procedures shall be readily available to effect a rescue in the confined space O Yes
- The rescue equipment identified in the attached plan/procedures is appropriate for entry into the confined space O Yes

12) Additional Considerations		