

Moderate Hazard Atmosphere CSE - Open Channel Sewer Rescue Plan

0180-00 RA Rev 0 12-07-06

1. RESCUE PLAN: MODERATE HAZARD ATMOSPHERE CSE – OPEN CHANNEL SEWER RESCUE

DATE: 2017-08-22
REVIEWED: January 24, 2019

LOCATION: Various sites throughout city – open channel sewers with depths up to 7.5 meters (25 feet)

Personnel	Role	Responsibilities
As noted on the Confined Space Entry Permit	Stand-by person	City of Kelowna staff member who has been trained in their role atop the confined space. Main role is to communicate with entry personnel, be stationed at the entry point, manage lines, summons rescue and keeps record of personnel in and out of the space and atmospheric readings.
	Entrant	Responsible for conducting work inside the confined space as well as initiating self-rescue, when required.
	Rescue leader	Trained City of Kelowna personnel whose role is to use the retrieval device to help extract personnel inside the space in the event of an emergency.

Confined Space Entry Rescue Plan: VERTICAL RESCUE

Before entry begins:

1. Responsible supervisor ensures roles and responsibilities are assigned and recorded on entry permit.
2. In the toolbox meeting prior to the entry, review the rescue plan discussing the following:
 - a. Roles and responsibilities
 - b. Equipment set-up (tripod, winch, Type 3 SRL)
 - c. Details of the specific rescue plan for the space and how the rescue plan will be initiated and conducted
3. Review risk assessment, safe work procedure, controls and equipment.
4. Set-up confined space entry equipment. Be sure to fully inspect prior to entry. **NOTE:** Entrant must remain connected to the Type 3 SRL fall protection system while in the space and while ascending and descending the ladder.

Emergency response and rescue procedures	
1.	In the event of an emergency of any type in the confined space, the entrants of the space must evacuate as quickly as possible. Use the winch and tripod to assist with extracting the worker from the space.
2.	The qualified stand-by person will call 911 at this time – request assistance from the fire department. State that it is a confined space emergency and explain the nature of the injury, number of people involved, location (confined space), site access (if applicable) and your telephone number on site. Once 911 is summoned, the stand-by person will inform their direct supervisor if a worker is unable to exit the space.
NOTE: Under no circumstances will the stand-by person or any other worker enter the space for rescue purposes.	
3.	The qualified stand-by person will assume the position of rescue coordinator and will: <ol style="list-style-type: none"> Take command at the site. Immediately conduct a site assessment to determine if there are any changes to the hazards (atmospheric or otherwise) in the space or if it's a medical emergency. Ensure all existing controls are still in place as per the risk assessment and procedure. Determine if any other controls are required.
4.	Test the atmosphere using a 4-head atmospheric monitor with oxygen, hydrogen sulfide, carbon monoxide and LEL sensors.
5.	The space must continue to be ventilated in accordance with the CSE procedure and the atmosphere must be continually monitored to maintain atmospheric readings.
6.	Upon arrival the Kelowna Fire Department (KFD), they will take command of the scene and determine the safest methodology to extract the worker. The following guidelines will be followed: <ol style="list-style-type: none"> If safe to do so, a rescuer (firefighter) will be sent into the space to extract the entrant and perform first aid, as required. Only trained personnel will enter the space for rescue purposes. If a rescuer is required to enter (very remote potential as entrants must be connected to winch at all times), they will wear all PPE required for entry including a full body harness. An atmospheric monitor must be worn as well.
7.	Upon reaching the injured worker, the rescuer (firefighter) will assess the worker's condition, determine the best method for packaging and provide an update to the stand-by personnel regarding: <ol style="list-style-type: none"> Nature and mechanism of injury Level of consciousness – Alert, verbal, pain, unresponsive ABCs – airway, breathing, circulation <p>At this point the rescuer may request an additional entry rescuer to help with first aid and/or extraction of the worker.</p>
8.	The injured worker will be positioned where the winch's hook can be attached to the worker's harness dorsal (back) D-ring (or sternal D-ring / Bosun's chair or packaging device, as determined by rescuer)
9.	KFD rescue leader and stand-by person will assist to remove the injured worker from the space with the retrieval device.
10.	Worker requiring medical treatment will be transported to the nearest Hospital or Medical Centre. An injured worker must never transport themselves.
11.	Ensure the supervisor and manager are aware of the status of the rescue. Ensure the scene is secured and await further direction.

Rescue plan approval	
Foreman/supervisor:	
Workers:	

This space is for providing a sketch of rescue plan.

NOTE: Please scan and email a copy of this Rescue Plan to OHS Branch.
NOTE: If work is at 25 feet or higher, the rescue plan is contained within the Fall Protection Plan Document