



**DALHOUSIE
UNIVERSITY**

Department of Facilities Management

**CONFINED SPACE ENTRY
EMERGENCY EVACUATION
AND
RESCUE PLAN**

Building _____ **Room No.** _____

Confined Space ID # _____ **Work Order No.** _____

Date: _____

Rescue Plan Completed By:

Confined Space Entry Supervisor _____

Entrant(s) _____

Attendant(s) _____

Rescue Team Member(s) _____

Indicate The Type of Rescue Likely To Be Used (Based on the type of rescue checked off refer to the **Rescue Procedures** section below for the procedures to be used during a rescue.)

Self Rescue – To be used when implemented hazard control measures have been compromised, an entrant has sustained an injury that requires attention but does not impede the entrant’s physical or mental ability to self rescue.

External Rescue – To be used when entrants cannot self rescue, the way out will accommodate the entrant being rescued, there are no obstructions and the way out is either straight out or straight up.

Entry Rescue – To be used when the employee cannot self rescue, the extraction route has an even floor surface, the extraction route is obstructed by posts, beams, cables, water, pipes, etc., the entrants injuries must be stabilized before attempting a rescue. (When obstructions exist a diagram of the confined space must be completed as part of pre-entry planning.)

Immediately Dangerous to Life or Health (IDLH) (NOTE: If a contaminated atmosphere has been identified during atmospheric testing the work should only be performed by a properly qualified and equipped organization.)

Availability Of The Rescue Team

Due to the severity of existing or potential hazards (due to work being performed) such as fire, explosion, injuries such as burns, being crushed, engulfment, drowning, suffocation, etc. occurring should the rescue team be:

Ready and able (available on campus) to respond quickly to an emergency

Immediately available on-site at the confined space while entrants are in the confined space.

Type of Communication To Be Used

- Two Way Radio Cell Phone Audible Signal Visual Signal
 Other (Explain) _____

Required Rescue Equipment

- | | |
|--|---|
| <input type="checkbox"/> Communication Devices | <input type="checkbox"/> Water Pump(s) |
| <input type="checkbox"/> Air Monitoring Equipment | <input type="checkbox"/> Extension Cords |
| <input type="checkbox"/> Personal Air Quality Monitors | <input type="checkbox"/> Tools (Specify in Comments Section) |
| <input type="checkbox"/> Ventilation Fans and Hoses | <input type="checkbox"/> Generator(s) |
| <input type="checkbox"/> Tripod, Winch and Appropriate Length Cable | <input type="checkbox"/> Davit |
| <input type="checkbox"/> Back-Up Lighting (Flashlight, Flood Lights) | <input type="checkbox"/> Lanyards (Specify lengths in Comments Section) |

Required Rescue Equipment (Cont'd)

- | | |
|--|---|
| <input type="checkbox"/> Pulleys | <input type="checkbox"/> First Aid Kit |
| <input type="checkbox"/> Come alongs | <input type="checkbox"/> Blankets |
| <input type="checkbox"/> Carabiners – XL and LG | <input type="checkbox"/> Lockout Kits (Locks, Tags, Chains, etc.) |
| <input type="checkbox"/> Decenders / Ascenders | <input type="checkbox"/> Traffic Cones |
| <input type="checkbox"/> Rigging Slings | <input type="checkbox"/> Tarps |
| <input type="checkbox"/> Sharp Edge Protection (For ropes, slings, etc.) | <input type="checkbox"/> Rescue Helmets with Head Lamps |
| <input type="checkbox"/> Perimeter Marking Tape, Cones, etc. | <input type="checkbox"/> Rope Grabs – As per rope size. |
| <input type="checkbox"/> Stretchers | <input type="checkbox"/> Rope Bags |
| <input type="checkbox"/> Back Board | <input type="checkbox"/> Gear Bags |
| <input type="checkbox"/> Rescue Rope With Built in Eye Loops | <input type="checkbox"/> Swivels |
| <input type="checkbox"/> SKED | <input type="checkbox"/> Load Release Strap |
| <input type="checkbox"/> Pick Off Strap | <input type="checkbox"/> Double Pulleys |
| <input type="checkbox"/> Petzel ID's | <input type="checkbox"/> Anchor Straps |

Personal Protective Equipment

- | | |
|---|---|
| <input type="checkbox"/> Head Protection (Complete With Chin Strap) | <input type="checkbox"/> High Visibility Safety Vest |
| <input type="checkbox"/> Safety Boots | <input type="checkbox"/> Protective Clothing (Specify Type) |
| <input type="checkbox"/> Face and Eye Protection | <input type="checkbox"/> Harnesses Class E |
| <input type="checkbox"/> Rope Gloves | <input type="checkbox"/> Hearing Protection |
| <input type="checkbox"/> Air Purifying Respirators Class _____ | <input type="checkbox"/> |

Inspection Of Rescue Equipment and Personal Protective Equipment

Rescue equipment that will be used has been inspected and a written record of the inspection is attached. Yes

All certifications are up to date. Yes No

Competent employee who performed the inspection. _____

Description Of Confined Space And Any Obstructions

Diagram Of Interior Of Confined Space

Pre-Rescue Procedures

NOTE: When completing this form add additional procedures for each type of rescue based on the hazards and conditions that exist at each confined space.

Prior To A Rescue Team Entering Confined Space

- Ensure a rescue plan has been completed and a copy will be available at the work site.
- Confirm that an adequate number of rescue team members are available to respond to an emergency.
- Ensure that the Confined Space Inventory and Hazard Assessment Form, the Confined Space Entry Permit, the Rescue Procedures and the Standard Confined Space Entry Procedures for the confined space in question are reviewed with entrants, attendants and the rescue team.
- Ensure that rescue equipment is at the site and set-up.
- Ensure entrants wear a full body harness connected to an appropriate length of lanyard or winch cable.
- Ensure rescuers are attached to a retrieval line prior to entering the confined space.
- Ensure that all employees involved in the confined space entry including the rescue team understand what type of communication will be used and how special signals will work.
- Ensure that all entrants and rescuers understand how and evacuation will be initiated.
- Ensure an alternate competent attendant is appointed if the attendant that was working with the entrants is unable to perform the attendant's duties during a rescue.

Attendants – Initiation Of An Evacuation And Participation In A Rescue

- The attendant must maintain constant contact with entrants while they are in a confined space.
- The attendant must evacuate the confined space if they become aware of equipment, critical to the safety of the entrants, malfunctioning or breaking down.
- The attendant shall evacuate a confined space immediately if continuous atmospheric monitoring indicates a hazardous condition exists.
- Upon notification by an entrant of any of the following situations / conditions the attendant must immediately initiate an evacuation:
 - Change in behaviour or unusual behaviour by another entrant.
 - Identification of a new hazard.
 - Another entrant performing work in an unsafe way.
 - Work being performed that is not permitted by the entry permit.

- If a rescue must be initiated the attendant shall do the following:
 - Never enter the confined space.
 - Immediately notify the rescue team that a rescue must be initiated.
 - Assist an entrant who is self rescuing.
 - Assist the rescue team as directed by the rescue team leader during external and entry rescues.
- Attendants must evacuate a confined space if there are problems with communication.

Entrants Response To An Attendants Order To Evacuate A Confined Space

- Entrants shall evacuate a confined space when an attendant gives the order to evacuate.
- Entrants shall report any new hazards or employees performing work that isn't permitted to the attendant.
- Entrants shall report unusual behaviour of other entrants to the attendants.
- Must evacuate a confined space if the attendant must leave their post and a replacement is not immediately available.

Rescue Procedures

Self Rescue Procedures

Written procedures must be developed to deal with the hazards identified for the above listed confined space and added to the following general procedures for self rescue. (Use additional sheets of paper if necessary.)

- Entrants are to confirm with the attendant that they are evacuating.
- Evacuate in a calm and orderly fashion.
- The attendant must maintain communications with entrants until all entrants are out of the confined space.
- Attendants should contact **Dalhousie Security at 4109** to ensure first aid assistance can be immediately available, if required, when entrants exit the confined space.

External Rescue Could be the attendant if they are trained as a rescuer. ??

Written procedures must be developed to deal with the hazards identified for the above listed confined space and added to the following general procedures for external / self rescue. (Use additional sheets of paper if necessary.)

- If the entrant is able to communicate, the attendant or rescuers must maintain communication at all times during the extraction.
- Attempt to establish the nature of the injury, or injuries, preventing the entrant from self rescuing so that appropriate first aid or medical attention can be immediately available when the entrant is out of the confined space.
- Contact **Dalhousie Security at 4109** and inform them of:
 - the location of the confined space;
 - that a rescue is in progress
 - that the entrant has been injured; and,
 - the nature of the entrant's injuries to ensure required first aid or medical attention will be immediately available.
- Once the entrant is outside the confined space provide first aid as required.
- Ensure the entrant is comfortable and stay with them until they are stable or an ambulance arrives.

Entry Rescue By Rescue Team

Written procedures must be developed to deal with the hazards identified for the above listed confined space and added to the following general procedures for self rescue. (Use additional sheets of paper if necessary.)

- On all campuses, including Truro, Call Dalhousie Security at **4109**, explain **what** is happening and **where** and ask them to call 911. (Security must provide 911 with a location where they will meet the ambulance in order to take them to the confined space.)
- Attempt to communicate with the Entrants in the confined space to establish what injuries exist and what conditions exist that may impede the rescue efforts.
- Check the atmospheric conditions to determine if respirators or supplied oxygen are required.
- Confirm that all communication equipment is working.
- Ensure that an Attendant is in place outside the entry point to assist the rescue team.
- Rescue team enters the space and provides any first aid that may be required to stabilize injured Entrant(s).
- Prepare the Entrant(s) for extraction. This may require the use of stretchers, etc.

- Have the Attendant operate the winching system to help remove the Entrant(s) from the confined space.
- Rescuers must ensure the safety of the injured Entrant(s) during the extraction procedure.
- Once outside the confined, provide any additional first aid required to stabilize the Entrant(s) until an ambulance arrives.
- Secure area and ensure that no one enters the confined space until it has been re-assessed and deemed safe to enter.