
 GOVERNMENT OF DUBAI	<b>Organization Unit</b> <b>Public Health &amp; Safety Department</b>	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	<b>Form sheet title:</b> <b>Guidelines for Entry into Confined Spaces</b>	اسم النموذج :	
	<b>Doc Ref.</b> <b>DM-PH&amp;SD-P4-TG04</b>	رقم النموذج :	

## Entry into Confined Spaces

**Background:** A "Confined space" is any workplace having limited means of entry and/or egress and so enclosed that the accumulation of toxic or combustible agents or a deficiency of oxygen may pose hazards to workers if adequate dilution ventilation (forced or natural) is not available.



A confined space may include but is not limited to, any of the following:

1. Storage tanks, tank cars, process vessels, tank trailer drums, or other tank-like compartments usually one or more manholes for entry.
2. Bins, silos, pits, vats, tubs, vaults, vessels or tanks of more than 4 feet in depth.
3. Ventilation or exhaust ducts, manholes, sewers, tunnels, pipelines, and similar structures.
4. Ovens, furnaces, kilns, heat exchangers, boilers, economizers, transformers, oil-circuit breakers, condensers, and similar structures.

Each industry has its own specific problems and dangers associated with the nature of its operations. Prevention of injuries to the life and health of workers requires that they are properly trained and well equipped to recognize, understand and control the hazards they could encounter. Dubai Occupational Health and Safety Regulations Local Order No. 61 of 1991 require the employers to take adequate precautions for the safety and health of workers.



### Guidelines:

1. Entry into a confined space for any purpose should only be considered when all reasonably practicable steps have been taken to deal with the problem in some other way.
2. The confined space shall, have adequate means of getting out. The design of vessels, tanks etc. shall take care of manhole which may be rectangular, oval

 حكومة دبي GOVERNMENT OF DUBAI	<b>Organization Unit</b>	<b>Public Health &amp; Safety Department</b>	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	<b>Form sheet title:</b>	<b>Guidelines for Entry into Confined Spaces</b>	اسم النموذج :	
	<b>Doc Ref.</b>	<b>DM-PH&amp;SD-P4-TG04</b>	رقم النموذج :	

or circular in shape and be not less than 450 mm x 407 mm or 457 mm diameter.

3. No person shall be required or allowed to enter any confined space, unless:
  - i. Positive steps has been taken to eliminate the hazards if dangerous fumes, gases, vapors, liquids, solids or lack of oxygen, either within the confined space or from an adjacent plant or area which might hazard the operation;
  - ii. The space has been adequately ventilated; tested and certified for toxic, flammable free atmosphere and/or oxygen level in the space.
4. Entry into confined space shall be controlled by a permit to work system specifying the description of work, possible hazards, personal protection required, tools and equipment to be used, gas monitoring, isolations, preparation of confined space and all other safety precautions and it should be clearly understood and followed by the workers.
5. The confined spaces such as tanks/vessels/pits sumps must be physically separated from possible inflow of gases, liquids or solids or moving machinery or the source of electrical supply.
6. Adequate control and supervision of the work in confined space shall be maintained by responsible supervisor, in addition to buddy system.
7. Before entry, the confined space must be emptied of residues.
8. Whenever possible, additional manhole lids, access covers and outlets should be removed to improve natural draft of air. Low velocity air hoses or fans or blowers must be used for air movement.
9. Gas test of atmosphere shall be done before and during the progress of the work by a trained gas tester, at the level where work is required.
10. Where the conditions of the atmosphere are not safe or likely to change, a self-contained breathing apparatus shall be used from the time of starting and during the progress of the work.
11. Persons entering a confined space must wear safety harness/ safety belt with a life line and a second person as standby outside on duty should assist him in case of emergency.
12. A spare breathing apparatus and oxygen resuscitator should be made available as standby.

 GOVERNMENT OF DUBAI	<b>Organization Unit</b> <b>Public Health &amp; Safety Department</b>	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY	
	<b>Form sheet title:</b>	<b>Guidelines for Entry into Confined Spaces</b>		اسم النموذج :
	<b>Doc Ref.</b>	<b>DM-PH&amp;SD-P4-TG04</b>		رقم النموذج :

13. No portable electric light or any other electric appliance of voltage exceeding 24 volts shall be permitted for use inside any chamber, tank, vat, pit, pipe, flue or any other confined space unless earth leakage protection device is provided.
14. No work shall be permitted in any boiler or furnace or boiler flue until it has been sufficiently cooled by ventilation or other method.
15. Hot work in confined space shall be done only after ensuring that the space/vessel is free from flammable gas/liquid.
16. It is not sufficient to insert a compressed air line into the confined space or to carryout gas tests at the manhole opening as the person's head will be just above the concentrated fumes which are subsequently diluted by air by the time they reach the manhole.
17. Steps must be taken to protect the persons in the confined space from fumes produced by the hot work.
18. Adequate and suitable lighting must be provided to illuminate all aspects of the work and access.  
Flameproof electrical equipment shall be used in case of possible flammable gas atmosphere.
19. Proper communication shall be established between persons inside and standby person.  
Rescue and emergency procedures must be established.
20. Confined space entry procedures shall be developed and followed strictly.

**Further Information is Available from  
 Public Health and Safety Department  
 Tel: 2064244    Fax: 2270160**