#### 4. Use of personal protective equipment

- ensure the person entering a confined space or remaining therein has worn an approved breathing apparatus of a type that gives appropriate protection given the nature of the confined space
- for underground pipework or
- where the risk assessment report recommends the use of approved breathing apparatus
- ensure the person is also wearing a safety harness connected to a lifeline the free end of which is held by a person outside who is capable of pulling him out of the confined space

Breathing apparatus used in confined space work shall be of a type approved by the Commissioner for Labour. Notice of approval of these apparatus will be published in the Gazette.

#### 5. Emergency procedures

- formulate and implement emergency procedures to deal with any serious and imminent danger to workers inside confined space
- provide and keep readily available in satisfactory condition sufficient supply of —
- approved breathing apparatus
- reviving apparatus
- vessels containing oxygen or air
- safety harnesses and ropes
- audio and visual alarm for alerting others outside confined space
- ensure sufficient number of persons who know how to use the safety equipment are present when work is taking place in confined space

#### 6. Provision of information, instructions, etc.

- provide all workers working within a confined space and those outside assisting in such work with instructions, training and advice as are necessary to ensure safety and health of workers
- provide all equipment necessary to ensure safety and health of workers

# our duties as a certified worker

- $\blacksquare$  observe emergency procedures implemented by the proprietor or contractor
- observe instructions and advice and attend training provided by the proprietor or contractor
- make full and proper use of, and forthwith report to the proprietor or contractor any fault or defect in, any safety equipment or emergency facilities

## our duties as a competent person

When requested to do so by a proprietor or contractor —

- carry out an assessment of the working conditions of a confined space covering all the aspects specified under the Regulation
- make recommendations on measures in relation to safety and health of workers while working in that space
- submit the assessment report with recommendations to the proprietor or contractor within a reasonable period of time

# enalty

- A proprietor or contractor who fails in his duties under the Regulation commits an offence and is liable on conviction to a maximum fine of \$200,000 and 12 months' imprisonment
- A certified worker who fails in his duties under the Regulation or while working in confined space, wilfully and without reasonable cause does anything likely to endanger himself or others commits an offence and is liable on conviction to a maximum fine of \$50,000 and 6 months' imprisonment
- A competent person who fails in his duties under the Regulation or makes a risk assessment report which is to his knowledge false as to a material particular commits an offence and is liable on conviction to a maximum fine of \$200,000 and 12 months' imprisonment

# nquiry & Complaints

This guide explains provisions of the Regulation in simple terms. In case of any inconsistency with provisions of the Regulation explained, the Regulation itself shall prevail. For any enquiry about this guide, you can contact us at:

E-mail: enquiry@labour.gov.hk

If you have any complaint about unsafe workplaces and practices, please call the Labour Department's occupational safety and health complaint hotline on 2542 2172. All complaints will be treated in the strictest confidence.

Published by the Labour Department

5/2009-2a-L50

# A Brief Guide to the Factories and Industrial Undertakings (Confined Spaces) Regulation







his guide outlines the major provisions of the Factories and Industrial Undertakings (Confined Spaces) Regulation in order to let you have a preliminary understanding of the Regulation. If you wish to know more about the Regulation and the related safety measures it requires, you can either refer to the original text or contact the Occupational Safety and Health Branch of the Labour Department.

The Factories and Industrial Undertakings (Confined Spaces) Regulation (the Regulation) applies to work in an industrial undertaking that takes place —

- within a confined space
- within the immediate vicinity of, and is associated with work occurring within, a confined space

"confined space" means any place in which, by virtue of its enclosed nature, there arises a reasonably foreseeable specified risk, and without limiting the generality of the foregoing, includes any chamber, tank, vat, pit, well, sewer, tunnel, pipe, flue, boiler, pressure receiver, hatch, caisson, shaft or silo in which such risk arises.

#### "specified risk" means a risk of -

- a. serious injury to any person at work arising from a fire or explosion;
- b. the loss of consciousness of any person at work arising from an increase in body temperature;
- c. the loss of consciousness or asphyxiation of any person at work arising from gas, fume, vapour or the lack of oxygen;
- d. the drowning of any person at work arising from an increase in the level of liquid; or
- e. the asphyxiation of any person at work arising from a free flowing solid or the inability to reach a respirable environment due to entrapment by a free flowing solid.

### our duties as a proprietor or contractor

#### 1. Risk assessment and recommendations

- appoint a **competent person** to carry out risk assessment for work in confined space and make recommendations on safety and health measures before undertaking the work
- appoint a **competent person** to carry out fresh assessment and make recommendations whenever there has been a significant change in the conditions of the confined space or of the work activities or whenever there is reason to suspect

that such change likely to affect the safety and health of workers working therein may occur

#### "competent person" means a person -

- a. who has attained the age of 18 years;
- b. who is either -
- i. a safety officer registered under the Factories and industrial Undertakings (Safety Officers and Safety Supervisors) Regulations; or
- ii. a person who holds a certificate issued by a person whom the Commissioner for Labour has authorized to certify persons as being competent to prepare risk assessment reports; and
- c. who has at least one year's relevant experience, after obtaining the registration or certification referred to in paragraph (b) (i) or (ii), in assessing risk to the safety and health of workers working in confined spaces.

#### 2. Compliance with risk assessment report and certification

- verify the risk assessment report submitted by the competent person
- issue a certificate stating that all necessary safety precautions in relation to the hazards identified in the risk assessment report have been taken and the period during which workers may remain safely in the confined space before allowing workers enter the confined space for the first time
- ensure no worker enters or remains in a confined space unless all recommendations in the risk assessment report have been complied with
- keep the certificate and risk assessment report for one year after work in the confined space has been completed and make them available to an occupational safety officer when requested

**Risk Assessment Report** is a written report which contains the assessment and recommendations carried out by a competent person for the work in confined space. It identifies the hazards likely to be present in the confined space, evaluates the extent of the risks arising from such hazards and, without limiting the foregoing, covers the following —

- the work method to be used and the plant and materials to be used in work activities:
- whether or not there is any hazardous gas, vapour, dust or fume present or there is any deficiency in oxygen;
- the possibility of —
- ingress of hazardous gas, vapour, dust or fume
- sludge or other deposits being present that are liable to give off hazardous

gas, vapour, dust or fume

- in-rush of free flowing solid or liquid
- a fire or explosion in the confined spaces
- loss of consciousness of worker arising from an increase in body temperature;
- recommendations on the safety measures required, including whether or not the use of approved breathing apparatus is necessary;
- the period during which workers may remain safely in the confined space; and
- recommendation on use of such monitoring equipment if there is a substantial likelihood of a change in the environment leading to an increased risk from the aforementioned possible hazards in the course of work.

#### 3. Safety precautions

Before allowing workers enter a confined space for the first time —

- disconnect and lock out power source to mechanical equipment which is liable to cause danger inside the confined space
- blank off pipe or supply line whose contents are liable to create a hazard
- test to ensure absence of any hazardous gas and no deficiency of oxygen in the confined space
- purge, cool and ventilate the confined space to ensure it is a safe workplace
- provide adequate respirable air and effective forced ventilation inside the confined space
- prevent ingress of hazardous gas, vapour, dust, fume and in-rush of free flowing solid or liquid into the confined space

When work is being carried out in a confined space —

- ensure only certified workers enter or work in the confined space
- ensure a person is stationed outside the confined space to maintain communication with the workers inside
- ensure the risk assessment report and related certificate are displayed in a conspicuous place at the entrance of the confined space
- ensure the safety precautions undertaken continue to be effective

"certified worker" means a person -

- a. who has attained the age of 18 years; and
- b. who holds a certificate issued by a person whom the Commissioner for Labour has authorized to certify workers as being competent to work in a confined space.

# Corrigendum to A Brief Guide to the Factories and Industrial Undertakings (Confined Spaces) Regulation (2009 edition) (28 February 2024)

Item	Page	Current Version	Amendment
1	5	Penalty  ■ A proprietor or contractor who fails in his duties under the Regulation commits an offence and is liable on conviction to a maximum fine of \$200,000 and 12 months' imprisonment	Penalty  ■ A proprietor or contractor who fails in his duties under the Regulation commits an offence and is liable on conviction to a maximum fine of \$400,000 and 12 months' imprisonment
		■ A certified worker who fails in his duties under the Regulation or while working in confined space, wilfully and without reasonable cause does anything likely to endanger himself or others commits an offence and is liable on conviction to a maximum fine of \$50,000 and 6 months' imprisonment	■ A certified worker who fails in his duties under the Regulation or wilfully and without reasonable cause does anything likely to endanger the certified worker or others, while working in a confined space, commits an offence and is liable on conviction to a maximum fine of \$150,000 and 6 months' imprisonment
		■ A competent person who fails in his duties under the Regulation or makes a risk assessment report which is to his knowledge false as to a material particular commits an offence and is liable on conviction to a maximum fine of \$200,000 and 12 months' imprisonment	■ A competent person who fails in his duties under the Regulation or makes a risk assessment report which is to the person's knowledge false as to a material particular, commits an offence and is liable on conviction to a maximum fine of \$200,000 and 12 months' imprisonment