

*Information, Excavation and Safety of
Gas Installation*

25. Location of gas installation.

(1) The location of a gas installation shall be indicated in accordance with one or more of the following methods:

- (a) provision of a plan on or listing of facility locations by measurement from a surface datums point;
- (b) surface staking; or
- (c) surface making.

(2) For the purpose of subregulation (1) the concrete marker, warning sign post and pipeline marker for a traffic area shall be as prescribed in Figure 1, 2 or 3 respectively, of the Fourth Schedule.

26. Area around indicated location.

A prelocated or marked gas installation shall be considered to lie within a zone equal to the diameter of the gas installation plus 0.5 meters on either side of the indicated location.

27. Installation in vicinity of underground structure.

(1) Except where permitted in writing by the Director General, no person shall install or allow to be install a gas installation where it passes through or interferes with an under ground structure that is not used solely for a gas installation.

(2) Except where permitted in writing by the Director General, no person shall install or construct an underground structure that interfere with a gas installation by passing over, under or enclosing the gas installation until an agreement has been entered into with the licensee for the removal or alteration of the gas installation.

28. Notice to licensee.

A person who intends to construct an underground structure within one meter of a gas installation shall notify the licensee operating in the area or his agent in writing in not less than three working days before commencing excavation for the structure.

29. Request for information from licensee or agent on location of gas installation.

A person who intends to excavate shall, in not less than four working days prior to the day of the proposed excavation, request in writing from the licensee or his agent who is operating in the area for an information on the location of the underground gas installation in the vicinity of the proposed excavation.

30. Information from licensee or agent on location of gas installation.

(1) Upon a request made under regulation 29, the licensee or his agent shall indicate the location of the gas installation owned, operated or registered by the licensee or his agent in the area where the excavation is intended to be made.

(2) The licensee or his agent shall provide the information requested under subregulation (1) twenty-four hours prior to the day of the proposed excavation.

31. Not to commence work until information is received.

- (1) No person shall commence an excavation work until he ascertain that-
- (a) the request for information under regulation 29 has been made; and
 - (b) the information on the location of gas installation under regulation 30 has been given.

32. Duty to notify licensee on intention to excavate.

Where a person who intends to carry out excavation work is aware that a gas installation is in the vicinity of the proposed place of excavation, he shall notify the licensee or his agent in the area in not less than three working days before commencing excavation.

33. Supervision on excavation work.

Excavation work in the vicinity of a gas installation shall be carried out under the supervision of the relevant competent person in accordance with the class of the gas installation.

34. Hand digging to confirm location.

The indicated location of a gas installation shall be confirmed by the excavator by means of hand digging and he shall expose the gas installation at a sufficient number of locations to determine its exact position and depth before using mechanised excavation equipment for any purpose other than breaking the surface cover.

35. Probing with pointed tools prohibited.

No person shall probe into the earth by using pointed tools in order to locate a gas installation.

36. Gas installation not within the zone prescribed.

(1) Where an excavator finds that the gas installation is not within the zone prescribed under regulation 26, he shall so notify the licensee or his agent of that fact.

(2) The licensee or his agent shall, upon being notified under subregulation (1), assist the excavator to locate and expose the gas installation and shall prohibit

mechanized excavation to be carried out in the vicinity until the gas installation has been located and exposed.

37. Non-metallic gas installation without tracer wire.

In case where the existing gas installation of non-metallic material is not provided with tracer wires, the licensee or his agent shall, upon request, indicate or cause to be indicated the location of the gas installation including all changes in the direction by using stakes or paint or both at intervals of not exceeding 100 meters and regulation 34 shall apply.

38. Excavator shall maintain markings.

(1) It shall not be the responsibility of the excavator, as the work progresses, to maintain and keep visible the markings placed by the licensee or his agent to identify the location of the gas installation.

(2) Where the maintenance under subregulation (1) is not feasible, the excavator shall make other arrangements to ensure that the location of the gas installation is otherwise noticeable by a person.

39. Prohibition on excavation work which is damaging to gas installation.

No person shall carry out an excavation work or cause an excavation work to be carried out in a manner which is damaging or dangerous to a gas installation.

40. Blasting

(1) A person who intends to blast in the vicinity of a gas installation shall comply with provisions of regulation 28 to 38 and shall, in addition, notify the relevant licensee or his agent in writing of his intention to blast in not less than three working days prior to the blasting.

(2) Where a person, whilst in the process of construction, discovers that blasting is required, he shall submit a notice in writing to the Director General in not less one working day before carrying out the blasting.

41. Verification of information.

Where an excavation work is not commenced within ten days from the date the information under regulation 30 is given by the licensee, the excavator shall verify the information with the licensee or his agent before commencing excavation.

42. Emergency excavations.

Regulation 27 to 40 shall not apply to an emergency excavation where there may be imminent danger to life, health or property provided that verbal notice of the excavation is given to the relevant licensee or its agent as soon as is practicable, and the notice shall subsequently be reduced into writing.

43. Power of authorized officer to stop excavation.

(1) An authorised officer may at any time order a person to stop excavation near a gas installation if he considers that the excavation may damage the gas installation or cause the leakage of gas.

(2) The authorized officer may require a licensee, installer or the owner of a gas installation to cut out or repair a gas pipeline, whether metallic or non-metallic, which is considered to be faulty.

44. Notification of damage.

Any person who causes damage to a gas installation shall, whether or not gas is leaking from the installation, immediately notify the Director General or the licensee, as case may be, of the damage.

45. Steps to be taken when gas leaks.

(1) Any person who causes damage to a gas installation which result in the leakage of gas shall immediately take reasonable steps to----

- (a) notify the persons in the premises or near the premises that may be affected by the leakage;
- (b) notify the Director General or the licensee, as the case may be;
- (c) warn all persons in the building which is near to the place where the leakage occurs and where gas odour is present to evacuate the building;
- (d) notify the nearest police station;
- (e) extinguish all flame and sources of ignition in the vicinity of the gas installation;
- (f) notify the Fire Services Department; and
- (g) warn the traffic, vehicles or pedestrian in the vicinity not to enter the area which has been rendered hazardous by the leakage.

46. Exposure of installation.

A person who exposes a gas installation for more than three metres whilst carrying out an excavation work shall immediately notify the Director General or the licensee, as case may be, and shall after that support the gas installation securely on its original line and grade at the intervals of not more than three metres to the satisfaction of the Director General or the licensee.

47. Exposure of fittings.

A person who exposes a bell-and-spigot joint, mechanical coupling, valve or line insulator whilst carrying out an excavation work shall-

- (a) immediately notify the Director General or the licensee, as the case may be, of the exposed fitting; and
- (b) support the exposed fitting adequately to the satisfaction of the Director General or the licensee to ensure that no strain is caused to the gas installation.

48. Cathodic protection devices.

(1) A person working in the vicinity of a gas installation shall take all necessary precautions to ensure that no damage is done to insulators, test wires, sacrificial anodes, anodes beds, rectifier wires and other cathodic protection devices.

(2) Where damage is done to a cathodic protection device the person causing the damage shall report the damage to the Director General or the licensee, as soon as possible.

49. Damage to protective wrapping.

A person who damages the protective wrapping on a gas installation shall-

- (a) report the damage to the Director General or the licensee; and
- (b) rectify the damage by rewrapping the gas installation in accordance with the manner as may determined by the Director General but the rewrapped gas installation shall not be backfilled until authorized by the Director General.

50. Backfilling.

A person who is backfilling an excavation which exposed a gas installation shall-

- (a) take precaution so as not to damage the gas installation, its protective wrapping or a cathodic protection device;
- (b) thoroughly tamp the backfill under the gas installation;
- (c) support the gas installation adequately to the satisfaction of the Director General or the licensee to ensure that it will remain in its original line and grade during the backfilling; and
- (d) ensure that the backfilling will not diminish the lateral support of an unexposed gas installation.

51. Gas pipeline to be above ground level when entering building.

Except where circumstances render it impracticable, service gas pipeline shall be installed above the ground level before the pipeline enters a building or structure.

52. No work on gas installation until gas is turned off.

No person shall install or alter a gas installation where there is a possibility of leakage of gas unless the gas is turned off to eliminate hazards caused by a leakage of gas.

53. Turning on and turning off supply.

(1) Except for emergency purposes, no person shall turn off the gas supply unless all affected consumers are notified.

(2) Where the supply has been turned off, no person shall turn it on again until he notifies all the affected consumers of his intention and carefully checks all the outlet and pilots to ascertain whether the supply is turned on or turned off.

54. Rented premises.

The owner of rented premises shall----

(a) display a notice on the safe operation of a gas appliance on the premise in a place which is noticeable to a tenant, an occupier or other person using the gas appliance; and

(b) ensure that the gas appliances is maintained in a safe condition.

55. Odorization.

(1) A gas which does not naturally possess a distinctive odour shall have an odourant added to it so that its presence in the atmosphere is readily detectable at a gas concentration of 1/5 of the lower explosive limit or above.

(2) Subregulation (1) does not apply to any gas delivered for further processing or where the odourant would not act as a warning agent.

56. Installation of gas pipeline, etc.

(1) Every installation of a gas pipeline shall be made in accordance with these Regulations and in a manner as may be determined by the Director General.

(2) No person shall install a gas pipeline, gas fitting or gas equipment in a place where it likely to be exposed to a substance which may corrode the gas pipeline, gas fitting or gas equipment unless the gas pipeline, gas fitting or gas equipment is constructed from materials resistant to being corroded or it is suitable protected against being so corroded.

57. Protection against damage to gas pipeline, etc.

A person installing a gas pipeline, gas fitting or gas equipment shall ensure that every part of the gas pipeline, gas fitting or gas equipment is supported and protected from damage.

58. Alteration or work on premises not to affect existing pipeline.

(1) No alteration shall be made on premises which have a gas installation unless it is made in accordance with these Regulations and in the manner as may be determined by the Director General.

(2) No person shall carry out work which would affect a gas pipeline or vent where the use of the gas pipeline may cause danger to a person or property.

59. Not to sue gas pipeline for earth connection, etc.

No person shall use a gas pipeline or any part of a gas installation for earth connection or as an electrical earth-continuity conductor.

60. Installation of new gas installation.

(1) A person who is installing a new gas installation shall ensure that the gas installation is tested for gas tightness.

(2) Upon compliance with subsection (1), the person shall carry out purging by using an inert gas throughout the entire gas installation in order to remove all air or other gas mixture.

(3) If the gas installation is not be used at once it shall be sealed off at every outlet with the appropriate fitting.

(4) A loose connection in a gas installation used in the purging procedure and seal after the purging procedure shall be retightened and shall be retested for gas tightness.

(5) Upon the commissioning of the gas installation, the gas to be supplied through the installation shall be conveyed into the entire gas installation to remove all the inert gas present in the gas pipeline.

61. Work on existing gas installation.

(1) Before any work is carried out on an existing gas installation, the person intended to carry out the work shall-

(a) submit the work procedure approved by the competent person to the Director General or the licensee, as the case may be, for final approval;

(b) obtain a written consent to carry out work from the owner of the gas installation;

(c) cordon the affected area and cause a reasonable number of notices displaying the words "**GAS WORK IN PROGRESS**" and "**NO SMOKING**" to be placed in conspicuous positions in the cordoned area;

(d) have a reasonable number of suitable fire extinguishers ready to be used in the work area;

(e) isolate the affected part of the gas installation from the unaffected parts; and

(f) purge gas from the affected part of the gas installation and ensure that no gas remains in the installation and the surrounding area.

(2) After complying with subsection (1) a person who is carrying out work in relation to an existing gas installation shall ensure that-

(a) the work is carried out only on the gas installation within the cordoned area;

(b) only authorized personnel is allowed to be within the cordoned area;

(c) the work is carried out in accordance with the work procedure that has been approved; and

(d) the workers are provided with the necessary personal protective equipment.

(3) After the work has been carried out, the person installing the gas installation shall-

(a) ensure that the gas installation is tested for gas tightness;

(b) purge the affected gas installation by using inert gas; and

(c) ensure the subregulations 60(3), (4) and (5) are complied with.

62. Marking of gas pipeline for identification.

(1) A person installing gas pipeline shall mark the gas pipeline in the manner as prescribed in Figure 4 of the Fourth Schedule so that upon inspection the gas pipeline identifiable as a gas pipeline for conveying gas.

(2) The responsible person or his representative knows or has the gas pipeline continues to be identifiable as long as it is used for conveying gas.

63. Duties of responsible person or his representative where there is an escape of gas.

(1) If the responsible person or his representative knows or has reason to suspect that gas is escaping into the premises, he shall immediately take all responsible steps to cause the supply of gas to be shut off at the necessary place to prevent further escape of gas.

(2) If gas continue to escape into the premises after the supply of gas has been shut off or when a smell of gas persists, the responsible person or his representative who discovers the escape or smell shall immediately inform or cause to be informed the Director General or the licensee of the escape of smell.

64. Shutting off gas supply for safety reasons.

(1) Where the supply of gas is shut off in any premise for safety reasons, it shall not be restored until all necessary steps are taken by the responsible person or

his representative to ensure that gas can be resupplied without causing danger to a person or property.

(2) Rectification work on the supply of gas shall be carried out by a competent person or any other person with the supervision of a competent person.