

Safety in the Installation and Use of Gas Systems and Appliances

The Health and Safety (Gas) (Guernsey) Ordinance, 2006



APPROVED CODE OF PRACTICE
AND GUIDANCE

(Revised April 2010)

Contents

Notice of Approval (2)

Introduction 3

Background 3

Content & Scope of the Ordinance 3

Summary of requirements 4

Interface with other safety legislation 8

Terms used in the Ordinance and ACOP/Guidance 8

Application of the Ordinance to the apparently self-employed 10

Part I Application of Ordinance 10

Section 1 Application of this Ordinance and Health and Safety at Work Ordinance 10

Section 2 Cases to which this Ordinance does not apply 10

Part II Gas fittings – general provisions 14

Section 3 Qualification and supervision 14

Section 4 Duty on employer 16

Section 5 Materials and workmanship 17

Section 6 General safety precautions 18

Section 7 Protection against damage 21

Section 8 Existing gas fittings 21

Section 9 Emergency controls 23

Section 10 Maintaining electrical continuity 25

Part III Meter Installations and regulators 26

Section 11 Interpretation of Part III 26

Section 12 Meters – general provisions 26

Section 13 Meter housings 27

Section 14 Regulators 28

Section 15 Meter – emergency notices 30

Section 16 Primary meters 31

Section 17 Secondary meters 32

Part IV Installation of pipework 33

Section 18 Safe use of pipes 33

Section 19 Enclosed pipes 34

Section 20 Protection of buildings 35

Section 21 Clogging precautions 36

Section 22 Testing and purging of pipes 36

Section 23 Marking of pipes 37

Section 24 Large consumers 37

Part V Gas Appliances 38

Section 25 Interpretation of Part V 38

Section 26 Gas Appliances – safety precautions 39

Section 27 Flues 42

Section 28 Access 43

Section 29 Manufacturer's instructions 43

Section 30 Room-sealed appliances 43

Section 31	Suspended appliances	44
Section 32	Flue dampers	44
Section 33	Testing of appliances	45
Section 34	Use of appliances	46

Part VI Maintenance, Escapes of Gas etc. 48

Section 35	Duties of employers and self-employed persons	48
Section 36	Duties of landlords	49
Section 37	Escape of gas	57
Section 38	Use of antiflucluators and valves	59

Part VII Rights of Entry, Disconnection, Appeals etc. 60

Section 39	Rights of Entry	60
Section 40	Inspection, testing and disconnection etc.	61
Section 41	Notification to Consumer	62
Section 42	Representations to Department	63
Section 43	Directions of Department	63
Section 44	Right to appeal to Royal Court	64
Section 45	Prohibition of reconnection or restoration of supply	65

Part VIII Offences and Exceptions 66

Section 46	Offences	66
Section 47	Exception as to liability	66
Section 48	Exemption certificates	66

Part IX Miscellaneous 67

Section 49	Interpretation	67
Section 50	General provisions as to subordinate legislation	74
Section 51	Extent	75
Section 52	Citation	75
Section 53	Commencement	75

Appendix I Requirements for appliances and flues 75

Appendix II Examples of potentially unsafe situations (Section 34) 78

Appendix III Summary of legislation 82

Appendix IV Appropriate standards, ACOP's, guidance and relevant information sources 83

Appendix V Diagrams of typical installations 94

NOTICE OF APPROVAL

The code of practice entitled: “Safety in the installation and use of gas systems and appliances” has been approved by the Department of Commerce and Employment under Section 13 of the Health and Safety at Work (General) (Guernsey) Ordinance, 1987 for the purpose of providing practical guidance with respect to the requirements of the Health and Safety (Gas) (Guernsey) Ordinance, 2006.

The Code of Practice consists of those paragraphs, which are identified, as such in the document entitled “Safety in the installation and use of gas systems and appliances”.

The Department’s approval is to take effect upon 1st April 2010.

Signed:

A handwritten signature in black ink, appearing to read 'Carla', written in a cursive style.

Carla McNulty Bauer
Minister
Department of Commerce & Employment

Introduction

Background

This Approved Code of Practice (ACOP) and guidance gives practical advice to those with responsibilities under the Health and Safety (Gas) (Guernsey) Ordinance 2006. In this publication, each section of the Ordinance is reproduced, followed by any associated ACOP, which the Department has approved under section 13 of the Health and Safety at Work (General) (Guernsey) Ordinance, 1987, and other guidance on compliance.

For convenience, the text of the Ordinance is given in *ITALIC* type, with the ACOP in **BOLD** type and accompanying guidance in **NORMAL** type. Reference in this Code of Practice to another document does not imply approval by the Department of that document except to the extent necessary to give effect to this Code.

A list of standards, ACOPs and guidance referred to in this publication is given in Appendix 4. The ACOP/guidance is written in general terms; it should be used in conjunction with the more detailed advice in referenced publications. In this ACOP/guidance, cross-references to specific paragraphs are references to other parts of this publication, unless otherwise stated. Information on meanings of terms is given later in this Introduction, under the heading 'Terms used in the Ordinance and ACOP/guidance'.

Content and scope of the Ordinance

The Ordinance deals with the safe installation, maintenance and use of gas systems, including gas fittings, appliances and flues, mainly in domestic and commercial premises, e.g. offices, shops, public buildings and similar places. The Ordinance generally applies to any 'gas' as defined in section 49. The requirements therefore include liquefied petroleum gas (LPG) and a mixture of LPG and air, subject to certain exceptions.

The Ordinance places responsibilities on a wide range of people, including those installing, servicing, maintaining or repairing gas appliances and other gas fittings; as well as suppliers and users of gas, including certain landlords. They cover a wide variety of premises and gas systems/appliances, but certain exceptions are provided, for example see section 2(1)-(5), and provisions concerning the application of and exceptions to requirements under specific sections.

The enforcing authority for the Ordinance is the Department of Commerce and Employment.

Summary of requirements

This summary is for background only and is intended to provide a general indication of some of the main requirements. It should not be taken as a statement of the legal position, for which reference needs to be made to the Ordinance.

This Ordinance, subject to certain exceptions/provisos:

- requires work on a gas fitting to be carried out only by a competent person; and employers of gas fitting operatives, together with other specified persons (e.g. those in control of the work such as building contractors), to ensure that operatives have the required competence for the particular work being done. Employers of persons carrying out work on gas fittings/service pipework and self-employed persons doing this work are required to be a member of a class of persons approved by the Department; at the time of publication of this ACOP/guidance this means that they should be registered with The Gas Safe Register (section 3);
- requires any employer or self-employed person requiring work to be done on a gas fitting, or in control to any extent of such work (e.g. a contractor), to take steps to ensure the person doing the work is, or is employed by a member of a class of persons approved by the Department (section 4);
- requires an installer of a gas fitting to ensure that the fitting is suitable for the purpose for which it is to be used. Installation of lead pipe/fittings is prohibited and controls are placed on the use of non-metallic pipe/fittings. Any work on a gas fitting/storage vessel is required to comply with appropriate standards and to be done in a manner, which avoids danger to any person (section 5);
- specifies measures to be taken by any person working on a gas fitting against danger from gas release, and requirements for sealing gasways and testing gastightness after work is completed. Use of ignition sources is prohibited where there is a risk of fire/explosion, e.g. in searching for a gas leak. Requirements are specified for safe installation of gas (e.g. LPG) storage vessels, (section 6);
- requires gas fittings to be protected from damage, including corrosion, and from blockage by a foreign body, e.g. dirt/dust (section 7),
- prohibits any alteration to premises in which a gas fitting or storage vessel is installed which causes the fitting or storage vessel no longer to comply with the Ordinance, as well as work on a gas fitting or associated flue/ventilation system, which results in danger to any person (section 8);
- requires an emergency control to be provided when gas is first supplied to premises. Where this control is not adjacent to a meter, a notice is required to be posted adjacent to the control, describing the procedure in event of a gas escape (section 9);
- requires electrical continuity to be maintained during work on a gas fitting, where necessary to avoid danger (section 10);
- requires gas meters to be installed so as to avoid, as far as is reasonably practicable, adverse effect on means of escape from premises, and specify requirements concerning construction of certain meters. Other requirements are imposed for meter installation, e.g. to avoid electrical hazards and facilitate inspection/maintenance, and for pipe connections, gastightness tests and purging of meters (sections 11-12);
- specifies requirements for meter housings concerning safe dispersal of any

gas escape, avoidance of combustible materials, and provision of keys to enable consumer access (section 13);

- stipulates protection arrangements to maintain gas pressure within safe limits, in the case of systems supplied from gas (e.g. LPG) storage tanks, or from certain cylinder configurations. Requirements are also included for sealing of regulators against unauthorised interference (section 14);
- requires an emergency notice to be posted at a primary meter, giving the procedure to be adopted in event of a gas escape; a notice showing the position of the emergency control is also required in certain cases (section 15);
- prohibits installation of a pre-payment meter as a primary meter in certain cases and specify requirements for notices at primary meters where gas is supplied to more than one secondary meter. Precautions, e.g. for isolation/sealing, are also specified for situations where a primary meter has been removed (section 16);
- requires any person supplying or permitting the supply of gas through a primary meter to a secondary meter (e.g. a landlord), to display at specified positions, a diagram showing the configuration of the gas system (section 17);
- requires installation pipework to be installed in a safe position having regard to factors, which might affect safety, e.g. location of other pipes, drains, cables and electrical apparatus. Any person connecting installation pipework to a meter is required to inform the person responsible for the premises (e.g. the occupier) of the need for equipotential bonding (section 18);
- specifies restrictions and protective measures for pipes passing through solid walls and floors, cavity walls and building foundations; conditions are stipulated whereby pipework associated with 'living flame effect fires' may be run in a wall cavity. Ducts and voids accommodating installation pipework are required to be adequately ventilated (section 19);
- requires installation pipework to be installed so as to avoid impairing the structure or fire resistance of a building (section 20);
- requires a receptor to be fitted to installation pipework where liquid or solid deposits may occur, e.g. from 'wet gas' (section 21);
- specifies requirements for gastightness testing after work has been done on installation pipework, and for purging/sealing of such pipework both in cases where gas is being supplied to the premises where it is installed, and where gas is not being so supplied (section 22);
- requires installation pipework, other than in premises or part of premises used only as a dwelling or living accommodation, to be marked, e.g. colour coded, in any position accessible to inspection, to identify that it is carrying gas (section 23);
- requires a valve to be fitted in certain installation pipework and a system diagram provided (e.g. for use by emergency services), where service pipe/pipework exceeding specified sizes feeds certain buildings or floor areas (section 24);
- requires any person installing a gas appliance to ensure it is safe for use; is not left connected to the gas supply unless it can be used safely; it complies with other relevant safety requirements (e.g. gas appliances safety

legislation), and that any second-hand appliance is in a safe condition for further use. Any work on an appliance is required to maintain safety standards and requirements are specified for the examination of any appliance after work has been done, and for notification of any defect to the owner/user (section 26);

- requires any flue to be suitable and in a proper condition for safe operation of the appliance which it serves, and any power-operated flue system to prevent operation of the appliance if the draught fails. Requirements to enable inspection of, and to prevent spillage of combustion products from, certain flues are specified; and any flue is required to be installed in a safe position (section 27);
- requires a gas appliance to be installed in a position readily accessible for operation, inspection and maintenance (section 28);
- requires the installer of a gas appliance to leave the manufacturer's instructions for the appliance, for use by the owner or occupier of the premises where the appliance is installed (section 29);
- prohibits installation of certain gas appliances in specified rooms unless the appliance is room-sealed. In other specified locations, certain appliances are required to be room-sealed or fitted with a device to cause shutdown before a dangerous quantity of combustion products can build up in the room concerned; a general prohibition is placed on the installation of any instantaneous water heater, unless it is room-sealed or fitted with such a device (section 30);
- prohibits installation of suspended appliances unless the installation pipework is capable of supporting the weight imposed and the appliance is designed to be so supported (section 31);
- specifies requirements for interlocking of automatic flue dampers, and their inspection. Installation of a manual flue damper on a domestic appliance is prohibited, and where an appliance is installed to an existing flue incorporating a manual flue damper, the damper is required to be permanently fixed in the open position (section 32);
- specifies requirements for testing gastightness and examining appliances, flues, ventilation etc, and action where adjustments are necessary; in cases where a gas appliance is installed at a time when gas is being supplied to the premises concerned. Requirements are also specified where installation takes place when gas is not being supplied to premises (section 33);
- requires a responsible person for any premises (for instance, the occupier/owner of the premises, e.g. landlord) not to use or permit the use of any unsafe appliance. Persons carrying out specified work, e.g. on service pipes or gas fittings, are required to report any appliance they suspect as being dangerous to the responsible person for the premises, or where this person is not available, to the gas supplier, as appropriate (section 34);
- requires an employer or self-employed person to ensure that any gas appliance, flue or installation pipework installed at a place of work they control is maintained in a safe condition (section 35);
- requires landlords, in specified circumstances, to ensure safe maintenance of gas appliances, flues and installation pipework installed in premises under their control, that annual safety checks are carried on such appliances/flues and that a record is kept and issued (or in certain cases, displayed) to

tenants. Landlords are required to ensure that no gas fitting of a type that would contravene section 30 (e.g. certain instantaneous water heaters) is fitted in any room occupied or to be occupied as sleeping accommodation after the Ordinance came into force. This includes any room converted into such accommodation after that time (section 36);

- specifies action to be taken by gas suppliers and persons responsible for premises in event of an escape of gas; this extends to the emission of, or suspected emission of, carbon monoxide from an appliance using gas, (section 37);
- requires protective measures as stipulated by the gas supplier, to be taken by a consumer where gas is used with plant (such as a compressor or engine) liable to cause dangerous fluctuation of pressure in the gas supply, or where an extraneous gas (e.g. compressed air) is used in connection with the consumption of gas (section 38).
- empowers authorised officers of the gas supplier to enter premises where they have reasonable cause to suspect that gas may escape, is escaping or has escaped and entered the premises. They may enter with such other person as it is necessary to prevent the escape of gas and do any work necessary to prevent the escape or to prevent the risks to life or property (section 39).
- empowers authorised officers of the gas supplier to enter any premises where there is a gas supply to test / examine the installation and equipment, to establish whether or not it is safe for use and if the provisions of the relative legislation has been complied with in order to ensure the health and safety of the public. They are empowered to make the situation safe by disconnecting any gas fitting or supply system or may disconnect the gas supply to the premises (section 40).
- requires the authorized officer to fix a prominent notice to any gas fitting, gas supply system or gas supply to premises, which have been disconnected and require the gas supplier to provide the consumer, within 5 working days, with notice in writing of the reasons why the authorized officer had taken such action. The notice must inform the consumer of the right to make representation to the Department and the right to appeal to the Royal Court (section 41).
- requires the consumer to make any representation to the Department in writing within 28 days of the notice being issued, to the effect that it was not justified or the circumstances specified did not exist or had been rectified. The consumer and the supplier would have the right to make verbal representation to a person appointed by the Department to hear such matters (section 42).
- requires that the Department direct whether the disconnected gas fitting, gas supply etc., should remain disconnected or be reconnected. The Department cannot however make such direction, which prejudice the rights of the supplier to refuse to supply gas to any premises (section 43).
- specifies the grounds on which an appeal can be made to the Royal Court against the decision of the Department. The decision of the Royal Court on an appeal of this nature is final (section 44).
- prohibits the reconnection of any gas fitting, gas supply etc. which has been disconnected by a supplier under the provisions of the Ordinance, without the consent of the gas supplier or at the direction of the Department (section 45).

- specifies the offences that are committed by failing to comply with the provisions of the Ordinance and the level of fines which may be imposed in the Magistrates Court or Royal Court (section 46).
- specifies circumstances in which a person is not guilty of an offence under certain sections of the Ordinance providing he can show he has taken all reasonable steps to prevent a contravention (section 47).
- provides the Department with a power to issue exemption certificates in relation to requirements of the Ordinance, provided that it is satisfied that to do so would not prejudice the health and safety of any person as a consequence (section 48).
- specifies the interpretation of certain words and phrases used in the Ordinance (section 49).
- specifies the matters that may be included in the procedure relating to regulations made under the powers of the Ordinance including the requirement for any regulations to be laid before the States as soon as possible after they are made. The States have the power to annul them (section 50).
- requires that the Ordinance has effect in the Islands of Guernsey, Herm and Jethou, (section 51).

Interface with other safety legislation

Health and Safety at Work etc. (Guernsey) Law, 1979

Health and Safety at Work (General) (Guernsey) Ordinance, 1987

A brief summary of this and details of ACOPs and guidance made under it are given in Appendices 3 and 4, respectively. It is important to recognise that requirements under the Ordinance operate within the overall framework of safety controls imposed by the Health and Safety at Work etc (Guernsey) Law 1979 and the Health and Safety at Work (General) (Guernsey) Ordinance, 1987 on employers and self-employed persons generally. Under those provisions, any gas installation business needs to ensure that hazards associated with work on gas fittings are properly identified, risks assessed, and suitable control measures are put into place.

In the case of workplaces, certain requirements in the Ordinance (e.g. concerning notices, marking of pipes, and precautions to avoid risk to persons during work on a gas system) may interface, directly or indirectly, with provisions in respect of safety signs.

Terms used in the Ordinance and ACOP/guidance

Words and expressions, which are defined in the Health and Safety at Work (General) (Guernsey) Ordinance, 1987 and the Safety of Employees (Miscellaneous Provisions) Ordinance, 1952 have the same meaning in this Code of Practice and guidance unless the context otherwise requires.

Any reference to an 'appropriate standard' is a reference to any of the following which are current at the time of the work activity:

- a British Standard (see Appendix 4);
- a relevant standard or code of practice of a national standards body of any member state of the European Union (EU);

- a relevant technical specification acknowledged for use as a standard by a public authority of any member state of the EU;
- traditional procedures of manufacture of a member state of the EU where these - are the subject of a written technical description sufficiently detailed to permit assessment of the goods or materials for the use specified;
- a specification sufficiently detailed to permit assessment for goods or materials of an innovative nature (or subject to innovative process of manufacture such that they cannot comply with a recognised standard or specification) and which will fill the purpose provided by the specified standard;

provided that the proposed standard, code of practice, technical specification or procedure of manufacture provides, in use, equivalent levels of safety, suitability and fitness for purpose to those achieved by the standard to which it is expressed to be equivalent.

The mutual recognition in the previous paragraph is also extended to products originating in European Economic Area member states who are contracting parties to the Agreement on the European Economic Area (EEA), which conform to the standards, regulations, specifications or traditional procedures of manufacture legally applied in those states and which offer an equivalent standard of safety to that required in the Ordinance.

The terms 'gas installer' and 'installer' are not defined in the Ordinance but are used in the guidance and ACOP; in this context they mean any person who carries out work on a gas system or gas storage vessel. This includes (but is not restricted to) any person who installs, services, maintains, connects, re-connects, disconnects, removes or repairs gas appliances or other fittings whether they are an employer, employee, self-employed or working on their own behalf, i.e. in 'do-it-yourself activity'.

The ACOP and guidance refers in several places to the requirement (under section 3(3)) for any gas installation business to be in membership of a class of persons approved by the Department, and in that context, Gas Safe registration is specified, as an example. This approach reflects the situation at the time of publication of this ACOP/guidance, where the only class of persons approved by the Department is The Gas Safe Register. However, it also recognises that another registration body could be appointed at some time in the future (see paragraph 17). For ease of reference, the term 'Gas Safe registered installer', is used in the ACOP/guidance and this should be taken to include a self-employed gas installer or an operative employed by a gas installation business, so registered.

For the purposes of this publication, where appliance standards refer to domestic use, this should be taken as reference to the type of appliance rather than the location. A small cooker in an office canteen would therefore normally be regarded as a domestic-type appliance in this context.

The term 'gas system' as used in the ACOP/guidance means all gas installation pipework, fittings and appliances as well as the provision of ventilation and flueing. Reference to 'Building Regulations' means Regulations currently in force in Guernsey.

Typical installations

Diagrams of typical installations are given in Appendix 5. However, it must be stressed that these are only general illustrations and variations may occur in specific circumstances.

Application of the Ordinance to the apparently self-employed

Although only the courts can give an authoritative interpretation of the law, in considering the application of this Ordinance and ACOP/guidance to persons working under another's direction, the following should be considered:

If people working under the control and direction of others are treated as self-employed for tax and insurance purposes, they may be treated as their employees for health and safety purposes. It may therefore be necessary to take appropriate action to protect them. If any doubt exists about who is responsible for the health and safety of a worker this could be clarified and included in the terms of the contract. However, remember, a legal duty under the Health and Safety at Work (General) (Guernsey) Ordinance 1987, cannot be passed on by means of a contract and there will still be duties towards others under section 3 of the Health and Safety Ordinance. If such workers are employed on the basis that they are responsible for their own health and safety, legal advice should be sought before doing so.

Part I Application of Ordinance

Section 1

Application of this Ordinance and Health and Safety at Work Ordinance

Ordinance

(1) *Subject to the provisions of section 2, this Ordinance applies to or in relation to gas fittings used in connection with –*

- (a) *gas which has been conveyed to premises through a distribution main, or*
- (b) *gas conveyed from a gas storage vessel.*

(2) *The provisions of this Ordinance –*

- (a) *shall be read as one with the provisions of the Health and Safety at Work (General) (Guernsey) Ordinance, 1987, and*
- (b) *are relevant statutory provisions for the purposes of that Ordinance.*

1(1)(2)

Section 2

Cases to which this Ordinance does not apply

Ordinance

(1) *Save for sections 37 and 38 and subject to section 3(8), this Ordinance shall not apply in relation to the supply of gas to, or anything done in respect of a gas fitting at, the following premises, that is to say -*

- (a) *a quarry within the meaning of the Quarries (Safety) Ordinance 1954;*
- (b) *a factory within the meaning section 81 of the Safety of Employees (Miscellaneous Provisions) Ordinance 1952;*
- (c) *agricultural premises, being agricultural land, including land being or forming part of a market garden, and any building thereon, which is used in connection with agricultural operations;*

2(1)-(5)

Ordinance

- (d) *temporary installations used in connection with any building operation within the meaning of section 27 (2) of the Safety of Employees (Miscellaneous Provisions) Ordinance 1952;*
- (e) *premises used for testing of gas fittings; or*
- (f) *premises used for the treatment of sewage,*

but this Ordinance does apply in relation to such premises or part thereof used for domestic or residential purposes or as sleeping accommodation.

(2) Nothing in this Ordinance applies in relation to the supply of gas to, or anything done in respect of a gas fitting on -

- (a) *a self-propelled vehicle except when such vehicle is -*
 - (i) *hired out in the course of a business; or*
 - (ii) *made available to members of the public in the course of a business carried on from that vehicle;*
- (b) *a sea-going ship;*
- (c) *a vessel not requiring a national or international load line certificate except when such a vessel is -*
 - (i) *hired out in the course of a business;*
 - (ii) *made available to members of the public in the course of a business carried out from that vessel; or*
 - (iii) *used primarily for domestic or residential purposes;*
- (d) *a hovercraft; or*
- (e) *a caravan used for touring otherwise than when hired out in the course of a business.*

(3) Nothing in this Ordinance applies in relation to -

- (a) *the supply of gas to the propulsion system of any vehicle or to any gas fitting forming part of such propulsion system;*
- (b) *the supply of gas to, or anything done in respect of a Bunsen burner used in an educational establishment; or*
- (c) *work in relation to a control device on a gas appliance if -*
 - (i) *the device is intended primarily for use by a consumer of gas; and*
 - (ii) *the work does not involve breaking into a gasway.*

(4) This Ordinance does not apply in relation to a gas fitting used for the purpose of training gas fitting operatives in a college or other training establishment, except that subsections (1) to (5) and (7) of section 3 shall apply to work in relation to a gas fitting carried out by a person providing such training.

(5) This Ordinance does not apply in relation to a gas fitting used for the purpose of assessing the competence of a gas fitting operative at an assessment centre where such assessment is carried out for the purposes of an accredited

2(1)-(5)

Ordinance

2(1)-(5)

Guidance

certification scheme, except that section 3(1) and (2) shall apply to work in relation to a gas fitting carried out by a person carrying out such assessment.

Premises not included by the Ordinance

1 For the purpose of this Ordinance (except where the context otherwise requires, e.g. see section 40), 'premises' has the meaning given in section 35 of the Health and Safety at Work (General) (Guernsey) Ordinance, 1987. It covers any place, including any installation on land, the foreshore, offshore installations (whether floating or otherwise - but only within Guernsey, Herm and Jethou), and any marquees or other movable structures. The Ordinance therefore covers everywhere in these islands subject to the exceptions for vehicles, ships/boats, factories, agricultural land, construction installations, quarries, and other premises/situations in section 2(1)-(4). In particular, the Ordinance covers gas systems and appliances in houses, flats, shops, offices, other commercial premises, and holiday accommodation, e.g. chalets and certain caravans, mobile homes and boats (paragraphs 2-8).

2 Exceptions are provided for certain premises under sections 2 as follows:

Section 2(1). The places mentioned, e.g. factories, mines and agricultural premises, are generally excluded, but sections 37 (gas escapes) and 38 (antifluctuators and valves) do apply and section 3(8) specifically covers places where certain caravans and inland waterway boats are manufactured (see paragraph 22). Section 2 excludes certain places, e.g. docks and electrical power stations, regarded as 'factories' under section 81 of the Safety of Employees (Miscellaneous Provisions) Ordinance 1952. However, gas installation work that forms part of a construction, e.g. installation of gas fittings/appliances in buildings being constructed for residential, industrial or commercial use, is covered with the exception of that in relation to fittings/appliances used in temporary installations such as site huts.

Section 2(2). The vehicles, ships, boats and other situations/activities mentioned are fully excluded from the Ordinance.

3 The exceptions in section 2 (1) – (2) cover any gas appliance or fitting (whether fixed or portable) in the premises concerned, irrespective of whether the fitting/appliance is intended for use in a place covered by the Ordinance. The range of situations where industrial gas fittings are excluded is farther extended (e.g. to certain other construction situations) by the exclusion for these fittings in the definition of 'gas fittings' (see section 49). However, it must be stressed that where there are exclusions from this Ordinance, relevant requirements may apply under general health and safety legislation, e.g. the Health and Safety at Work (General) (Guernsey) Ordinance 1987.

4 The exceptions in section 2(1) do not extend to domestic, residential or sleeping accommodation at the places specified. Therefore, the Ordinance covers all such accommodation wherever it is found, apart from ships, boats, vehicles etc excluded under section 2(2). For example, caretakers' flats at factories are covered.

5 Caravans used for touring which are hired out in the course of a business, and permanently sited caravans and mobile homes (hired out or otherwise) on holiday-home parks or similar sites, including farms, are covered. Similarly, any caravan used as an annexe to permanent accommodation, e.g. as a 'granny flat', or as temporary residential accommodation for employees (for instance on a construction site or farm), is covered by the Ordinance.

6 The Ordinance applies to certain boats not requiring a load line certificate, as specified in section 2(2)(c). These include boats (both permanently moored and those capable of navigation) which are hired out in the course of a business, e.g. boats used for holiday accommodation; any boat (including those privately-

owned/occupied) used solely or primarily for domestic or residential purposes, such as houseboats and those used for cruising but in which the owner/user lives for most of the time, and boats made available to the public in the course of a business carried out from the vessel. Privately owned boats used only for leisure or sporting purposes and not hired out in the course of a business are excluded. Boats requiring a national or international load line certificate (i.e. broadly, sea-going cargo carrying ships) are also excluded from the Ordinance.

7 Vessels subject to this Ordinance will often fall outside the scope of merchant shipping legislation (MSL), i.e. because they are permanently-moored and/or not used for commercial purposes, but in some cases, such as commercially-operated pleasure boats (e.g. hire boats) and certain passenger vessels, this Ordinance and MSL apply together; similarly additional requirements (including gas safety) may be applied by the Harbour Authority.

8 Self-propelled vehicles hired out to, or frequented by the public, in the course of a business, e.g. motor caravans, are also covered. Mobile food 'stalls' (whether towed as 'caravans' or self-propelled) are covered; this includes such facilities where the public have access inside the vehicle or caravan concerned as well as 'serve through the hole' vendors. However, the tanks and associated fittings of LPG powered vehicles are excluded under section 2(3) (a), e.g. 'work' on such fittings is not covered (but other safety controls may apply in these circumstances - see paragraph 15).

Application in particular circumstances

9 Although the Ordinance extend to a wide range of premises, not all uses of gas, or activities in relation to gas fittings/storage vessels are covered - see, for example, definitions of 'gas appliance', 'gas fittings, and 'work' under section 49(1). Furthermore, there are specific exceptions from requirements in particular sections. These factors all need to be considered together in order to determine application of requirements in particular circumstances.

10 Appliances using non-refillable gas containers (e.g. some camping stoves, cigarette lighters, hairdressing curling tongs etc) are, for instance, not covered and other portable/mobile appliances are generally excluded, apart from space heaters and associated cylinders, pipes and fittings (which are subject to sections 3, 35 and 36) - see definitions of 'gas storage vessel' and 'gas appliance', section 49.

11 Under section 2(3)(c), work on any control device associated with an appliance, which is primarily intended for use by the consumer (e.g. removal/replacement of electric thermostats and on/off timer switches) is excluded from the Ordinance if this does not involve breaking into a gasway, i.e. where there is no risk of a gas escape. Persons carrying out such work are not, therefore, required to be in membership of Department approved class of persons, e.g. Gas Safe registered (see section 3), nevertheless competence to ensure any such work is done safely is required under the Health and Safety at Work (General) (Guernsey) Ordinance 1987.

12 The exceptions in section 2(4)-(5) concerning gas fittings used in the training/assessment of gas fitting operatives recognise that these fittings may have deliberate faults introduced, e.g. to demonstrate specific problems or test fault-detection techniques. Most of the sections, e.g. concerning appliance safety, do not apply in these circumstances but assessors/trainers are still required to possess the necessary competence to ensure safe conduct of such activities (this needs to take into account the level of trainee knowledge and experience, which might be limited) and training organisations also need to be in membership of Department approved class of persons, e.g. Gas Safe registered, under section 3(3)); the exception in section 2(5) is restricted to assessment for the purpose of an accredited certification scheme (see paragraph 20) and therefore excludes other 'assessment' activities, e.g.

checks and tests as part of the training of gas operatives.

13 Under section 2(4)-(5), both assessment and training organizations are required to ensure that their staff have the necessary competence (see section 3(2)), and in addition they need to meet obligations (e.g. under the Health and Safety at Work (General) (Guernsey) Ordinance 1987 and the Safety of Employees (Miscellaneous Provisions) Ordinance 1952), for securing safety of both staff and trainees in these circumstances. For instance, this would include addressing activities involving 'faulty' appliances in the 'risk assessment', and implementing the necessary control measures (e.g. by 'grading' work according to trainee experience, providing appropriate instructions and supervision and implementing formal procedures/checks to ensure gas fittings are left in a 'safe condition', after exercises have been completed).

14 The exceptions in section 2(4)-(5) do not cover gas fittings used for purposes other than training/assessment or those used in training or assessment of operatives at places other than training colleges or assessment centres, e.g. 'on the job' training / assessment carried out at different locations is subject to the Ordinance in full.

Requirements at premises outside the Scope of the Regulations

15 Where there are exclusions under these Ordinance, e.g. at factories, relevant requirements may apply under the Health and Safety at Work (General) (Guernsey) Ordinance 1987 and related legislation, e.g.. the Safety of Employees (Miscellaneous Provisions) Ordinance 1952. In deciding whether these other, more general duties have been met in relation to installation and use of gas systems/appliances, the relevance of the more specific requirements of this Ordinance will need to be considered.

Part II Gas fittings - general provisions

Section 3

Qualification and supervision

Ordinance

- (1) No person shall carry out any work in relation to a gas fitting or gas storage vessel unless he is competent to do so.*
- (2) The employer of any person carrying out such work for that employer, every other employer and self-employed person who has control to any extent of such work and every employer and self-employed person who has required such work to be carried out at any place of work under his control shall ensure that subsection (1) is complied with.*
- (3) Without prejudice to the generality of subsections (1) and (2, and subject to subsection (4), no employer shall allow any of his employees to carry out any work in relation to a gas fitting or service pipework and no self-employed person shall carry out any such work, unless the employer or self-employed person, as the case may be, is a member of a class of persons approved for the time being by the Department for the purposes of this subsection.*
- (4) The requirements of subsection (3) shall not apply in respect of -*
 - (a) the replacement of a hose or regulator on a portable or mobile space heater; or*
 - (b) the replacement of a hose connecting a refillable cylinder to installation pipework.*
- (5) An approval given pursuant to subsection (3) and any withdrawal of such*

3(1)-(8)

Ordinance

approval shall be in writing and notice of it shall be given to such persons and in such manner as the Department considers appropriate.

(6) The employer of any person carrying out any work in relation to a gas fitting or gas storage vessel in the course of his employment shall ensure that such of the following provisions of this Ordinance as impose duties upon that person and are for the time being in force are complied with by that person.

(7) No person shall falsely pretend to be a member of a class of persons required to be approved under subsection (3).

(8) Notwithstanding paragraph (b) of section 2(1), when a person is carrying out work in premises referred to in that paragraph in relation to a gas fitting in a vehicle, vessel or caravan –

(a) subsections (1), (2) and (6) of this Ordinance shall be complied with in respects thereof; and

(b) he shall ensure, so far as is reasonably practicable, that the installation of the gas fittings and flues will not contravene the provisions of this Ordinance when the gas fittings are connected to the gas supply,

but this subsection does not apply where the person has reasonable grounds for believing that the vehicle, vessel or caravan will be first used for a purpose which when so used will exclude it from the application of this Ordinance by virtue of paragraphs (a), (c) or (e) of section 2(2).

3(1)-(8)

Guidance

16 All gas installation businesses, including self-employed gas installers, are (subject to the limited exceptions in section 3(4)) required to be in membership of a 'class of persons' approved by the Department, whether they carry out such work as their main or part activity. Gas fitters who are employed by a member of an approved 'class of persons', but who do separate work on their own behalf, need to be in membership of such class of persons, e.g. Gas Safe registered, in their own right.

17 At the time of publication of this ACOP/guidance, the only body with such approval is The Gas Safe Register, their address is PO Box 6804, Basingstoke, Hants RG24 4NB (Tel: 0800 408 5500).

18 Anyone who does work on a gas fitting or gas storage vessel must be competent to do so, whether or not they are required to be a member of an approved class of persons. Therefore, do-it-yourself installers and those performing favours for friends and relatives all need to have the required competence. The level and range of competence should match the full extent of work done, but needs only to be sufficient for and relevant to that work. Employers of gas fitting operatives are also required under Section 3(2) to ensure that their employees have the required competence for the work undertaken; in addition to ensuring they are properly experienced and trained (see paragraph 20), this involves ongoing monitoring of performance standards, as necessary.

19 The duty to ensure gas installers are competent extends to other employers and self-employed persons with control over the work concerned, e.g. certain contractors, and those requiring work to be done in a workplace under their control. Where there is more than one dutyholder in a particular situation, close liaison is essential to ensure requirements are met, e.g. through proper check procedures. Information on the scope of work a Gas Safe registered gas installer is competent to perform may be obtained from the installer certificate of competence (issued under the certification scheme referred to in paragraph 20) or where, under transitional registration arrangements, no certificate has yet been issued, from The Gas Safe Register - see also Section 4 concerning duty to check for membership of a Department approved class of persons.

Guidance

20 Competence depends on a combination of training and experience. The HSC ACOP *Standards of training in safe gas installation* provides guidance both on the scope of training and the need for proper assessment/re-assessment of gas fitting operatives. Although failure to comply with the Code is not an offence in itself, it is admissible as proof that the defendant had failed to comply with a statutory requirement or prohibition to which the code is relevant, unless it can be demonstrated that compliance has been achieved in some alternative but equally effective way. The ACOP extends to gas installation work at premises excluded from this Ordinance but subject to the Health and Safety at Work (General) (Guernsey) Ordinance, 1987. The accredited certification scheme introduced in January 2005 requires individual gas fitting operatives to have their competence assessed at five-yearly intervals by a certification body accredited by the United Kingdom Accreditation Service (UKAS).

21 Section 3 extends to work on portable or mobile space heaters, e.g. LPG cabinet heaters (where done at premises subject to this Ordinance). As gas storage vessels are not 'gas fittings' within the meaning of this Ordinance, the changing of cylinders, filling of storage tanks or fixing in position of such tanks does not require membership of an approved class of persons, e.g. Gas Safe registration. However, people involved in these activities, or any of those covered by the exceptions in Section 3(4)(a)-(b) (concerning certain 'like for like' hose/regulator replacement activities, such as where used/worn items are replaced) need to have the required competence and ensure that they follow instructions, e.g. given by the gas supplier/appliance manufacturer, as appropriate. Where other work is involved, e.g. installing or replacing an LPG tank requiring work on service pipework or other gas fitting(s), it should be carried out only by someone who is in membership of an approved class of persons, e.g. a Gas Safe registered installer, with the required competence (see also Section 2(3)(c) regarding exceptions for certain work on gas appliance control devices primarily intended for use by the consumer).

22 Section 3(8) requires manufacturers of caravans, holiday homes or inland waterway boats to be used in situations in which the Ordinance will apply to ensure employees who install gas fittings (or who do subsequent maintenance or repair work) are competent, and to take reasonable steps to secure safety once their products are taken/retaken into use. Manufacturers should take reasonable steps, e.g. by arrangements with their supply outlets and dealers, to establish, as best they can, the intended use of their products and whether the requirements in Section 3(8) will therefore apply. Whatever is the case, manufacturers also need to bear in mind other, more general, duties under health and safety and other legislation, and, in their own interests, it is recommended that they use the same standards of gas installation in all their products, and have quality control procedures to ensure that this is the case. In addition to the installation of gas fittings themselves, other relevant factors, e.g. location and size of flue and ventilation openings, need to be taken into account.

Section 4

Duty on employer

Ordinance

4

Where an employer or self-employed person requires any work in relation to a gas fitting to be carried out at any place of work under his control or where an employer or self-employed person has control to any extent of work in relation to a gas fitting, he shall take reasonable steps to ensure that the person undertaking that work is, or is employed by, a member of a class of persons approved by the Department under Section 3(3) above.

ACOP

23 Businesses should make reasonable efforts to obtain evidence that any person they intend to perform gas installation work (subject to section 3(3)), either under contract or on their own behalf, is a member, or employed by a member of a class of persons approved by the Department.

Guidance

24 Section 4 applies to an employer/self-employed person requiring work to be done on a gas appliance/fitting installed at their workplace as well as to an employer or self-employed person having control over work done on a gas fitting, e.g. a contractor. The duty supplements that for checking competence under Section 3(2) - see paragraphs 18-19.

25 At the time of publication of this ACOP/guidance, the 'class of persons' approved by the Department are those who are registered with The Gas Safe Register (see paragraph 17). Gas Safe will provide evidence of registration and confirmation that any certificate of registration is still valid.

Section 5

Ordinance

5(1)

ACOP

Guidance

Materials and workmanship

(1) No person shall install a gas fitting unless every part of it is of good construction and sound material, of adequate strength and size to secure safety and of a type appropriate for the gas with which it is to be used.

26 Gas installers should acquaint themselves with the appropriate standards for gas fittings and ensure that the fittings they use are to those standards.

27 Most new gas appliances used for domestic (e.g. cooking, heating and hot Water production) purposes will carry the CE marking in addition to any recognized European standard mark and/or BSI kitemark. Some larger plant, e.g. for commercial use, will also bear the CE marking in conformity with other Regulations which implement EC directives, e.g. on machinery and pressure vessels.

28 Pipes should be of a suitable construction, material, strength and size to convey gas to the appliance and to ensure its safe operation; account needs to be taken of any special factors in particular circumstances, e.g. risk of physical damage to non-metallic pipework, for instance, from rodent attack (see also sections 5(2) and 7). Where the appropriate standard or manufacturer recommends a limited life-time for a gas fitting (including plastic pipework), it should be replaced before the end of its limited life, unless it can be shown that continued use will not constitute a hazard. The manufacturer should be consulted, to establish whether the lifetime of the gas fitting can be extended, what tests need to be carried out, and the extended lifetime allowed. See also sections 35-36 and associated guidance, concerning maintenance/safety check duties.

Ordinance

5(2)

(2) Without prejudice to the generality of subsection (1) above, no person shall install in a building any pipe or pipe fitting for use in the supply of gas which is -

- (a) made of lead or lead alloy; or*
- (b) made of a non-metallic substance unless it is –*
 - (i) a pipe connected to a readily movable gas appliance designed for use without a flue; or*
 - (ii) a pipe entering the building and that part of it within the building is placed inside a metallic sheath which is so constructed and installed as to prevent, as far as is reasonably practicable, the escape of gas into the building if the pipe should fail.*

ACOP

29 Non-metallic connectors for use with readily movable gas appliances should conform to the appropriate standard (see Appendix 4). Such hoses, pipes and pipe fittings need to be used only for the purpose for which they are designed.

Guidance

30 Appliances or meters may be connected to existing lead piping using suitable fittings, provided that the piping is in a safe condition, e.g. there is no sign of damage.

31 Apart from connectors to readily movable appliances such as Bunsen burners, non-metallic (e.g. plastic) pipes should only be used within buildings if sheathed in metal to minimise the risk of gas escaping if the pipe should fail. This requirement does not extend to polyethylene (PE) piping buried in ground beneath buildings providing that the piping does not enter the building (but see section 19(5)). However, it does apply to that routed in spaces under floors. Plastic pipe fittings should not be used to seal pipes within buildings (see also definition of 'appropriate fitting' in section 49(1)). Although section 5(2) applies only to pipes and pipe fittings in buildings, it is recommended that a similar approach be adopted for other premises, e.g. caravans and boats. See also section 26(2) concerning pipes for flued domestic appliances.

32 Free-standing gas cookers are generally movable, but are not regarded as 'readily movable' for the purpose of this section (see also paragraph 24). Flexible cooker hoses should therefore be of metallic construction, they should conform with appropriate standards and be used only for their intended purpose.

Ordinance 5(3)

(3) No person shall carry out any work in relation to a gas fitting or gas storage vessel otherwise than in accordance with appropriate standards and in such a way as to prevent danger to any person.

Guidance

33 This subsection covers two separate but related requirements. Work in relation to any gas fitting or gas storage vessel needs both to be in accordance with appropriate standards, and to be carried out in a manner which does not expose the gas installer, or any other person, to danger, e.g. from a gas escape. It is the particular work being carried out which needs to comply with the appropriate standards; modifications completely unrelated to that work, e.g. upgrading to revised specifications, are not required (unless necessary to meet other provisions of the Ordinance). The term 'appropriate standards' is not defined in the Ordinance itself, but a list of standards regarded as appropriate standards for the purpose of this ACOP and guidance is given in Appendix 4 (see also relevant paragraphs under 'Terms used in the Ordinance and ACOP/guidance' in the Introduction).

Section 6

General safety precautions

Ordinance

(1) No person shall carry out any work in relation to a gas fitting in such a manner that gas could be released unless steps are taken to prevent the gas so released constituting a danger to any person.

6(1)(2)

(2) No person carrying out work in relation to a gas fitting shall leave the fitting unattended unless every incomplete gasway has been sealed with the appropriate fitting or the gas fitting is otherwise safe.

ACOP

34 Where work is carried out on a gas fitting that involves breaking into a gasway, it should be done in such a way that any resulting release of gas does not lead to danger. Where any gasway has been broken into, and the gas fitting concerned is to be left unattended before work is completed, the gasway should be sealed with an appropriate fitting so as to be gastight. Appropriate fitting(s) used to seal gasway(s) of an appliance should ensure that the gas supply to the appliance cannot be readily restored until safe to do so. Closure of an emergency control does not fulfill this requirement (see definition of 'appropriate fitting' in section 49(1)).

Guidance

35 This section generally covers work done on existing gas fittings, including extension or modification of existing gas installations, that involves breaking into a live gasway. If the work has to be left unfinished for any significant period, during which appliances might be deliberately or inadvertently used, the gas supply to the (disconnected) appliance should be sealed, as specified in paragraph 34. Reference should be made to the requirements for an 'appropriate fitting' under the definition in section 49(1).

36 'Unattended' has differing meanings depending on the size of premises. For domestic premises it normally means that the person working on the gas system is absent from the premises for a significant time during which someone else (e.g. the appliance owner) could turn gas supply back on in order to use the appliance. For most larger commercial locations 'unattended' could mean being on another part of the site.

Ordinance 6(3)

(3) Any person who disconnects a gas fitting shall, with the appropriate fitting, seal off every outlet of every pipe to which it was connected.

ACOP

37 The open-end(s) of any metal pipe(s) from which a gas fitting has been disconnected should be sealed with an appropriate metal fitting, see definition of 'appropriate fitting' in section 49(1).

Guidance

38 This section is largely intended to deal with situations in which gas appliances are removed, for instance because they are no longer needed or are being taken away when owners move home. When an appliance is disconnected and open-ended pipework is left, the pipework should always be left sealed with an appropriate fitting. A self-sealing coupling, e.g. on a cooker connection, does not need to be capped-off, except where there is a significant risk of interference (such as by a child). However, it should be checked that any disconnected coupling is not leaking gas (see paragraph 41), and any wall-mounted connector has been installed in the downward mounted position to prevent dirt or grit getting into the self-closing seal.

Ordinance 6(4)

(4) No person carrying out work in relation to a gas fitting which involves exposing gasways which contain or have contained flammable gas shall smoke or use any source of ignition in such a manner as may lead to the risk of fire or explosion.

Guidance

39 'Sources of ignition' include such tools as blow-lamps and hot-air guns. A safe system of work (including effective isolation of the gas supply etc) should be used to avoid any risk of fire or explosion; gasways should generally be purged of gas prior to the use of tools such as a blow torch.

Ordinance 6(5)

(5) No person searching for an escape of gas shall use any source of ignition.

Guidance

40 This prohibition extends to householders and other members of the general public.

41 The source of leaks should be located by sense of smell, gas detection instruments approved for use in flammable atmospheres, leak detection fluids, pressure test equipment or a combination of these methods.

Ordinance 6(6)

(6) Where a person carries out any work in relation to a gas fitting which might affect the gas tightness of the gas installation he shall immediately thereafter test the installation for gas tightness at least as far as the nearest valves upstream and downstream in the installation.

ACOP

42 The gastightness of the installation should be tested in accordance with the appropriate standard.

Guidance

43 The pressure decay test, sometimes referred to as the gas soundness test or the pressure drop test for soundness, is often used for gastightness. In domestic situations the test normally needs to cover the installation pipework between the meter control valve or emergency control valve as appropriate, and the appliance shut-off device.

Ordinance 6(7)

(7) No person shall install a gas storage vessel unless the site where it is to be installed is such as to ensure that the gas storage vessel can be used, filled or refilled without causing a danger to any person.

Guidance

44 Guidance on installation of LPG vessels is given in LP Gas Association Codes of Practice (see Appendix 4).

45 LPG tanks should not be located indoors, within a bunded area or on a roof of a building. Location of LPG storage tanks should take into account the need for safe access for road tankers, where reasonably practicable with provision of off-road parking, and for safe delivery of LPG. Any LPG storage tank used to supply gas to multiple consumers should be located only at a site where the person providing the gas supply to consumers has full control over the access to the tank and associated equipment.

Ordinance

(8) No person shall install in a cellar or basement:

- (a) a gas storage vessel; or*
- (b) an appliance fuelled by liquefied petroleum gas which has an automatic ignition device or a pilot light.*

6(8) (9)

(9) No person shall intentionally or recklessly interfere with a gas storage vessel or otherwise do anything which might affect a gas storage vessel so that the subsequent use of that vessel might cause a danger to any person.

Guidance

46 The prohibitions extend to everyone, including householders and other members of the public.

47 The prohibitions in section 6(8) address the fire/explosion hazard, e.g. from possible leakage and accumulation of heavy LPG vapour in any cellar or basement or from involvement of a gas storage vessel in a building fire. Further guidance on the installation and maintenance of LPG installations is given in LP Gas Association Codes of Practice (see Appendix 4).

Ordinance

6(10)

(10) No person shall store or keep gas consisting wholly or mainly of methane on domestic premises, and, for the purpose of this subsection, such gas from time to time present in pipes or in the fuel tank of any vehicle propelled by gas shall be deemed not to be so stored or kept.

Guidance

48 This section prohibits storage and keeping of natural gas at domestic premises, including for the purpose of home filling of gas-fuelled vehicles. However, this prohibition does not extend to natural gas in pipes, or in fuel tanks of parked or garaged vehicles. Similarly, equipment used for filling vehicle tanks is not prohibited where this does not involve storage, but any requirements stipulated by the gas transporter in relation to antifluators/valves need to be met in these circumstances, see section 38. The meaning of 'domestic premises' in section 6(10) is that given in section 35 of the Health and Safety at Work (General) (Guernsey) Ordinance, 1987 and includes any garden, yard or garage of such premises not used in common by the occupants of more than one such dwelling.

Section 7

Protection against damage

Ordinance
7(1)

(1) Any person installing a gas fitting shall ensure that it is properly supported and so placed or protected as to avoid any undue risk of damage to the fitting.

Guidance

49 Gas fittings should be installed in accordance with appropriate standards.

50 Gas fittings should be properly supported to ensure that no undue strain is placed upon them, e.g. by virtue of the weight or action of the gas fitting itself, which could lead to failure or damage of the fitting (see also paragraph 159). Gas fittings should, as far as possible, be installed in a position which avoids any risk of damage from foreseeable activities in the vicinity, e.g. vehicular traffic. Where such risk cannot be avoided, fittings should be suitably protected against possible damage. This would need to be addressed, for instance, in the case of service pipework, meter installations and installation pipework, where location near to vehicular access routes cannot be avoided.

51 Details of suitable arrangements for support and protection of gas fittings are given in appropriate standards. Appliances need to be installed in accordance with manufacturer instructions; such instructions must accompany appliances supplied or placed on the market. Special care needs to be taken where a gas fitting is located in a movable structure such as a caravan or boat, to take account of wind, tides etc.

Ordinance
7(2)

(2) No person shall install a gas fitting if he has reason to suspect that foreign matter may block or otherwise interfere with the safe operation of the fitting unless he has fitted to the gas inlet of, and any airway in, the fitting a suitable filter or other suitable protection.

Guidance

52 Filters or other suitable protection may be necessary to protect against any adverse effect of dirt or dust. Such devices should be compatible with any connected appliance. If there is any doubt, the advice of the gas supplier/ transporter and/or fitting manufacturer, as appropriate, needs to be sought.

Ordinance
7(3)

(3) No person shall install a gas fitting in a position where it is likely to be exposed to any substance which may corrode gas fittings unless the fitting is constructed of materials which are inherently resistant to being so corroded or it is suitably protected against being so corroded.

Guidance

53 Environments of particular concern are those where water, salt-spray, damp, corrosive chemicals or soot are present, or likely to be present. Special care needs to be taken where a gas fitting is located in a movable structure such as a boat, or a caravan on coastal sites. In some circumstances, it may be necessary to apply a protective coating but that coating should not affect safe operation of the fitting.

Section 8

Existing gas fittings

Ordinance
8(1)

(1) No person shall make any alteration to any premises in which a gas fitting or gas storage vessel is fitted if that alteration would adversely affect the safety of the fitting or the vessel in such a manner that, if the fitting or the vessel had been installed after the alteration, there would have been a contravention of this Ordinance.

Guidance

54 This section embraces a wide range of physical alterations to premises that might affect the safety of an existing gas fitting or gas storage vessel installed in the premises where the alteration is to be made (see paragraph 60). Before a significant alteration is made to premises where a gas appliance is installed, e.g. installation or removal of windows, air bricks, extractor fan units etc, any implications for gas

Guidance

appliance/fitting safety need to be properly addressed (see paragraphs 56-60). Similarly, prior consideration needs to be given to the possible effect of any modification, such as a building extension, on the safety of a gas storage vessel (e.g. from any reduction in separation distances and standards of ventilation), or on service pipework (for example, the risk of damage to buried pipework from strain/weight imposed upon it) - see also sections 6(7)-(8), 7(1) and 19(5). Requirements of Building Regulations, e.g. concerning ventilation and flues, should also be taken into account, as appropriate. Reference should also be made to section 36(11)-(12) concerning duties on landlords in respect of any room to be converted into sleeping accommodation.

55 Section 8(1) applies to householders, builders, gas installers etc. The implications of any change to premises for safety of a gas fitting or gas storage vessel need to be considered systematically as part of the overall work planning process.

56 In some cases, the effects of particular work for gas safety may be obvious. For example, where a chimney is being reduced in height or capped, its effectiveness in removing flue gases may be drastically affected. Before such work is started, it needs to be established whether, or not, the chimney is active and, if so, allowance made for this in the way the work is carried out. This may include planning for appliances to be disconnected before work commences, preventing debris falling or being thrown down the chimney, and ensuring appliances are tested for safety after the work has been completed. (Disconnection/testing of appliances should only be carried out by someone who is, or is employed by, a member of a Department approved class of persons under section 3, e.g. a Gas Safe registered installer.) Similar consideration needs to be given to any proposed alterations which might affect operation of a flue system, e.g. fitting a flue liner or terminal.

57 In other cases, the effects of the work may not be so obvious. For example, when fitting double glazing or cavity wall insulation, the removal of fixed permanent ventilation, such as air bricks, and replacement with closeable ventilation louvres (in contravention of standards), can lead to danger from reduced ventilation/incomplete combustion. Equally, fitting extractor fans can lead to the pull on flues being overcome and flue products being sucked back into premises. Moreover, the enclosure of an existing flue terminal within a new extension or conservatory (again in contravention of standards) can lead to flue gases becoming entrapped.

58 Irrespective of how obvious the implications of the work are for gas safety, the people involved need to keep these matters in mind, and ensure they are properly addressed when alterations to premises are planned.

59 Section 8(1) applies only to the alteration of premises in which the gas appliance concerned is installed, i.e. it does not cover any alteration to adjoining premises. Gas appliances/storage vessels should be installed so that safety cannot be affected by any future developments, e.g. building extensions, on adjoining property. For example, a flue should be located at a safe distance from any site boundary, so that in event of any development on a neighbouring site (which could extend up to the boundary), the flue will continue to operate properly and discharge of combustion products will not present a hazard to any person (see section 27 and Appendix 1).

Ordinance

8(2)

(2) No person shall do anything which would affect a gas fitting or any flue or means of ventilation used in connection with the fitting in such a manner that the subsequent use of the fitting might constitute a danger to any person; but this subsection does not apply to an alteration to premises.

Guidance

60 This section applies to everyone, not just gas installers. It supplements section 8(1), by prohibiting other activities (i.e. except alteration to premises) which have the potential to compromise safety; this might for instance include modifications which cause blockage/obstruction of an air supply vent or flue, or incorrect installation of an air extraction or condensation control unit. As with section

Guidance

8(1), it is essential for the implications of any such change or modification to be properly addressed, before work is commenced, to ensure that gas safety cannot be prejudiced in any way.

61 Modification of any gas fitting should be made only by a competent person who is, or is employed by, a member of Department approved class of persons (e.g. Gas Safe registered) under section 3(3). Alterations not comprising 'work' on a gas fitting but which nevertheless may affect gas safety, e.g. a change to room ventilation provisions, should also be made only by a person with the required competence. Similarly, any significant modification needs to be checked by a competent person before the gas fitting concerned is taken into use, to ensure that appropriate standards have been met and safety has not been compromised (see section 26(9)).

Ordinance 8(3)

3) In relation to any place of work under his control, an employer or a self-employed person shall ensure, so far as reasonably practicable, that the provisions of subsections (1) and (2) are complied with.

Guidance

62 It is recommended that a responsible person, e.g. a principal contractor, foreman, site manager or other person with overall control of the work, is nominated to ensure, so far as is reasonably practicable, compliance with section 8(1) and (2).

Section 9

Emergency controls

Ordinance 9(1)

(1) No person shall for the first time enable gas to be supplied for use in any premises unless there is provided an appropriately sited emergency control to which there is adequate access.

Guidance

63 A person who allows gas to flow into any premises for the first time should ensure an appropriately sited emergency control is in place.

64 Whenever a new supply of gas is made available for use in premises, an emergency control should also be provided; where there is a gas meter, the meter control may serve as the emergency control as long as the conditions (as follows) are met. Each individual premises (e.g. each house, flat, maisonette, or caravan) using a supply of gas should be provided with an emergency control, whether or not that premises contains a gas meter. The emergency control should be situated as near as is reasonably practicable to the point where the pipe supplying gas enters the premises. It should be readily accessible to all consumers, i.e. gas users, in the premises concerned (e.g. not located in a basement or cellar); therefore, a valve located in a meter-room which is normally locked, and accessible only to a landlord, gas supplier or emergency services, for example, cannot act as an 'emergency control'. An emergency control should be protected against unauthorised operation (i.e. tamper-proof) but if situated in a locked compartment, the occupier(s) of the premises should be provided with keys (see also section 13 (3)-(4)). In such cases, the emergency service provider should also hold keys where access cannot be ensured for them at all times, e.g. through keys held by the responsible person for premises.

65 The person allowing the flow of gas to the premises should ensure that every gas consumer in the premises is aware of the location of their emergency control (where there is more than one emergency control, e.g. in multi-occupancy premises, it is important for the particular control serving that consumer to be identified), and of the action to be taken in case of a gas emergency. In the case of rented property, the responsible person for the building, such as a landlord or managing agent, should ensure that all tenants are made aware of this information, including any new tenant moving into property (see also definition of 'emergency control' in section 49(1)).

Guidance

66 Some premises contain separate buildings, e.g. a domestic property with stables or an office complex with a number of buildings on one site. As long as the premises are clearly under the control of one person or organisation, only one emergency control is required. However, arrangements need to be made in these situations to ensure that the person in control is immediately notified of any gas emergency in the premises, so that suitable action can be taken, e.g. to isolate the gas supply (see section 37).

67 In the case of LPG, this section only applies where the gas is supplied from a storage tank or tanks, or from two or more cylinders connected by an automatic change-over device (see section 9(5)). In other cases the vapour valve on each cylinder also functions as a shut-off control and no additional provision is necessary.

Ordinance

(2) *Any person installing an emergency control shall ensure that -*

- (a) *any key, lever or hand-wheel of the control is securely attached to the operating spindle of the control;*
- (b) *any such key or lever is attached so that -*
 - (i) *the key or lever is parallel to the axis of the pipe in which the control is installed when the control is in the open position; and*
 - (ii) *where the key or lever is not attached so as to move only horizontally, gas cannot pass beyond the control when the key or lever has been moved as far as possible downwards;*
- (c) *either the means of operating the key or lever is clearly and permanently marked or a notice in permanent form is prominently displayed near such means so as to indicate when the control is open and when the control is shut; and*
- (d) *any hand-wheel indicates the direction of opening or closing of the control.*

9(2)

Guidance

68 The emergency control can operate by a key, lever or hand-wheel which should be securely attached to the operating spindle of the control. Where a key or lever is used, the 'open' position should be when the key or lever is parallel to the axis of the pipe. The 'off' position should be approximately one quarter turn of the key or lever to the right or left and, where the key or lever moves in the vertical plane, the move to the 'off' position should be in a downwards direction. Either the key or lever itself, or a nearby permanent notice, should indicate how the control operates and when the gas is 'off and 'on'.

69 Controls operated by hand-wheels need to indicate the opening and/or closing directions for the control.

Ordinance

(3) *Where a person installs an emergency control which is not adjacent to a primary meter, he shall immediately thereafter prominently display on or near the means of operating the control a suitably worded notice in permanent form indicating the procedure to be followed in the event of an escape of gas.*

9(3)

Guidance

70 Where an emergency control is installed which is not adjacent to a primary meter, or where no meter is installed, a prominently displayed notice on or near the control bearing the words 'Gas emergency control' should be provided. The notice needs to tell the consumer:

Guidance

- (a) to shut off the supply of gas if there is a gas escape in the premises;
- (b) if gas continues to escape, immediately notify the Gas Emergency Service Telephone: 749000;
- (c) not to reinstate the supply until remedial action has been taken by a competent person to prevent gas escaping again;
- (d) the date the notice was first displayed.

71 The notice should be in a permanent form, i.e. of durable material, and protected against damage as necessary, e.g. weather-resistant. See section 37 and associated guidance concerning action required in the event of a gas escape.

72 Where an emergency control is installed adjacent to a primary meter, an emergency notice is required to be displayed instead at the meter (see section 15).

Ordinance

9(4)

(4) Where any person first supplies gas to premises where an emergency control is installed, he shall ensure that the notice required by subsection (3) remains suitably worded or shall, where necessary, forthwith amend or replace that notice so as to give effect to the provisions of that subsection.

Guidance

73 If there is a change to the gas supplier which results in a change to the emergency contact point, the notice needs to be updated by the new supplier.

Ordinance

9(5)

(5) This section does not apply where gas is supplied in a refillable cylinder except where two or more cylinders are connected by means of an automatic change-over device.

Section 10

Maintaining electrical continuity

Ordinance

10

In any case where it is necessary to prevent danger, no person shall carry out work in relation to a gas fitting without using a suitable bond to maintain electrical continuity until the work is completed and permanent electrical continuity has been restored.

ACOP

74 A temporary continuity bond to the appropriate standard is required when disconnecting and reconnecting pipework where the production of a spark could cause a hazard.

Guidance

75 The purpose of the temporary bond is to maintain electrical continuity between the pipework to reduce the risk of a spark causing ignition. Work is not considered to have been completed until the restoration of permanent electrical continuity, where this is necessary to prevent potential hazard. The bond should be fitted with a robust clip or clamp at each end which provides effective electrical contact. See also section 18(2) concerning equipotential bonding which addresses the risk of electric shock.

Part III Meter Installations and regulators

Section 11

Ordinance

11

Interpretation of Part III

In this Part -

"meter box" means a receptacle or compartment designed and constructed to contain a meter with its associated fittings;

"meter compound" means an area or room designed and constructed to contain one or more meters with their associated fittings;

"secondary meter" means a meter, other than a primary meter, for ascertaining the quantity of gas provided; by a person for use by another person.

Section 12

Ordinance

12(1) (2)

Meters - general provisions

(1) *No person shall install a meter in any premises unless the site where it is to be installed is such as to ensure so far as is reasonably practicable that the means of escape from those premises in the event of fire is not adversely affected.*

(2) *No person shall install a meter in any premises unless it is of sound construction adequate to ensure so far as is reasonably practicable that in the event of fire gas is not able to escape in hazardous quantities; but this subsection does not apply to any meter installed in non-domestic premises to which gas is supplied through a readily accessible service valve.*

ACOP

76 Before any meter is installed, a check should be made on the means of escape from the premises in the event of fire. Meters and meter compartments, and their installation, need to conform to the appropriate standard.

General

77 Building designers and contractors need to consult the gas supplier to mutually agree the position and housing for primary meters at an early stage in any new building development.

New installations (premises with two or more floors above the ground floor)

78 Meters should not be sited on or under the stairway, or in any other part of the premises, where the stairway or that other part of the premises forms the sole means of escape in case of fire.

All other installations (including premises with less than two floors above the ground floor and replacement meters in premises with two or more floors above the ground floor)

79 Meters need to be installed, where reasonably practicable, in accordance with paragraph 78. If it is necessary to install a new or replacement meter on or under a stairway, or in any other part of premises, where the stairway or that other part of the premises forms the sole means of escape in the case of fire:

- (a) the meter should be fire-resistant; or
- (b) the meter should be housed in a fire-resistant compartment with automatic self-closing doors; or

Guidance

Guidance

(c) the pipe immediately upstream of the meter, or regulator if fitted, should be provided with a thermal cut-off device which is designed to automatically cut-off the gas supply if the temperature of the device exceeds 95°C.

Ordinance 12 (3)

80 Due account should be taken of relevant requirements in the Building Regulations. It may be necessary to install meters in meter rooms or compounds.

(3) No person shall install a meter unless the installation is so placed as to ensure that there is no risk of damage to it from electrical apparatus.

ACOP

81 Before installing a meter, checks should be made on the location and type of any electrical apparatus in the vicinity. Separation distances between gas meter installations and electrical apparatus are specified in the appropriate standards.

Ordinance

(4) No person shall install a meter except in a readily accessible position for inspection and maintenance.

(5) Where a meter has bosses or side pipes attached to the meter by a soldered joint only, no person shall make rigid pipe connections to the meter.

(6) Where a person installs a meter and the pipes and other gas fittings associated with it, he shall ensure that -

(a) immediately thereafter they are adequately tested to verify that they are gas tight and examined to verify that they have been installed in accordance with this Ordinance; and

(b) immediately after such testing and examination, purging is carried out throughout the meter and every other gas fitting through which gas can then flow so as to remove safely all air and gas other than the gas to be supplied.

12(4) – (6)

ACOP

82 The connections should be tested for gastightness in accordance with the appropriate standard. The whole installation should then be purged including any appliances connected to the system, again in accordance with the appropriate standard.

Section 13

Meter housings

Ordinance

(1) Where a meter is housed in a meter box or meter compound attached to or built into the external face of the outside wall of any premises, the meter box or meter compound shall be so constructed and installed that any gas escaping within the box or compound cannot enter the premises or any cavity in the wall but must disperse to the external air.

(2) No person shall knowingly store readily combustible materials in any meter box or meter compound.

13(1) (2)

Guidance

83 Potential routes for gas leakage from a meter box or compound into a premises or wall cavity should be effectively sealed. Particular care needs to be taken adequately to sleeve and seal around an installation pipe where it passes from the meter box and enters a building, e.g. via a cavity (see also section 19).

84 Section 13(2) applies to everyone, not just gas installers. Meter boxes or compounds should not, for example, be used for storage of combustible household waste such as paper and cardboard.

Ordinance
13(3)(4)

(3) *No person shall install a meter in a meter box provided with a lock, unless the consumer has been provided with a suitably labeled key to that lock.*
(4) *No person shall install a meter within a meter compound which is capable of being secured unless the consumer has been provided with a suitably labeled key for that compound.*

Section 14

Regulators

Ordinance
14(1)

(1) *No person shall install a primary meter or meter by pass used in connection with a primary meter unless -*

- (a) *there is a regulator controlling the pressure of gas supplied through the meter or the by pass, as the case may be, which provides adequate automatic means for preventing the gas fittings connected to the downstream side of the regulator from being subjected to a pressure greater than that for which they were designed;*
- (b) *where the normal pressure of the gas supply is 75 millibars or more at the inlet to the regulator, there are also adequate automatic means for preventing, in case the regulator should fail, those gas fittings from being subjected to such a greater pressure; and*
- (c) *where the regulator contains a relief valve or liquid seal, such valve or seal is connected to a vent pipe of adequate size and so installed that it is capable of venting safely.*

Guidance

85 An overpressure shut-off device or pressure relief valve may be used to prevent exposure of downstream fittings to excessive pressure in event of regulator failure. Requirements for protection against overpressure in the case of gas (e.g. LPG) installations supplied from vessels or cylinders are given in section 14 (2)-(4).

86 Any vent pipe should discharge to open air rather than into any part of a building, and should terminate away from potential ignition sources. Reference should be made to appropriate standards.

Ordinance
14(2)

(2) *Without prejudice to the requirements of subsection (1), no person shall cause gas to be supplied from a gas storage vessel (other than a re-fillable cylinder or a cylinder or cartridge designed to be disposed of when empty) to any service pipework or gas fitting unless -*

- (a) *there is a regulator installed which controls the nominal operating pressure of the gas;*
- (b) *there is adequate automatic means for preventing the installation pipework and gas fittings downstream of the regulator from being subjected to a pressure different from that for which they were designed; and*
- (c) *there is an adequate alternative automatic means for preventing the service pipework from being subjected to a greater pressure than that for which it was designed should the regulator referred to in paragraph (a) fail.*

Guidance

87 Section 14(2) applies only to installations using gas (essentially LPG) stored in bulk vessels or tanks. Any such installation should be provided with:

- (a) a regulator to maintain the gas supply pressure within the range at which appliances downstream were designed to operate safely; and
- (b) an overpressure and underpressure shut-off device (OPSO/UPSO), to provide back-up protection if the regulator fails or the gas supply pressure falls to a dangerously low level, e.g. because the storage vessel has become empty.

In addition, where there is a risk of service pipework failing if the regulator malfunctions, the pipework should be protected by a further overpressure shut-off device to prevent such failure. This is normally required only for non-metallic pipework.

88 Pressure systems and gas storage vessels should comply with the relevant industry standards. Any regulator, over-or underpressure protection device required under section 14(1)-(4) should be designed, constructed and installed in accordance with the appropriate standards.

Ordinance

(3) No person shall cause gas to be supplied through an installation consisting of one or more re-fillable cylinders unless the supply of gas passes through a regulator which controls the nominal operating pressure of the gas.

(4) Without prejudice to subsection (3), no person shall cause gas to be supplied through an installation consisting of four or more re-fillable cylinders connected to an automatic change-over device unless there is an adequate alternative means for preventing the installation pipework and any gas fitting downstream of the regulator from being subjected to a greater pressure than that for which it was designed should the regulator fail.

14(3)(4)

Guidance

89 Section 14(3)-(4) applies only to installations using gas (i.e. essentially LPG) from cylinders. As with installations using bulk vessels, a regulator should be provided to protect appliances downstream from being subjected to a pressure outside their safe operating range. If the cylinder supply comprises four or more cylinders connected to an automatic changeover device, an overpressure protection device should, in addition, be fitted to prevent downstream appliances, and pipework, being subjected to a pressure above that for which they were designed, should the regulator fail. Automatic cylinder changeover devices should comply with the appropriate standard.

Ordinance

- (5) *Where a person installs*
 - (a) *a regulator for controlling the pressure of gas through a primary meter, through a meter bypass used in connection with a primary meter or from a gas storage vessel, or*
 - (b) *a gas appliance itself fitted with a regulator for controlling the pressure of gas to that appliance,*

he shall immediately thereafter ensure, in either case, that the regulator is adequately sealed so as to prevent its setting from being interfered with without breaking of the seal.

- (6) *In relation to –*
 - (a) *gas from a distribution main, and*
 - (b) *gas from a gas storage vessel,*

no person except the supplier or a person authorised to act on his behalf, shall break a seal applied under subsection (5) above other than a seal applied to a regulator for controlling the pressure of gas to the appliance to which that regulator is fitted.

14(5)(6)

Ordinance
14(7)

(7) *A person who breaks a seal applied under subsection (5) shall apply as soon as is practicable a new seal which is adequate to prevent the setting of the regulator from being interfered with without breaking such seal.*

Guidance

90 Section 14(6) generally restricts the breaking of regulator seals to the gas transporter or supplier in the particular situation, or someone authorized to act on their behalf. However, a competent person may adjust a regulator on an individual appliance, e.g. to check the correct operating pressure, without the need for authorisation to break the seal.

91 Any person who breaks a seal should ensure that it is replaced with a suitable equivalent seal, as soon as the work has been completed.

Section 15

Meters - emergency notices

Ordinance

(1) *No person shall supply gas through a primary meter installed after the commencement of this Ordinance or for the first time supply gas through an existing primary meter after the commencement of this Ordinance unless he ensures that a suitably worded notice in permanent form is prominently displayed on or near the meter indicating the procedure to be followed in the event of an escape of gas,*

15(1) (2)

(2) *Where a meter is installed or relocated in any premises at a distance of more than 2 metres from, or out of sight of, the nearest upstream emergency control in the premises, no person shall supply or provide gas for the first time through the meter unless he ensures that a suitably worded notice in permanent form is prominently displayed on or near the meter indicating the position of that control.*

ACOP

92 Any supplier of gas through a primary meter should ensure that the required emergency notice is in place. Where there is a change in gas supplier which involves a change in the emergency service provider, the notice will need to be updated / replaced to reflect such a change.

Guidance

93 Whenever a primary meter is installed in premises, an emergency notice is required to be prominently displayed on or near the meter. The notice should contain the information for the gas consumer, as specified in paragraph 70 (a)-(d).

94 If the nearest upstream emergency control is installed in or subsequently relocated to a position out of sight of the meter or, in any case, in a position more than 2 metres away from the meter, a notice should be displayed on or near the meter concerned, indicating the position of the emergency control.

95 Notices required under section 15 should be in a permanent form, i.e. of durable material, and protected against damage as necessary, e.g. weather-resistant. The notice (s) should not obscure other information shown on a meter. See section 37 and associated guidance concerning action required in the event of a gas escape.

96 Where an emergency control is not located adjacent to a primary meter, an emergency notice is required instead to be displayed on or near to the emergency control (see section 9(3)).

Section 16

Primary meters

Ordinance

(1) No person shall install a prepayment meter as a primary meter through which gas passes to a secondary meter.

(2) Any person -

(a) who first provides gas through any service pipe or service pipework after the commencement of this Ordinance to more than one primary meter; or

(b) who subsequently makes any modification which affects the number of primary meters so provided,

shall ensure that a notice in permanent form is prominently displayed on or near each primary meter indicating that more than one primary meter is provided with gas through that service pipe or service pipework.

16(1) (2)

Guidance

97 Section 16(1) prohibits the use of a prepayment meter as a primary meter, where gas is passed on to a secondary meter(s), because use of such a meter would (when money runs out) cause the gas supply to all consumers on the system to be immediately cut-off. This would lead to a potential risk of gas escape where any gas appliance has not been isolated before the gas supply is resumed, e.g. because the user is away at the time (see also paragraph 102).

98 The purpose of the notice required under section 16(2) is to make gas installers, emergency services etc aware of the possible implications for other users, e.g. if the gas supply needs to be isolated. The notice is required both for new installations and where an existing system is modified so that more than one primary meter is then supplied from a service pipe or service pipework; in the case of modifications, the person making the change is responsible for ensuring the notice is displayed. It is recommended that the notice also indicates the number and location of other meters supplied from the same service pipe or pipework, and that any person who carries out an alteration affecting the accuracy of the information provided should ensure that the notice is amended accordingly.

Ordinance

(3) Where a primary meter is removed, the person who last supplied gas through the meter before removal shall -

(a) where the meter is not forthwith re-installed or replaced by another meter -

(i) close any service valve which controlled the supply of gas to that meter and did not control the supply of gas to any other primary meter; and

(ii) seal the outlet of the emergency control with an appropriate fitting; and

(iii) clearly mark any live gas pipe in the premises in which the meter was installed to the effect that the pipe contains gas; and

(b) where the meter is not re-installed or replaced by another meter before the expiry of the period of 12 months beginning on the date of removal of the meter and there is no such service valve as is mentioned in paragraph (a) (i), ensure that the service pipe or service pipework for those premises is disconnected as near as is reasonably practicable to the main or storage vessel and that any part of the pipe or pipework which is not removed is sealed at both ends with the appropriate fitting.

16(3)

Ordinance
16(4)

(4) Where a person proposes to remove a primary meter he shall give sufficient notice of it to the person supplying gas through the meter to enable him to comply with subsection (3).

Guidance

99 In the case of any gas service pipe the person who last supplied gas needs to ensure, so far as is reasonably practicable, that the action stipulated in section 16(3)(b) is taken. The work should be carried out only by a person meeting the requirements of section 3. See definition of 'supplier' in section 49(1) and associated guidance concerning allocation of duties in particular circumstances.

100 Section 16(3)(b) requires disconnection 'as near as is reasonably practicable' to the main or storage tank, providing flexibility to cover circumstances where disconnection at the main or storage tank itself might be very difficult. The section also recognises certain situations, e.g. blocks of flats, where removal of service pipes or service pipework to particular dwellings may not be readily achievable. The gas supplier needs to decide the appropriate action in a particular case, bearing in mind that unused 'live' service pipes or pipework represent a potential hazard. Metal fittings should be used to seal metal pipes (and outlets of emergency controls under section 16 (3) (a)), see also definition of 'appropriate fitting' in section 49(1). It should also be ensured that any installation pipework or other gas fitting rendered redundant by meter removal is made safe (e.g. by purging, and sealing any open gasways with an appropriate fitting).

101 Section 16(4) recognises that meters may be removed by persons other than gas suppliers in exceptional circumstances. Close co-operation with the 'last supplier' of gas is essential in these circumstances, and sufficient notice of any proposed meter removal should be given to enable the supplier to take effective action under section 16(3).

Section 17

Secondary meters

Ordinance

(1) Any person supplying or permitting the supply of gas through a primary meter to a secondary meter shall ensure that a line diagram in permanent form is prominently displayed on or near the primary meter or gas storage vessel and on or near all emergency controls connected to the primary meter showing the configuration of all meters, installation pipework and emergency controls.

17(1) (2)

(2) Any person who changes the configuration of any meter, installation pipework or emergency control so that the accuracy of the line diagram referred to in subsection (1) is affected shall ensure that the line diagram is amended so as to show the altered configuration.

Guidance

102 Where a gas supply is provided through a primary meter to secondary meter(s), i.e. to a number of downstream consumers, the information required by this section is important for several reasons. For example, in the case of a flat or house in multiple occupation, an installer or the emergency services would require information on the location/configuration of emergency control valves and pipework to isolate the gas supply to a particular dwelling; and to establish how this would affect the supply to other consumers in the premises. Similarly, this information would be required when supplies to individual consumers needed to be checked, e.g. after disconnection or reconnection of pipework.

103 The notice is required to contain the information specified in section 15(1); a diagram showing the configuration in outline will normally be sufficient for this purpose, i.e. a detailed scale plan is not necessary. The diagram should be displayed in a prominent position at the primary meter (or gas storage vessel if the gas is so supplied) and at all emergency controls connected to the primary meter, in the premises. The duty to provide the notice(s) rests with the person supplying or permitting the supply of gas through the primary meter. This might be a gas supplier

Guidance

or a landlord providing gas to a tenant. Where there is more than one dutyholder, effective liaison is essential to ensure requirements are met.

104 Section 17(2) requires any person making a change to the configuration of any installation pipework, meter, or emergency control to ensure the notice originally provided under section 17(1) is suitably amended, where this is necessary to preserve accuracy for safety purposes, as described in paragraphs 102-103. The notice is not required to be modified in respect of minor changes which do not have implications for safety identification purposes, e.g. where there is a small change in location of a relevant fitting but relative positions are unaffected.

105 The advice of a competent gas installer needs to be sought on the wording of the notice. In addition to the information specified in section 17, it is recommended that notices indicate the person responsible for each section of installation in the premises. The notice may be based on the system diagram required under section 24, where applicable.

Part IV Installation of pipework

Section 18

Safe use of pipes

Ordinance

(1) No person shall install any installation pipework in any position in which it cannot be used with safety having regard to the position of other pipes, pipe supports, drains, sewers, cables, conduits and electrical apparatus and to any parts of the structure of any premises in which it is installed which might affect its safe use.

18(1) (2)

(2) Any person who connects any installation pipework to a primary meter shall, in any case where equipotential bonding may be necessary, inform the responsible person that such bonding should be carried out by a competent person.

ACOP

106 The location and routing of installation pipework should take into account the potential risk, e.g. of corrosion damage, posed by the other building services, equipment and features specified in section 18(1), for instance by providing adequate separation. Pipework installation and equipotential bonding should be carried out to the appropriate standard.

Guidance

107 Main equipotential bonding (sometimes known as 'electrical cross bonding') is the connection between the consumer earth point and the gas installation pipe. The purpose is to create a zone (e.g. within a dwelling), including the area occupied by the gas installation pipework, within which acceptable voltage differences are maintained, in order to avoid the risk of electric shock. Such bonding does not involve connecting electrical power to gas pipes.

108 The section places an obligation upon the person who installs a section of pipework which connects with the primary meter or emergency control, whether or not the meter or control has yet been fitted, to inform the responsible person for the premises (builder, owner or occupier) of the possible need for main equipotential bonding where such a requirement did not exist before the work was undertaken, and that such bonding should be carried out by a competent person. The advice should be in writing and the relevant Gas Safe Register report form may, for example, be used for this purpose. Although the section applies only when new systems are installed and existing ones are modified, similar action needs to be taken if an installer notices an apparent defect in bonding in other circumstances, e.g. during maintenance checks (this applies to both main or supplementary equipotential bonding - see also paragraph 112 below).

Guidance

109 Main equipotential bonding is most commonly required where:

- (a) gas pipework is installed in new premises; or
- (b) gas pipework is first installed in existing premises.

110 The section is directed at the 600 mm (approximate) length of installation pipework at the outlet of the domestic meter installation which is the recommended location of any main equipotential bond in the appropriate standard.

111 The requirements for main equipotential bonding are more strict for certain types of electrical supply to premises (e.g. those supplies from protective multiple earth (PME) systems - most new electrical supplies will be from such systems). A gas installer may not be competent to make the necessary judgement, in which case the responsible person needs to be informed of this fact and any further action left to them.

112 Section 18(2) does not apply to the installation of a meter. In addition to main bonding, supplementary equipotential bonding of pipework may be necessary in locations of increased electric shock risk, e.g. bathrooms. In such cases, a competent electrical engineer should be consulted.

113 In many commercial and other large sites where gas and electric meters may be remotely located, the bonding is not always possible within a 600 mm distance. A competent electrical engineer needs to consider what action is necessary in these cases.

Section 19

Enclosed pipes

Ordinance
19(1)

(1) No person shall install any part of any installation pipework in a wall or a floor or standing of solid construction unless it is so constructed and installed as to be protected against failure caused by the movement of the wall, the floor or the standing as the case may be.

Guidance

Ordinance

114 The appropriate standard describes suitable installation methods.

(2) No person shall install any installation pipework so as to pass through a wall or a floor or standing of solid construction (whether or not it contains any cavity) from one side to the other -

- (a) unless any part of the pipe within the wall, floor or standing, as the case may be, takes the shortest practicable route; and*
- (b) unless adequate means are provided to prevent, so far as is reasonably practicable, any escape of gas from the pipework, passing through the wall, floor or standing from entering any cavity in the wall, floor or standing.*

(3) No person shall, subject to subsection (4), install any part of any installation pipework in the cavity of a cavity wall unless the pipe is to pass through the wall from one side to the other.

- (4) Subsection (3) does not apply to the installation of installation pipework connected to a living flame gas effect fire provided that the pipework in the cavity is as short as is reasonably practicable, enclosed in a gas tight sleeve and sealed at the joint at which the pipework enters the fire; and in this subsection a "living flame effect gas fire" means a gas fire -*

19(2) - (4)

Ordinance

- (a) *designed to simulate the effect of a solid fuel fire;*
- (b) *designed to operate with a fanned flue system; and*
- (c) *installed within the inner leaf of a cavity wall.*

(5) *No person shall install any installation pipework or any service pipework under the foundations of a building or in the ground under the base of a wall or footings unless adequate steps are taken to prevent damage to the installation pipework or service pipework in the event of the movement of those structures or the ground.*

19(4) – (6)

(6) *Where any installation pipework is not itself contained in a ventilated duct, no person shall install any installation pipework in any shaft, duct or void which is not adequately ventilated.*

Guidance

115 Section 19(2)(b) addresses the potential risk of gas leaking from pipework within a cavity in a wall, floor or standing; such leakage may be difficult to detect and readily lead to the accumulation of an explosive gas/air mixture in the cavity, presenting a considerable hazard to building occupants and others. The protective measures required may include enclosing that part of the pipe which passes through the wall, floor or standing in a gastight sleeve which itself is ventilated to a safe position, preferably to open air. This approach also provides some protection against possible mechanical damage to pipework, arising from structural movement (see also section 19(5)); any gap between the pipe and sleeve should be sealed (with flexible sealant), but at one end only so as to ensure any leak cannot accumulate in the gap space.

116 Shafts, ducts and voids used for accommodation of gas pipework should comply with the appropriate standard. It should be ensured that measures to comply with section 19, e.g. void/duct ventilation arrangements, do not impair any provisions for fire/smoke separation in a building - see section 20.

117 The exception for 'living flame effect' fires in section 19(4) applies only to those fires of this type which operate with a fanned flue system (i.e. where removal of combustion products depends on a fan rather than natural draught through a flue/chimney) and are installed within the inner leaf of a cavity wall. Although pipework connected to these fires may be 'hidden' by routing within a cavity, without the restriction in section 19(3), the length of pipework in the cavity is still required to be kept as short as is reasonably practicable, i.e. by taking the most direct route consistent with requirements for the particular installation. The installation of 'living flame effect' fires and associated flue systems, as covered by section 19(4), normally involves work which may affect the structural integrity of a building; requirements of Building Regulations should be met, as appropriate.

Section 20

Protection of buildings

Ordinance
20

No person shall install any installation pipework in a way which would impair the structure of a building or impair the fire resistance of any part of its structure.

Section 21

Clogging precautions

Ordinance

21

No person shall install any installation pipework in which deposition of liquid or solid matter is likely to occur unless a suitable vessel for the reception of any deposit which may form is fixed to the pipe in a conspicuous and readily accessible position and safe means are provided for the removal of the deposit.

Guidance

118 LPG and LPG air mix are 'dry' gases and do not normally require such fittings. Installers working with gases which might cause solid or liquid deposits (e.g. gas produced from landfill or by anaerobic digestion in certain circumstances) should refer to the appropriate standard.

Section 22

Testing and purging of pipes

Ordinance

22(1)

(1) Where a person carries out work in relation to any installation pipework which might affect the gastightness of any part of it, he shall immediately thereafter ensure that -

- (a) that part is adequately tested to verify that it is gastight and examined to verify that it has been installed in accordance with this Ordinance; and*

ACOP

119 Gastightness requirements are set out in the appropriate standard. All joints affected by the portion of work done should be visually inspected to ensure they have been correctly made, as part of the gastightness test.

Ordinance

22(1)

- (b) after such testing and examination, any necessary protective coating is applied to the joints of that part.*

ACOP

120 Joints should be tested before being painted or otherwise protected against corrosion.

Guidance

121 Painting a joint before it has been tested could provide a temporary seal, and falsify the test result.

Ordinance

22(2)

(2) Where gas is being supplied to any premises in which any installation pipework is installed and a person carries out work in relation to the pipework, he shall also ensure that -

- (a) immediately after complying with the provisions of paragraphs (a) and (b) of subsection (1), purging is carried out throughout all installation pipework through which gas can then flow so as to remove safely all air and gas other than the gas to be supplied;*
- (b) immediately after such purging, if the pipework is not to be put into immediate use, it is sealed off at every outlet with the appropriate fitting;*
- (c) if such purging has been carried out through a loosened connection, the connection is retested for gastightness after it has been retightened; and*
- (d) every seal fitted after such purging is tested for gastightness.*

ACOP

122 Purging should be carried out in accordance with the appropriate standard and should be undertaken after any work which breaches the integrity of installation pipework, not just when gas is first supplied. Requirements in relation to an 'appropriate fitting' are given under the definition in section 49.

Ordinance

(3) Where gas is not being supplied to any premises in which any installation pipework is installed -

(a) no person shall permit gas to pass into the installation pipework unless he has caused such purging, testing and other work as is specified in paragraphs (a) to (d) of subsection (2) to be carried out;

(b) a person who provides a gas supply to those premises shall, unless he complies with paragraph (a) above, ensure that the supply is sealed off with an appropriate fitting.

22(3)

Guidance

123 This section applies when a premises is first being supplied with gas. It does not apply where gas has been temporarily cut off, e.g. where an emergency control has been shut off, or an over/under pressure valve has operated. Neither does it apply to situations merely involving a change in supplier of gas to a premises.

124 In some cases, a gas supply may be provided some time before installation work is done, or vice versa. Where this occurs, the supply or installation pipework should be properly capped so that no third party, e.g. the occupant, can easily interfere with it. The person finally connecting the supply to the installation is responsible for testing and purging the pipe system in accordance with section 22(2).

Section 23

Marking of pipes

Ordinance 23(1)

(1) Any person installing, elsewhere than in any premises or part of premises used only as a dwelling or for living accommodation, a part of any installation pipework which is accessible to inspection shall permanently mark that part in such a manner that it is readily recognisable as part of a pipe for conveying gas.

Guidance

125 This section does not apply to domestic premises or living accommodation. In all other locations, e.g. commercial premises such as offices, gas pipes accessible to inspection should be colour coded and/or marked in accordance with the appropriate standard.

Ordinance 23(2)

(2) The responsible person for the premises in which any such part is situated shall ensure that the part continues to be so recognisable so long as it is used for conveying gas.

Section 24

Large consumers

Ordinance

(1) Where the service pipe to any building having two or more floors to which gas is supplied or (whether or not it has more than one floor) a floor having areas with a separate supply of gas has an internal diameter of 55 mm or more, no person shall install any incoming installation pipework supplying gas to any of those floors or areas, as the case may be, unless -

24(1)

Ordinance

- (a) a valve is installed in the pipe in a conspicuous and readily accessible position; and
- (b) a line diagram in permanent form is attached to the building in a readily accessible position as near as practicable to the primary meter or (where there is no primary meter) the emergency control, or to the gas storage vessel, as the case may be, indicating the position of all installation pipework of internal diameter of -
 - (i) 25 mm or more, where gas is supplied from a gas storage vessel, or
 - (ii) 35 mm or more, in any other case,

and all meters, emergency controls, valves and pressure test points of the gas supply systems in the building.

(2) Subsection (1) applies to service pipework as it applies to a service pipe except that the reference therein to an internal diameter of 55 mm or more is to be a reference to an internal diameter of 30 mm or more.

(3) In subsection (1)(b) "pressure test point" means a gas fitting to which a pressure gauge can be connected.

24(1) – (3)

Guidance

126 This section applies where a service pipe has an internal diameter of 55 mm or more, or service pipework has an internal diameter of 30 mm or more, and divides to supply more than one floor, or separate areas on one floor. This situation is most often encountered in industrial and commercial premises.

127 Where, in order to comply with section 24(1)(a), an isolation valve needs to be installed in the service pipe, it is essential to notify the gas supplier and make necessary arrangements, e.g. for isolation and degassing as necessary, in order to ensure this can be done safely. The system diagram should be prominently displayed at or near to the primary meter or if there is no such meter, the emergency control; where gas is supplied from a storage vessel, the notice may alternatively be displayed at or near to that vessel. Depending on the size of the premises, other copies may be held elsewhere, e.g. the security gate or reception area.

128 The purpose of the system diagram is to allow anyone, especially the emergency services, to identify and isolate part of the gas system if necessary. Pipes of less than 25 mm do not need to be shown on the diagram but it is recommended that information in addition to that specified in section 24(1) (a) be included, where considered significant in respect of the safety of a particular installation, e.g. this might include purge connections. The diagram needs to be updated as necessary.

Part V Gas appliances

Section 25

Interpretation of Part V

Ordinance

In this Part -

"flue pipe" means a pipe forming a flue but does not include a pipe built as a lining into either a chimney or a gas appliance ventilation duct;

"operating pressure", in relation to a gas appliance, means the pressure of gas at which it is designed to operate.

25

Section 26

Gas appliances - safety precautions

Ordinance
26(1)

(1) No person shall install a gas appliance unless it can be used without constituting a danger to any person.

ACOP

129 Gas installers should ensure that any appliance they install, or flue to which they connect an appliance, is safe for use. Requirements in Appendix 1 should be met, as applicable, and reference made to appropriate standards.

130 Appliances should be installed in accordance with the manufacturer's instructions, including any on flues to which they can be safely connected.

Guidance

131 This section imposes an important and wide-ranging duty on the installer to ensure that nothing about an appliance itself, the manner in which it is installed, any associated fitting or flue, or other factor (e.g. ventilation) will cause danger when the appliance is taken into use. This 'all-embracing' duty interfaces with other parts of the Ordinance dealing with more specific safety aspects of appliance installation, and requirements under section 26(9) for examination/testing after any work on an appliance, including installation. Section 30 places restrictions/prohibitions on the installation of certain appliances; without prejudice to those controls, the installation of an open-flued appliance in the same room (this includes a through lounge) as a solid fuel open fire, or an appliance with a fan-assisted flue, is not recommended (see appropriate standards in Appendix 4).

Ordinance
26(2)

(2) No person shall connect a flued domestic gas appliance to the gas supply system except by a permanently fixed rigid pipe.

Guidance

132 Flexible connections should not be used as this could allow consumers to move the appliance away from the flue. See also section 5(2) concerning construction materials for pipes and pipe fittings.

Ordinance
26(3)

(3) No person shall install a used gas appliance without verifying that it is in a safe condition for further use.

Guidance

133 Section 26(3) requires the physical condition of any used appliance to be checked before installation. This is necessary as suitable inspection might not be possible after an appliance has been installed.

134 In addition to second-hand appliances, this section also applies when an appliance is moved from one location to another, even within the same room.

Ordinance
26(4)

(4) No person shall install a gas appliance which does not comply with any enactment imposing a prohibition or restriction on the supply of such an appliance on grounds of safety.

Guidance

135 New appliances should conform to the relevant standards (see Appendix 3).

Ordinance

(5) No person carrying out the installation of a gas appliance shall leave it connected to the gas supply unless -

26(5)

(a) the appliance can be used safely; or

(b) the appliance is sealed off from the gas supply with an appropriate fitting.

Guidance

136 An appliance should be properly commissioned and checked for safe operation immediately after it has been installed and connected to the gas supply (see also section 33). If this cannot be done, the appliance should be sealed off from the gas supply by capping off the installation pipework serving the appliance, using an

Guidance

appropriate fitting. For requirements concerning an 'appropriate fitting' see definition in section 49(1) and associated guidance.

Ordinance 26(6)

(6) No person shall install a gas appliance without there being at the inlet to it means of shutting off the supply of gas to the appliance unless the provision of such means is not reasonably practicable.

Guidance

137 The means of shutting off the gas supply to an appliance may comprise either a conventional isolation valve, or other effective means, e.g. a self-sealing plug-in connector (commonly used on cooker installations) or a screw down restrictor elbow (such as used on gas fire installations). A shut-off device at the inlet to a gas appliance is regarded as part of 'installation pipework' for the purpose of this Ordinance (see definition in section 49 (1)).

138 The shut-off device required under this section not only assists soundness testing of installation pipework (see paragraph 43) but also allows an appliance to be isolated/disconnected in case of an emergency, e.g. if the appliance develops a gas leak or otherwise becomes dangerous. Although the section recognises that provision of a shut-off device at the inlet of an appliance might occasionally be difficult, there will be few, if any, situations where this is not reasonably practicable.

Ordinance

(7) No person shall carry out any work in relation to a gas appliance which bears an indication that it conforms to a type approved by any person as complying with safety standards in such a manner that the appliance ceases to comply with those standards.

(8) No person carrying out work in relation to a gas appliance which bears an indication that it so conforms shall remove or deface the indication.

(9) Where a person performs work on a gas appliance he shall immediately thereafter examine -

- (a) the effectiveness of any flue;*
- (b) the supply of combustion air;*
- (c) its operating pressure or heat input or, where necessary, both; and*
- (d) its operation so as to ensure its safe functioning,*

and he shall forthwith take all reasonably practicable steps to notify any defect to the responsible person and, where different, the owner of the premises in which the appliance is situated or, where neither is reasonably practicable, the supplier of gas to the appliance.

(10) Subsection 9 does not apply in respect of -

- (a) the direct disconnection of the gas supply of a gas appliance;
or*
- (b) the purging of gas or air from an appliance or its associated pipework or fittings in any case where that purging does not adversely affect the safety of that appliance, pipe or fitting.*

26(7) – (10)

ACOP

139 After performing work on an installed appliance, installers should carry out the necessary checks and tests to ensure that the appliance, and any associated flue, is safe for use. Requirements in Appendix 1 should be met, as applicable, and reference made to appropriate standards.

140 Nothing should be done to a gas appliance which will result in it no longer complying with the standard (s) to which it purports to comply, i.e. as required by the conformity (e.g. 'CE') marking on the appliance. Any repair to a gas appliance, for instance involving use of refurbished or reconditioned parts, should be done in a way which ensures safety standards are maintained. Installers should refer to manufacturer specifications/instructions and appropriate standards.

141 Section 26(9) requires a check to be made to ensure that the operating (i.e. gas) pressure and/or heat input of the appliance is correct. The installer should carry out the most appropriate test(s) for the appliance. This information is usually shown in manufacturer installation instructions, or on the appliance data badge. In certain cases, e.g. when appliance burners are modified or replaced, such as for conversion from natural gas to LPG or LPG air mix, it may be necessary to check both operating pressure and heat input.

142 Section 26(9) applies only to work on gas appliances, it does not cover work on certain other gas fittings, e.g. meters and installation pipework (that might be carried out remote from an appliance) - see definitions of 'gas appliance' and 'gas fittings' in section 49(1). However, appropriate checks and tests are still required to ensure safety after any work has been done on such fittings, e.g. see sections 6(6), 12(6) and 22(1). See also exceptions in section 2(3)(c) for work on certain gas appliance control devices primarily intended for use by the consumer.

143 Under section 26(10), the tests/examinations in section 26(9) are not required after certain work on appliances. The exception applies, for instance, to the direct disconnection of an appliance, i.e. where the appliance is itself detached from the gas supply, such as at the appliance connector or a nearby pipework connection. (Indirect disconnection, e.g. resulting from removal of another fitting upstream, such as a meter, is separately excluded as this is not regarded as work on a gas appliance - see paragraph 142.)

144 Section 26(9) also does not apply in respect of the purging of air or gas from an appliance, e.g. in the process of resuming a gas supply after interruption, but this is conditional on the purging operation itself having no adverse affect on the safety of any gas fitting. (This would not preclude the possibility of an appliance defect present before, and completely unrelated, to the purging activity still remaining after purging has been completed; such defects would need to be detected and addressed separately, e.g. see sections 35 and 36.) In order to establish whether the safety of any gas fitting might be affected by purging, an assessment should be made by a competent person before the operation is carried out; in any case of doubt or where safety is likely to be affected, the tests/examinations in section 26(9) should be carried out after purging has been completed, and remedial action taken to make appliances/fittings safe, as necessary.

145 It should be stressed that the exceptions in section 26(10) apply only to those activities specifically mentioned and if other work is carried out in association with these activities, e.g. any adjustment of appliances after purging, the requirements in section 26(9) again need to be met.

146 Installers need to take account of manufacturer instructions and any safety warnings given by them, especially any 'recall' type information about safety problems encountered with appliances some time after the particular model was first introduced onto the market.

147 If any safety defect is found as a result of the tests/examinations under section 26(9), the responsible person, and, if appropriate, the landlord for the premises should be notified as soon as possible. If neither is available, the gas supplier should be notified - see also section 34 concerning unsafe appliances.

Section 27

Ordinance
27(1)

ACOP

Guidance

Flues

(1) *No person shall install a gas appliance to any flue unless the flue is suitable and in a proper condition for the safe operation of the appliance.*

148 Whenever an appliance is installed to a flue, the installer should ensure that the flue is adequate, suitable and effective for use with the appliance which it will serve. This requirement applies however the connection is made (e.g. it covers equally where an appliance is fitted to an existing flue, and where a flue is fitted to an existing appliance); in each case, the necessary tests and examinations should be carried out both before and after the appliance has been fitted. Requirements in Appendix 1 should be met, as applicable, and reference made to appropriate standards.

149 The requirements of Building Regulations concerning flues and chimneys should be met, where applicable. The fitting of a suitable terminal to any flue/chimney outlet is recommended, to assist products of combustion to escape, minimise draught and prevent entry of material, e.g. bird nests, which might cause blockage. In certain areas, e.g. where birds such as crows are known to roost, purpose-designed protection is essential to avoid such blockage (see paragraph 56).

150 It should not be assumed that previous satisfactory operation means that a flue will continue to be safe for use with another appliance, even of the same type. Appropriate tests and examinations should always be carried out, see Appendix 1. Guidance on types of appliance which require a flue to be fitted is given in the appropriate standards.

(2) *No person shall install a flue pipe so that it enters a brick or masonry chimney in such a way that the seal between the flue pipe and chimney cannot be inspected.*

(3) *No person shall connect a gas appliance to a flue which is surrounded by an enclosure unless that enclosure is so sealed that any spillage of products of combustion cannot pass from the enclosure to any room or internal space other than the room or internal space in which the appliance is installed.*

151 Where a false chimney breast or decorative canopy is fitted, it should be sealed from other rooms in the premises. Reference should be made to appropriate standards.

(4) *No person shall install a power operated flue system for a gas appliance unless it safely prevents the operation of the appliance if the draught fails.*

152 An interlock should be provided which will cut off the gas supply if the draught falls below a pre-set minimum standard for safe operation of the appliance, and prevent the gas supply being re-established unless safe to do so. The advice of the appliance/flue system manufacturer should be sought, as necessary, in respect of interlock design requirements and reference should be made to appropriate standards, e.g. concerning provision of manual reset facilities and interlocks with flame proving devices. See also section 32 and associated ACOP/guidance concerning flue dampers.

(5) *No person shall install a flue other than in a safe position.*

153 A flue (including any terminal) should be installed in a position which ensures that it will operate effectively and that products of combustion will safely disperse and not present a hazard to any person, whether in the premises in which the associated appliance is installed (e.g. by being located a safe distance from vents and openable windows), or in adjoining/neighbouring premises. The location needs to take into account any possible developments in neighbouring property, e.g. building extensions. Any flue should therefore be

Ordinance

27(2) (3)

Guidance

Ordinance
27(4)

Guidance

Ordinance
27(5)

ACOP

Guidance

sited so as to discharge at a safe distance from any boundary with adjoining premises (see section 8 and Appendix 1); reference should be made to requirements in Building Regulations and appropriate standards, as applicable.

Section 28

Access

Ordinance
28

No person shall install a gas appliance except in such a manner that it is readily accessible for operation, inspection and maintenance.

Guidance

154 Minimum clearance distances for operation, inspection and maintenance purposes are normally specified in manufacturer's instructions for installation of appliances.

Section 29

Manufacturer's instructions

Ordinance
29

Any person who installs a gas appliance shall leave for the use of the owner or occupier of the premises in which the appliance is installed all instructions provided by the manufacturer accompanying the appliance.

Guidance

155 The manufacturer's instructions to accompany appliances will provide information relating to new appliances covering issues such as safe installation, operation and maintenance.

Section 30

Room-sealed appliances

Ordinance

(1) No person shall install a gas appliance in a room used or intended to be used as a bathroom or a shower room unless it is a room-sealed appliance.

(2) No person shall install a gas fire, other gas space heater or a gas water heater of more than 14 kilowatt gross heat input in a room used or intended to be used as sleeping accommodation unless the appliance is a room-sealed appliance.

(3) No person shall install a gas fire, other gas space heater or a gas water heater of 14 kilowatt gross heat input or less in a room used or intended to be used as sleeping accommodation and no person shall install an instantaneous water heater unless (in each case) -

(a) it is a room-sealed appliance; or

(b) it incorporates a safety control designed to shut down the appliance before there is a build up of a dangerous quantity of the products of combustion in the room concerned.

(4) The references in subsections (1) to (3) to a room used or intended to be used for the purpose therein referred to includes a reference to -

(a) a cupboard or compartment within such a room; or

(b) a cupboard, compartment or space adjacent to such a room if there is an air vent from the cupboard, compartment or space into such a room.

30(1) (4)

Guidance

156 Under section 30(2), non-room-sealed appliances used for water heating, space heating and central heating of 14 kW or more gross heat input should not be installed in accommodation designed for sleeping purposes such as bedrooms, bed-sitting rooms and the sleeping areas of caravans. However, such heating appliances, of less than 14 kW gross heat input, may be fitted in these rooms/areas provided they incorporate a device which turns off the gas supply before a dangerous level of fumes can build up (section 30(3)). An instantaneous water heater, which is not room-sealed, may not be installed in any room unless it incorporates such a device.

157 The prohibitions in section 30 each extend to any cupboard or compartment which is accessed from the accommodation or room concerned (see section 30(4)). They also extend to any cupboard, compartment (e.g. cubicle) or space adjoining the accommodation or room concerned, where ventilation for safe operation of the appliance is provided via the accommodation or room concerned. Spaces adjoining the accommodation or room concerned, which are provided with ventilation for safe operation of an appliance from another source, are not included in the prohibition. The rooms subject to the restrictions in section 30 are not only those actually being used as bathrooms, shower rooms or sleeping accommodation, but also those known to be intended for such use, at the time when the appliance is installed. The references to 'bathroom' and 'shower room' in this section include any room not purpose-built as such, but containing a functioning bath or shower, and the restrictions on appliance installation apply accordingly.

158 The prohibitions in section 30 also extend, in certain situations, to appliances fitted in rooms converted, or intended to be converted, by landlords into sleeping accommodation (see section 36(11)-(12)).

Section 31

Suspended appliances

Ordinance
31

No person shall install a suspended gas appliance unless the installation pipework to which it is connected is so constructed and installed as to be capable of safely supporting the weight imposed on it and the appliance is designed to be so supported.

Guidance

159 The installation of appliances by suspension from installation pipework should be avoided, wherever practicable. Where this approach has to be considered, it should be ensured that the appliance is suitable for installation in this way and that the pipework is properly supported and capable of safely withstanding the weight imposed. Reference should be made to the appliance manufacturer instructions.

Section 32

Flue dampers

Ordinance

(1) *Any person who installs an automatic damper to serve a gas appliance shall -*

(a) ensure that the damper is so interlocked with the gas supply to the burner that burner operation is prevented in the event of failure of the damper when not in the open position; and

(b) immediately after installation examine the appliance and the damper to verify that they can be used together safely without constituting a danger to any person.

32(1) – (2)

(2) *No person shall install a manually operated damper to serve a domestic gas appliance.*

Ordinance
32(3)

(3) No person shall install a domestic gas appliance to a flue which incorporates a manually operated damper unless the damper is permanently fixed in the open position.

Guidance

160 Reference should be made to appropriate standards and appliance manufacturer instructions (see Appendix 4).

161 An automatic damper may be used with a gas appliance subject to conditions in section 32(1) being satisfied. A damper system meeting these requirements will both prevent gas being supplied to the burner unless the damper is in the fully open position and provide for adequate pre-ignition purging and burner post-purging on flame failure; purging is particularly important for enclosed appliances where ignition of an unburned gas/air mixture in the combustion system has the potential to cause a serious explosion. See also paragraph 152 concerning power-operated flue systems.

162 The fitting of a manually operated damper system to serve a domestic gas appliance is prohibited under section 32(1) because, although it is possible to interlock the damper with the gas supply, an assured means of purging is not generally possible with such a system (see paragraph 161). Section 32(3) makes provision for an appliance to be fitted to an existing flue incorporating a manual damper, but only where the damper is permanently fixed in the open position. A manual damper may, for instance, often be present in a hearth used for burning coal or other solid fuel. Any such damper should be removed (this is often necessary for 'flame effect' fires), or permanently secured in the fully open position, so as to protect against the possibility of interference by a third party (such as the occupant) or of the damper falling into a closed position, e.g. as a result of corrosion damage.

Section 33

Testing of appliances

Ordinance

(1) Where a person installs a gas appliance at a time when gas is being supplied to the premises in which the appliance is installed, he shall immediately thereafter test its connection to the installation pipework to verify that it is gastight and examine the appliance and the gas fittings and other works for the supply of gas and any flue or means of ventilation to be used in connection with the appliance for the purpose of ascertaining whether –

- (a) the appliance has been installed in accordance with this Ordinance;*
- (b) the operating pressure is as recommended by-*
 - (i) the supplier of the gas to the appliance, or some other properly qualified person, in the case of an appliance converted for use with a mixture of liquefied petroleum gas and air, or*
 - (ii) the manufacturer of the appliance, in any other case,*
- (c) the appliance has been installed with due regard to any manufacturer's instructions provided to accompany the appliance; and*
- (d) all gas safety controls are in proper working order.*

33(1)

ACOP

163 Testing procedures should be in accordance with appropriate standards (see Appendices 1 and 4).

Ordinance
33(2)

(2) *Where a person carries out such testing and examination in relation to a gas appliance and adjustments are necessary to ensure compliance with the requirements specified in paragraphs (a) to (d) of subsection (1), he shall either carry out those adjustments or disconnect the appliance from the gas supply or seal off the appliance from the gas supply with an appropriate fitting.*

ACOP

164 Once the commissioning of an appliance is started, it should be either completed in full, leaving the appliance in a safe working condition, or the appliance should be disconnected or the gas supply to the appliance sealed off with an appropriate fitting, until tests and examinations can be fully completed at a later date. See also definition of 'appropriate fitting' in section 49(1).

Guidance

165 In addition to disconnection/sealing off from the gas supply as in paragraph 164, a label needs to be attached to any appliance which has not been fully commissioned, indicating this to be the case and that appliance should not be re-connected to the gas supply, or the appropriate fitting sealing off the gas supply to the appliance removed, until the procedure has been safely completed. Where an appliance is disconnected, the outlet of every pipe to which it was connected should be sealed off in accordance with section 6(3).

Ordinance
33(3)

(3) *Where gas is not being supplied to any premises in which any gas appliance is installed -*
(a) *no person shall subsequently permit gas to pass into the appliance unless he has caused such testing, examination and adjustment as is specified in subsections (1) and (2) to be carried out; and*
(b) *a person who subsequently provides a gas supply to those premises shall, unless he complies with paragraph (a), ensure that the appliance is sealed off from the gas supply with an appropriate fitting.*

ACOP

166 A person who allows gas to flow into any appliance should ensure that gas fittings are purged and tested for safety, or the supply is sealed off with a fitting to the appropriate standard (see also definition of 'appropriate fitting' in section 49(1)).

Guidance

167 This section applies when a premises is first being supplied with gas. In some cases, a gas supply may be provided some time before any installation work is done, or vice versa. Where this occurs, the supply or appliance should be properly capped so that no third party, e.g. the occupant, can easily interfere with it. The person finally connecting the supply to the appliance is responsible for testing and purging the system and appliance in accordance with sections 22 and 3 3(1)-(2).

168 This section does not apply where gas has been temporarily cut off from an appliance, e.g. where the emergency control has been shut off or an over/under pressure valve has operated. Neither does it cover situations merely involving a change in supplier of gas to a premises.

Section 34

Use of appliances

Ordinance
34(1) (2)

(1) *The responsible person for any premises shall not use a gas appliance or permit a gas appliance to be used if at any time he knows or has reason to suspect that it cannot be used without constituting a danger to any person.*

(2) *For the purposes of subsection (1), the responsible person means the occupier of the premises, the owner of the premises and any person with authority for the time being to take appropriate action in relation to any gas fitting therein.*

169 A responsible person must not use or allow the use of any appliance which it is known or suspected could constitute a danger to any person, and in particular danger of fire/explosion arising from gas leakage or carbon monoxide poisoning arising from inadequate flueing arrangements or fixed ventilation. An unsafe/dangerous appliance in this context means any appliance where both (a) and (b) which follow pertain:

- (a) **there is a design, construction, installation, modification, servicing/maintenance deficiency or other fault (e.g. maladjustment) in the gas appliance, associated flue/ventilation arrangement or a gas fitting/other works for the supply of gas to the appliance, which has, or is likely to result in:**
 - (i) **incomplete combustion of gas; or**
 - (ii) **removal of products of combustion not being safely carried out; or**
 - (iii) **insufficient oxygen being available for the occupants of the room/space in which the appliance is located; or**
 - (iv) **an accidental gas leakage; or**
 - (v) **other danger, e.g. of fire;**
- (b) **the resulting leakage, inadequate combustion, inadequate removal of the products of combustion, insufficiency of oxygen or other danger has caused or is likely to cause death or serious injury.**

Guidance

170 Users and other persons with control over the use of gas appliances (as specified in section 34(2)) are required not to use or permit use of any gas appliance they know or suspect to be unsafe, e.g. when they have been told so by a competent gas installer. In the case of rented property this duty extends to tenants, landlords and managing agents. The requirement applies only to 'unsafe' appliances (see paragraph 169), it does not cover those which are merely 'sub-standard' and considered in need of minor improvements to bring them up to current standards.

171 General examples of the kinds of fault described in paragraph 169 which, if likely to cause death or serious injury, would be regarded as an 'unsafe' appliance, are given in Appendix 2. However, the level of risk, i.e. whether an appliance is 'dangerous' in a particular case, has to be a matter for judgement by a competent person, based on their knowledge and experience, and taking into account the specific circumstances. Further information is given in industry guidance on 'unsafe situations' procedures, e.g. as issued by the Gas Safe Register. See also section 37 and associated guidance, concerning action in event of a gas escape.

172 If a gas installer discovers an unsafe gas appliance, the user and, if different, the owner of the appliance (in rented accommodation, the landlord; or managing agent, where the landlord is absent or has entrusted the agent to deal with gas safety matters on his behalf) should be informed, in writing, that the appliance is unsafe and that continued use is an offence. The installer should seek to persuade the user/owner to allow them to repair or disconnect the appliance but the installer has no legal power to take such action if the user/owner disagrees. If consent for such action is not obtained, the appliance should be suitably labeled as being unsafe and that continued use is an offence; with the agreement of the responsible person, the appliance shut-off device (if one is fitted) should be closed. Irrespective of any action taken by the gas installer, the obligation rests on the responsible person(s) not to use, or allow the use of any unsafe gas appliance.

Guidance

173 Where agreement of the responsible person cannot be obtained for repair or disconnection of an unsafe appliance, the installer is advised, to contact the Gas Emergency Telephone 749000. In an emergency situation the gas supplier has powers to enter property and take action to avert danger to life (and property). In the case of LPG, a contractual right of entry may exist between the supplier and customer.

174 A report will generally be required where disconnection of an appliance is considered to be necessary, as described in paragraph 172.

Ordinance

(3) Any person engaged in carrying out any work in relation to a gas main, service pipe, service pipework, gas storage vessel or gas fitting who knows or has reason to suspect that any gas appliance cannot be used without constituting a danger to any person shall forthwith take all reasonably practicable steps to inform the responsible person for the premises in which the appliance is situated and, where different, the owner of the appliance or, where neither is reasonably practicable the supplier of gas to the appliance.

34(3) (4)

(4) In subsection (3), the expression "work" shall be construed as if, in the definition of "work" in section 49(1), every reference to a gas fitting were a reference to a gas main, service pipe, service pipework, gas storage vessel or gas fitting.

Guidance

175 Section 34(3) places a duty on a person engaged in any work specified in section 34(4), e.g. a gas installer, who becomes aware of an unsafe/dangerous appliance, to take steps to inform the responsible person for the premises concerned, such as the landlord/managing agent of rented accommodation, and (where different) the gas appliance owner, i.e. as described in paragraph 172. Where none of these persons is available or readily contactable, the gas supplier or transporter (as appropriate) is required to be notified to enable any necessary action to be taken to make the appliance safe. Details of the gas supplier/transporter emergency gas service may be found on a notice near the meter, or where there is no meter, the emergency control (see sections 9 and 15). If there is no notice, or the relevant information is not given, the information may be found in the telephone directory.

Part VI Maintenance, Escapes of Gas etc.

Section 35

Duties of employers and self-employed persons

Ordinance
35

It is the duty of every employer or self-employed person to ensure that any gas appliance, installation pipework or flue installed at any place of work under his control is maintained in a safe condition so as to prevent risk of injury to any person.

Guidance

176 The duty to maintain appliances, flues and installation pipework is linked to other related workplace safety responsibilities, e.g. under the Health and Safety at Work (General) (Guernsey) Ordinance 1987; this provision only applies to workplaces falling within the scope of the Ordinance (see sections 2(4)-(5)), but similar duties are imposed by separate safety legislation in other places, e.g. factories (see paragraph 15). The duty under section 35 extends to certain mobile and portable appliances, e.g. **LPG** space heaters (see definition of gas appliance in section 49(1)). Maintenance of service pipework is not covered by section 35, but duties in this respect are applied under the general provisions of the Health and Safety at Work (General) (Guernsey) Ordinance 1987.

177 Effective routine maintenance normally involves an ongoing programme of regular/periodic examinations, and remedial action, as necessary. For specific

Guidance

requirements reference should be made, as appropriate, to manufacturer instructions for servicing of appliances. Where detailed information is not available, the installer may need to check the physical condition of the appliance, air vent(s), flue and installation pipework for deterioration, carry out performance tests, and take the necessary remedial action. For appliances and flues, maintenance should address the points in Appendix 1; additional aspects may need to be addressed in a particular case, e.g. dismantling and cleaning burners and inspection and/or cleaning of any combustion fan, as appropriate (see also section 26(9) for tests/examinations required after any work is done on an appliance). In the case of some gas equipment and fittings (e.g. flexible pipework, certain protective devices etc), where inadequate maintenance could cause failure in a dangerous way, a formal system of planned preventative maintenance might be necessary. This aims to prevent failures occurring while equipment is in use and involves a system of written instructions, e.g. based on appliance/fitting manufacturer's instructions, used to initiate inspection, testing and periodic replacement or refurbishing of components or equipment before they reach the end of their useful life.

178 Where non-domestic premises such as public houses or offices are leased as workplaces, employer's duties under section 35 may interface with landlord's responsibilities under section 3 of the Health and Safety at Work (General) (Guernsey) Ordinance 1987, e.g. for maintenance of gas heating appliances. In these situations, close co-operation and clear allocation of responsibilities is essential to ensure that requirements are fully met and no gaps in safety cover can arise. The landlord and tenant (i.e. employer/self-employed person) may come to a contractual arrangement in such cases, and such action is recommended to ensure responsibilities are clearly and unambiguously defined (see also paragraph 185 concerning duties in relation to mixed domestic/non-domestic premises).

Section 36

Duties of landlords

Ordinance

(1) *In this Ordinance -*

"landlord" means -

- (a) *where the relevant premises are occupied under a lease, the person for the time being entitled to the reversion expectant on that lease; and*
- (b) *where the relevant premises are occupied under a licence, the licensor, except that where the licensor is himself a tenant in respect of those premises, it means the person referred to in paragraph (a);*

"lease" means -

- (a) *a lease for a term of less than 7 years;*
- (b) *a tenancy for a periodic term; and*
- (c) *any right to occupy the relevant premises during any period in which the execution of an order for eviction from the premises is suspended by order of the Royal Court under the Stay of Evictions Laws 1946 and 1954, but only where the stay of eviction is granted to a person who was a tenant or sub-tenant of the premises under a lease or tenancy referred to in paragraph (a) or (b),*

36(1)

and in determining whether a lease is one which falls within paragraph (a) -

(i) any part of the term which falls before the grant shall be left out of account and the lease shall be treated as a lease for a term commencing with the grant;

(ii) a lease which is determinable at the option of the lessor before the expiration of 7 years from the commencement of the term shall be treated as a lease for a term of less than 7 years; and

(iii) a lease (other than a lease to which paragraph (b) applies) shall not be treated as a lease for a term of less than 7 years if it confers on the lessee an option for renewal for a term which, together with the original term, amounts to 7 years or more;

"relevant gas fitting" means -

(a) any gas appliance (other than an appliance which the tenant is entitled to remove from the relevant premises) or any installation pipework installed in any relevant premises; and

(b) any gas appliance or installation pipework which, directly or indirectly, serves the relevant premises and which -

(i) is installed in any part of premises in which the landlord has an estate or interest; or

(ii) is owned by the landlord or is under his control,

but it does not include any gas appliance or installation pipework exclusively used in a part of the premises occupied for non-residential purposes.

"relevant premises" means premises or any part of premises occupied, whether exclusively or not, for residential purposes in consideration of money or money's worth, under -

(a) a lease; or

(b) a licence;

"tenant" means a person who occupies relevant premises and who is -

(a) where the relevant premises are occupied under a lease, the person for the time being entitled to the term of that lease; and

(b) where the relevant premises are occupied under a licence, the licensee;

(2) Every landlord shall ensure that there is maintained in a safe condition

(a) any relevant gas fitting; and

(b) any flue which serves any relevant gas fitting,

so as to prevent the risk of injury to any person in lawful occupation of relevant premises.

Ordinance

(3) *Without prejudice to the generality of subsection (2), a landlord shall -*

- (a) *ensure that each appliance and flue to which that duty extends is checked for safety within 12 months of being installed and at least once in any 12 month period (whether beginning before or after the commencement of this Ordinance)*
- (b) *in the case of a lease commencing after the commencement of this Ordinance, and without prejudice to paragraph (a), ensure that each appliance and flue to which that duty extends is or has been checked for safety within 12 months before the lease commences or within 12 months of being installed, whichever is later; and*
- (c) *ensure that a record in respect of any appliance or flue so checked is made and retained for a period of 2 years from the date of the check, which record shall include the following information -*
 - (i) *the date on which the appliance or flue was checked;*
 - (ii) *the address of the premises at which the appliance or flue is installed;*
 - (iii) *the name and address of the landlord of those premises (or, where appropriate, his agent);*
 - (iv) *a description of and the location of each appliance or flue checked;*
 - (v) *any defect identified;*
 - (vi) *any remedial action taken;*
 - (vii) *confirmation that the check complies with the subsection (9);*
 - (viii) *the name and signature of the individual carrying out the check; and*
 - (ix) *if appropriate, the registration number with which that individual, or his employer, is registered with a body approved by the Department for the purposes of section 3(3).*

(4) *Every landlord shall ensure that any work in relation to a relevant gas fitting or any check of a gas appliance or flue carried out pursuant to subsection (2) or (3) is carried out by, or by an employee of, a member of a class of persons approved by the Department for the purposes of section 3(3).*

(5) *The record referred to in subsection 3(c) shall be made available upon request and upon reasonable notice for the inspection of any person in lawful occupation of relevant premises who may be affected by the use or operation of any appliance to which the record relates.*

36(2) – (5)

Ordinance

(6) *Notwithstanding subsection (5), every landlord shall ensure that -*

- (a) *a copy of the record made pursuant to the requirements of subsection 3(c) is given to each existing tenant of premises to which the record relates within 28 days of the date of the check; and*
- (b) *a copy of the last record made in respect of each appliance or flue is given to any new tenant of the premises to which the record relates before that tenant occupies those premises save that, in respect of a tenant whose right to occupy those premises is for a period not exceeding 28 days, a copy of the record may instead be prominently displayed within those premises.*

(7) *Where there is no relevant gas fitting in any room occupied or to be occupied by the tenant in relevant premises, the landlord may, instead of ensuring that a copy of the record referred to in subsection (6) is given to the tenant, ensure that there is displayed in a prominent position in the premises (from such time as a copy would have been required to have been given to the tenant under that subsection), a copy of the record with a statement endorsed on it that the tenant is entitled to have his own copy of the record on request to the landlord at an address specified in the statement; and on any such request being made, the landlord shall give the tenant a copy of the record as soon as is practicable.*

(8) *A copy of the record given to a tenant pursuant to subsection (6) (b) need not contain a copy of the signature of the individual carrying out the check if the copy of the record contains a statement that another copy containing a copy of that signature is available for inspection by the tenant on request to the landlord at an address specified in the statement; and, on any such request being made, the landlord shall make such a copy available for inspection as soon as is practicable.*

(9) *A safety check carried out pursuant to subsection (3) shall include, but shall not be limited to, an examination of the matters referred to in paragraphs (a) to (d) of section 26(9).*

(10) *Nothing done or agreed to be done by a tenant of relevant premises or by any other person in lawful occupation of them in relation to the maintenance or checking of a relevant gas fitting or flue in the premises (other than one in part of the premises occupied for non-residential purposes) shall be taken into account in determining whether a landlord has discharged his obligations under this section (except in so far as it relates to access to that gas fitting or flue for the purposes of such maintenance or checking).*

36(6)-(10)

Application

Guidance

179 Section 36 places important duties on most landlords of domestic property to ensure that gas appliances and flues are maintained in a safe condition, annual safety checks are carried out, and records are kept and issued (or in certain cases displayed) to tenants.

180 The meaning of 'landlord' in section 36(1) effectively applies the requirements to a wide range of accommodation (occupied under a licence, or a lease as defined in the Ordinance), including residential premises provided for rent by the States of Guernsey, housing associations, private sector landlords, housing co-operatives and hostels. Rooms let in bed-sit accommodation, private households, and bed and breakfast accommodation are also covered, as is rented holiday

accommodation such as chalets, cottages, flats and caravans. The duties apply to landlords providing residential accommodation for occupation by others on the basis of a lease for less than seven years, a tenancy agreement for a periodic term, or a licence. Section 36 does not apply simply because a lease longer than seven years has partly expired, leaving a residue of less than seven years duration. Properties are not brought within scope merely because they are occupied under the terms of a mortgage, but premises subject to shared ownership may be caught if other conditions are satisfied.

181 Landlords using agents to manage properties need to ensure that the management contract clearly specifies who is responsible for carrying out the maintenance and safety check duties, and keeping associated records. Where a breach of this Ordinance by a landlord is shown to arise from the act or default of a managing agent, the agent may be liable to legal action under this Ordinance by virtue of section 26 of the Health and Safety at Work (General) (Guernsey) Ordinance, 1987, regardless of whether or not separate proceedings are taken against the landlord.

182 In the case of sub-let accommodation, the 'original' landlord may retain duties which overlap with those acquired by the person who sub-lets. In these cases, duty holders need to take effective steps (e.g. by close co-operation, and clear allocation of responsibilities under contractual arrangements) to ensure requirements are fully met. However, licensors (i.e. 'sub-letters') of premises who are themselves tenants of those premises are not regarded as landlords in this context and do not have obligations under section 36. This means that a tenant allowing others to share accommodation in return for 'rent' does not acquire duties under the section; these remain with their landlord.

183 Section 36(10) requires landlords generally to act independently of tenants in meeting their obligations under section 36 (except with regard to gaining access for carrying out maintenance/safety checks). Duties, apart from those relating to a relevant gas fitting or associated flue in part of premises occupied for non-residential purposes (see paragraph 185), may not be delegated in any way to a tenant, e.g. by the landlord asking a tenant to make the necessary arrangements for work to be carried out. Further, a tenancy agreement, such as a full repairing and insuring lease, cannot be used to transfer these responsibilities to a tenant. However, tenants need to co-operate as necessary, e.g. by promptly reporting any appliance, flue or installation pipework defect to the landlord or managing agent.

184 All reasonable steps should be taken by landlords (including through tenancy agreements) to ensure access to property for safety checks and maintenance work to be done, this may involve giving written notice to a tenant (e.g. by recorded delivery) explaining the reasons why access is required and requesting arrangements to be made (at a mutually agreed date/time); follow-up action, including personal visits, might be required, for instance, if there is no response to written request. Tenants should co-operate with landlords in allowing the necessary access to their accommodation. However, landlords should keep a record of their action in case a tenant refuses entry and it is necessary to demonstrate the steps taken to discharge their duties (see section 47). Action to gain access does not involve making arrangements for forced entry into property.

185 Section 36(10) allows flexibility for landlords to make arrangements, e.g. by contract, with tenants for discharging maintenance/safety check duties in respect of a relevant gas fitting or flue installed in part of premises occupied for non-residential premises (see paragraphs 194-196). This means, for instance, where a gas appliance, such as a central heating boiler, is installed in the 'bar area' of a public house, the landlord of the building (e.g. brewery company) may make contractual arrangements for the bar manager to ensure requirements under section 36 are met, even where the manager is a tenant of a residential part of the premises, such as a flat, also served by the appliance. In the case of such mixed residential/non-residential property, where

there may be an interface between landlord's duties, e.g. for maintenance of gas appliances (under section 36 of the Ordinance and section 3 of the Health and Safety (General) (Guernsey) Ordinance, 1987) and those of employers/self-employed persons (under section 35), close co-operation and clear definition of duties in this way is essential to ensure requirements are fully met and there are no gaps in safety cover (see also paragraph 178).

186 Duties under section 36 do not apply to any gas appliance or installation pipework used exclusively in a part of premises occupied for non-residential purposes. However, landlord's duties for maintenance under section 3 of the Health and Safety (General) (Guernsey) Ordinance 1987, may in some cases extend to such equipment, and where the part of the premises concerned is a workplace, maintenance requirements under section 35, together with relevant duties under the HSW Ordinance are applicable. Any gas appliance or installation pipework installed in a part of premises used for non-domestic purposes, but (also) serving residential accommodation (e.g. a central heating boiler) is regarded as a 'relevant gas fitting' and therefore covered by section 36 (see paragraphs 194-195 but allowance is made for display of safety check records in some cases (paragraph 193 refers).

Maintenance and safety check duties

187 Section 36 imposes two main duties on landlords, concerning (a) annual safety checks on gas appliances/flues, and (b) ongoing maintenance, it is important to recognise that, although related, these duties are separate and distinct (e.g. see paragraph 190). Unlike most of the other sections, both duties extend to certain mobile and portable appliances, e.g. LPG cabinet heaters (see definition of gas appliance in section 49(1)); further information on appliances, flues and pipework covered is given in paragraphs 194-196. Although section 36 does not apply to any gas appliance a tenant is entitled to remove from relevant premises (e.g. an appliance owned by a tenant), in discharging duties, landlords need to take account of any appliance left by a tenant (i.e. when a lease comes to an end) which the landlord decides to retain in the premises.

188 Section 36(2) requires gas appliances, flues and installation pipework to be maintained in a safe condition. Effective maintenance of gas appliances normally involves an ongoing programme of regular/periodic inspections, together with any necessary remedial work. Specific maintenance requirements are sometimes defined in manufacturer instructions for servicing appliances. In the absence of such information, a gas installer may need to check the physical condition of the appliance, installation pipework, air vent(s) and any flue for deterioration, carry out performance tests, and take the necessary remedial action. Appendix 1 gives information on general points to be addressed for appliances and flues but additional aspects may require attention in a particular case, e.g. dismantling/cleaning of burners and inspection/cleaning of any combustion fan, as appropriate.

189 The appliance/flue safety check under section 36(3) (a) must be carried out on an 'annual' basis; for any appliance/flue installed in or serving any 'relevant premises' before this Ordinance came into force, the first safety check under this section must be made within one year of a previous check made or where no such check was made, within one year of the date the appliance was installed. Section 36(3) (b) provides for situations where a 'lease' commences (after this Ordinance came into force), subsequent to a period when any gas appliance/flue in the premises concerned was not subject to section 36(3) (a), e.g. because the property was left unoccupied. In such cases, a safety check needs to be (or have been) carried out within 12 months prior to the commencement date of the lease or within 12 months of the date when the appliance or flue was installed, whichever is later. Subsequent safety checks must then be carried out at intervals of not more than one year, starting from the date of that check, for the duration of the lease. Although the landlord's

safety check under section 36(3)(a) may be carried out at any time within one year of the appliance installation date (and within one-year intervals thereafter), it is important to recognise that this check is additional to examinations under section 26 (e.g. when an appliance is first installed or subsequent work is done), and checks required for ongoing maintenance purposes under section 36(2), for instance, before a new tenancy is commenced (see paragraph 197).

190 The safety check needs to address, as a minimum, the points given in section 26(9) - see Appendix 1. It may need to include extra examinations/tests in a particular case; this will normally be for the installer to assess. Although it is recommended that an annual service inspection includes the points required by a safety check, landlords should not assume that this is the case, neither should it be assumed that carrying out annual safety checks will be sufficient to provide effective maintenance. The advice of a competent gas installer should be sought where necessary on action required. Installation pipework is not covered by the annual safety check but it is recommended that a test for soundness on the whole gas system, including installation pipework, together with visual examination (as far as is reasonably practicable) of the pipework, be made at the same time as the safety check. Landlords should also ensure that installation pipework is properly examined/tested whenever any damage or associated problem, e.g. suspected gas leak, is reported by a tenant.

191 The safety check should be carried out by someone who is, or is employed by a member of a class of persons approved by the Department under section 3(3), e.g. a Gas Safe registered gas installer, whether or not it includes 'work' as defined in section 49(1) (this will normally be the case). The safety check record should contain the information specified in section 36(3)(c), for example, the Gas Safe Register Gas Safety Record Form may be used for this purpose. The appliance/flue covered by a safety check should be clearly and unambiguously identified, e.g. by make or model, as necessary. A safety check record should never be issued unless and until all the required tests/examinations have been completed. The installer should investigate any evidence of unsafe operation and report to the responsible person(s), see section 34. A landlord should take prompt action to correct any defect shown on a safety check record, which is not remedied at the time of the safety check; and where there is any suspicion that an appliance may be dangerous, the landlord or other responsible person for the premises should ensure that the appliance concerned is not used until the defect(s) have been remedied (see section 34).

192 Landlords should maintain a record of each safety check, a copy of which should be issued to any existing tenant within 28 days of the check and, in the case of any new tenancy, to the prospective tenant prior to occupation of the premises. In addition, section 36(5) requires the safety check record or a copy to be made available on request (at reasonable notice) for inspection by tenants concerned. In case of a new tenancy, section 36(8) provides for a copy of a record not containing the signature of the installer, e.g. a computerised record, to be issued by the landlord. However, the tenant has the right to inspect a signed copy, on request.

193 For occupancies under 28 days, such as rented holiday accommodation, a copy of the safety check record may be posted in a prominent position in the premises, e.g. mobile home or caravan, concerned. In relevant premises, e.g. houses in multiple occupation etc, where a gas appliance is not located in any room occupied or to be occupied by a tenant (whether for exclusive or 'common' use such as a communal living room, hallway, kitchen or bathroom), a similar option is available under section 36(7) to display the safety check record in a prominent position. This would, for example, apply to a gas boiler serving a central heating system, which is located in a boiler house or compartment separate to any room occupied by a tenant. In such cases, the notice should be posted centrally; it should indicate that an individual copy of the safety check is available to any tenant on request, and specify where this may be obtained. Landlords need to inform tenants of the location of this notice and of the option of obtaining an individual copy of a safety check record, at the start of any new tenancy. They should ensure that any record displayed under

Guidance

section 36(6) or (7) is maintained in a legible condition.

194 In addition to gas appliances installed in 'relevant premises' (see section 36(1)), the safety check duty applies to any appliance, e.g. a central heating boiler, directly or indirectly serving relevant premises. This includes appliances which, in addition, may serve premises, or parts of premises, otherwise excluded from section 36 - see definition of 'relevant gas fitting'. Such appliances may include those installed in areas of property where there is "common" occupancy (i.e. by tenants covered by this Ordinance and possibly other persons as well), such as 'communal' living rooms, kitchens and bathrooms in houses in multiple occupation. However, any gas appliance exclusively used in a part of premises occupied for non-residential purposes is not covered. See also paragraph 185 concerning provisions for allowing landlords to make arrangements with tenants for discharging maintenance/safety check duties in respect of a relevant gas fitting or flue installed in part of premises occupied for non-residential purposes.

195 The maintenance duty covers the same range of appliances as the safety check requirement but also extends to installation pipework, and includes appliances/pipework serving relevant premises, but not any exclusively used in 'non-residential' areas. As with appliances, this means that pipework forming part of a system which also serves premises outside the scope of the section may be covered, as may that serving certain gas appliances, not themselves subject to section 36, e.g. appliances owned by tenants but installed in relevant premises.

196 Both the maintenance and safety check duties cover flues, including those serving gas appliances installed in relevant premises, as well as flues fitted to appliances directly or indirectly serving the relevant premises. All sections of a flue, i.e. both those specific and local to appliances as well as 'common' parts of flues (e.g. associated with Se- and U- ducts, and Shunt flues) need to be covered under maintenance and safety check duties. Landlords should make appropriate arrangements with tenants and occupiers of any other property through which a flue passes, to enable access for inspection, tests and maintenance work to be carried out (see paragraph 184 and Appendix 1).

197 When tenants vacate premises, landlords need to ensure that gas fittings/appliances are safe before re-letting. Tenants may have removed appliances unsafely (e.g. leaving open-ended pipes, having shut off the emergency control valve), or left their appliances in place. Appropriate checks should be carried out and any unsafe equipment rectified or removed before a new tenancy begins - see also paragraphs 187 and 189. It is also recommended that installation pipework be inspected and tested for soundness before property is re-let.

Ordinance

36(11) (12)

(11) Every landlord shall ensure that in any room occupied or to be occupied as sleeping accommodation by a tenant in relevant premises there is not fitted a relevant gas fitting of a type the installation of which would contravene section 30(2) or (3).

(12) Subsection (11) does not apply in relation to a room which since before commencement of this Ordinance has been occupied or intended to be occupied as sleeping accommodation.

Guidance

198 Under section 36(11)-(12), a landlord must ensure that where a room is, or is intended to be used as sleeping accommodation, there is no gas appliance fitted, the installation of which would be prohibited under section 30(2) or (3). This means, for instance, that any existing appliance of the type specified there, e.g. certain gas heaters and instantaneous water heaters, should be removed from any room which is to be converted into sleeping accommodation. However, these requirements do not apply retrospectively, and relate only to those conversions to rooms on or after the date the Ordinance came into force.

Section 37

Escape of gas

Guidance

199 This section is primarily restricted to LPG and certain other fuel gases (see definition of 'gas' in section 49(1)) which do not consist wholly or mainly of methane. The requirements also extend to an actual or suspected escape or emission of fumes, i.e. products of combustion containing carbon monoxide (CO), from an appliance using a gas (see section 37(7)). Where a gas escape or emission of fumes arises from a dangerous appliance, requirements under section 34 also need to be met. Any gas escape or incident involving emission of carbon monoxide from a dangerous appliance should be reported.

200 Section 37 extends to certain premises, e.g. factories, mines and quarries, otherwise excluded from the Ordinance. For the meaning of 'supplier', reference should be made to section 49(1); see also section 37(6) concerning sub-contracting to other emergency service providers.

Ordinance

37(1)

(1) Where any gas escapes from any pipe of a gas supplier or from any pipe, other gas fitting or gas storage vessel used by a person supplied with gas by a gas supplier, the supplier of the gas shall, within 12 hours of being so informed of the escape, prevent the gas escaping (whether by cutting off the supply of gas to any premises or otherwise).

Guidance

201 Gas suppliers need to make arrangements to ensure that reports of emergencies can be received and responded to 24 hours a day. In order to avoid delays, responders to emergency calls need an outline script enabling them to:

- (a) establish the precise location of the emergency;
- (b) in case of a fuel gas escape:
 - (i) establish if and how the leak may be controlled, i.e. by isolating an emergency control or cylinder valve (s), as appropriate;
 - (ii) advise callers how to turn off the gas at the emergency control/cylinder valve (s) and confirm that this has been done; except where this may be dangerous, e.g. requiring entry into a confined space where there is a smell of gas, when the advice should be not to take such action but instead to vacate premises;
 - (iii) advise callers to open doors and windows to ventilate the property and not to smoke, or use electrical appliances/other sources of ignition;
- (c) establish whether there are fumes (escape of carbon monoxide into the room), and if it is possible to identify the appliance emitting the fumes;
- (d) advise callers where an escape of CO is suspected, of the immediate steps to be taken, i.e. to turn off appliances which may be emitting CO (all the appliances in the room/area, where the defective appliance cannot be identified), ventilate property to disperse CO and not to use the appliances concerned again until they have been checked by a competent gas installer who meets the requirements of section 3, e.g. who is Gas Safe registered.

202 In case of a fuel gas escape, the gas supplier should attend the emergency, as soon as is reasonably practicable after receiving a report of the escape. Once at the emergency, appropriate steps should be taken to bring the situation under control, and make it safe as quickly as possible. The 12-hour period specified in section 37(1) is the maximum time that should normally be taken to stop gas escaping.

Guidance

- 203 Gas suppliers need to ensure that they:
- (a) are registered, as appropriate, with a body approved by the Department under section 3, e.g. The Gas Safe Register, for work on gas fittings and installation pipework;
 - (b) employ an adequate number of competent operatives with sufficient knowledge, appropriate equipment, practical skill and experience to deal with all foreseeable emergency situations (see paragraph 20);
 - (c) establish written procedures for operatives to follow.
- 204 The primary duty on gas suppliers in the event of an emergency is to take action to ensure the situation is made safe. They need to:
- (a) respond to reports of fuel gas escapes and take action as necessary to make the situation safe by preventing gas from escaping; and/or
 - (b) respond to reports of suspected or actual CO escapes and advise on the action to be taken to make the situation safe.

Ordinance

(2) If the responsible person for any premises knows or has reason to suspect that gas is escaping into those premises, he shall immediately take all reasonable steps to cause the supply of gas to be shut off at such place as may be necessary to prevent further escape of gas.

(3) If gas continues to escape into those premises after the supply of gas has been shut off or when a smell of gas persists, the responsible person for the premises discovering the escape or smell shall immediately give notice of the escape or smell to the supplier of the gas.

(4) Where an escape of gas has been stopped by shutting off the supply, no person shall (other than in the course of repair) re-open the supply or cause or permit the supply to be re-opened, until all necessary steps have been taken to prevent a recurrence of the escape. until all necessary steps have been taken to prevent a recurrence of the escape.

37(2) – (4)

Guidance

205 Where a fuel gas escape is suspected or known to be occurring, the responsible person (see definition in section 49(1)) should take immediate action to cause the emergency control or gas cylinder shut-off valve (s), as appropriate, to be closed; except where this would be dangerous, e.g. requiring entry into a confined space where there is a smell of gas, when the premises should instead be evacuated. If gas continues to escape, the responsible person should immediately notify the supplier emergency gas service that there is a suspected leak of gas. In any case of a gas escape, doors and windows should be opened to ventilate the property and all sources of ignition, e.g. smoking or use of electrical equipment, should be avoided. The gas supply should not be reinstated until remedial action has been taken and appropriate checks made (e.g. that appliance isolation valves are closed, as appropriate) to avoid a further escape of gas.

206 In the case of a suspected escape of carbon monoxide (CO) the responsible person should turn off any appliances suspected of emitting CO, open doors and windows to ventilate the property and contact the gas supplier emergency service immediately. However, where a particular appliance is known to be the source of the escape, the responsible person should ensure that it is not used and contact someone who is, or is employed by a member of a Department approved class of persons under section 3(3), e.g. a Gas Safe registered installer, to repair, replace, or otherwise make safe the appliance (see also section 34).

Guidance

207 The name and means of contacting the supplier emergency gas service may be found on a notice near the meter, or where there is no meter, the emergency gas control (see sections 9 and 15, and associated guidance). If there is no notice, or the relevant information is not given, details of the gas supplier may be found in the telephone directory.

Ordinance

37(5)

(5) *In any proceedings for an offence under subsection (1) it is a defence for the supplier of the gas to prove that it was not reasonably practicable for him effectually to prevent the gas from escaping within the period of 12 hours referred to in that subsection, and that he did effectually prevent the escape of gas as soon as it was reasonably practicable for him to do so.*

Guidance

208 There may be circumstances, e.g. a major leak from a storage tank, when it may not be feasible to stop the gas escape within 12 hours. Gas suppliers will, however, need to ensure that the situation is brought under control and made safe as soon as is reasonably practicable and in any event within 12 hours, in order to meet the requirements of this section. Where it is not possible to stop leakage within 12 hours, the gas suppliers will need to demonstrate that they took all reasonable steps to do so.

Ordinance

37(6) (7)

(6) *Nothing in subsections (1) and (5) prevents the supplier of the gas appointing another person to act on his behalf to prevent an escape of gas supplied by that supplier.*

(7) *In this section any reference to an escape of gas from a gas fitting includes a reference to an escape or emission of carbon monoxide gas resulting from incomplete combustion of gas in a gas fitting, but, to the extent that this section relates to such an escape or emission of carbon monoxide gas, the requirements imposed on a supplier by subsection (1) are, where the escape or emission is notified to the supplier by the person to whom gas has been supplied, limited to advising that person of the immediate action to be taken to prevent the escape or emission and the need for the examination and, where necessary, repair of the fitting by a competent person.*

Guidance

209 The requirements of section 37 apply both to an escape of fuel gas and to suspected or actual emissions of fumes, i.e. carbon monoxide from an appliance using gas. This means that requirements in section 37 extend to an emission, or suspected emission of carbon monoxide from any appliance using 'gas' as defined in section 49(1), e.g. LPG or LPG air mix. However, the duty on gas suppliers in section 37(1) with regard to a report of CO escape/emission is restricted to providing advice on how to prevent the escape/emission (including identification of the faulty appliance/fitting (if possible) and action to isolate the gas supply) and on the need for examination, and where necessary, repair of the appliance/fitting by a competent person, e.g. a Gas Safe registered installer (see paragraph 201(c)-(d)).

Section 38

Use of antifluctuators and valves

Ordinance

38(1)(2)

(1) *Where a consumer uses gas for the purpose of working or supplying plant which is liable to produce pressure fluctuation in the gas supply such as to cause any danger to other consumers, he shall comply with such directions as may be given to him by the supplier of the gas to prevent such danger.*

(2) *Where a consumer intends to use for or in connection with the consumption of gas any gaseous substance he shall -*

- (a) *give to the supplier of the gas at least 14 days notice in writing of that intention; and*

Ordinance

- (b) *during such use comply with such directions as the supplier may have given to him to prevent the admission of such substance into the gas supply;*

and in this subsection "gaseous substance" includes compressed air but does not include any gaseous substance supplied by the supplier.

(3) Where a direction under subsection (1) or (2) requires the provision of any device, the consumer shall ensure that the device is adequately maintained.

(4) Any direction given pursuant to this section shall be in writing.

38(2)-(4)

Guidance

210 This section applies to consumers who use plant that may create pressure fluctuation in the gas supply (e.g. a compressor, engine or similar apparatus liable to produce a pressure below atmospheric in the gas main), or who intend to use in conjunction with gas another gaseous substance such as compressed air (for instance in gas/air mixing equipment or other process plant). The consumer should notify the gas supplier of intentions in either case (at least 14 days notice is specifically required under section 38(2)(a)), and is required to comply with directions given by the supplier for protection of the gas supply against possible pressure fluctuation, or introduction of extraneous gas, to prevent danger to other consumers. Any device, such as an antifluctuator, or non-return valve, specified by the gas supplier needs to be provided and maintained by the consumer.

211 The gas supplier is also empowered to disconnect, remove, test and replace any appliance/device required under this section, and to claim expenses from the consumer where the appliance is not found to be in proper order and repair.

Part VII Rights of Entry, Disconnection, Appeals etc

Section 39

Rights of Entry

Ordinance

Where a supplier of gas has reasonable cause to suspect –

- (a) that gas conveyed or supplied by him is escaping, or may escape, in any premises, or*
- (b) that gas conveyed or supplied by him which has escaped has entered, or may enter, any premises,*

any officer authorised by the supplier may, on production of some duly authenticated document showing his authority, with such other persons (if any) as may be necessary, enter the premises to carry out any work necessary to prevent the escape and take any other steps necessary to avert danger to life or property.

39

Guidance

212 If the gas supplier has reason to believe that there is a situation where gas is or may escape, in any premises, or has escaped and has or may enter any premises, an authorised officer may enter the premises on production of an authenticated document showing his authority.

That authorized person can also take with them any other person who would prove necessary to carry out any work to prevent the gas escape and may take other steps necessary, i.e. ventilating the property to negate the danger to life and property.

Section 40

Inspection, testing and disconnection, etc.

Ordinance

Any officer authorised by a supplier of gas may, on production of some duly authenticated document showing his authority, with such other persons (if any) as may be necessary –

- (a) enter any premises in which there is a service pipe connected with a gas main for the purpose of inspecting –
 - (i) any gas fitting on the premises,*
 - (ii) any flue or means of ventilation used in connection with any such gas fitting, and*
 - (iii) any service pipe or other apparatus on the premises which is used for the conveyance or supply of gas or which is connected with a gas main,**

- (b) where he so enters any such premises, examine or apply any test to any object mentioned in paragraph (a) and (where the object is a gas fitting) verify the supply of air available for it, with a view to ascertaining whether -
 - (i) the provisions of this Ordinance or any other statutory provision having effect for the purpose of protecting the public against risks to health and safety have been complied with, or*
 - (i) the object is in such a condition, or (in the case of a gas fitting) the supply of air available for it is so inadequate, that it (or, in the case of a flue or means of ventilation, the gas fitting in connection with which it is used) is likely to constitute a danger to any person or property, and**

- (c) where in his opinion it is necessary to do so for the purpose of averting danger to life or property, and notwithstanding any contract previously existing –
 - (i) disconnect and seal off any gas fitting and any part of the gas supply system on the premises, or*
 - (ii) disconnect the supply of gas to the premises or, if no such supply is being given, signify the refusal of the supplier to give or, as the case may be, allow such a supply.**

40

Guidance

213 In addition to the general right of entry, an officer authorised by the gas supplier can on entering, inspect any gas fitting, flue and means of ventilation associated with them. They can also inspect any service pipe or other apparatus used for the conveyance / supply of gas or which is connected to a gas main.

This inspection can include the examination and testing of any of the objects mentioned and where this is a gas fitting, verifying that there is a supply of air available in order that it is established whether the provisions of relevant health and safety legislation have been met or whether the object is in such a condition that it constitutes a danger to any person or property.

If in their opinion it is necessary to avert danger to life or property, they can disconnect and seal off any gas fitting or any part of the gas supply system or disconnect the gas supply to the premises or refuse to give or allow a supply.

Section 41

Notification to Consumer

Ordinance

41(1)

(1) *Where an officer authorised by a supplier of gas takes any action in relation to any premises in the exercise of a power conferred by section 40(c), the supplier shall, within five working days after the day on which the action is taken, serve on the consumer a notice in writing -*

- (a) *specifying -*
 - (i) *the nature of the defect or other circumstances in consequence of which the power was exercised, and*
 - (ii) *the nature of the danger in question and the action taken in the exercise of the power, and*
- (b) *stating -*
 - (i) *that the consumer has a right to make representations under this Ordinance to the Department against the action taken within a period of 28 days beginning on the date of the notice or such longer period as the Department may at any time in any particular case allow,*
 - (ii) *the grounds on which and the manner in which he can make representations (see sections 42 and 43), and*
 - (iii) *the effect of sections 45 and 46.*

Guidance

214 When an authorised officer has exercised the power to disconnect or seal off any fitting/part of gas supply or disconnect or refuse a supply, the supplier must within 5 working days, give the consumer notice in writing which specifies the nature of defect/circumstances, the danger arising and the action taken. The notice must also give the consumer an explanation of the rights, which he has under the Ordinance to make representations to the Department and the manner in which they should be made, (see paragraph 216).

The notice must further advise the consumer of the effects of sections 45 & 46 of the Ordinance, which relate to prohibition of reconnection or restoration of supply and Offences.

Ordinance

41(2)

(2) *Where an officer authorised by a supplier of gas takes any action in relation to any premises in the exercise of a power conferred by section 40(c), he shall at the same time, in accordance with subsection (3), affix a prominent notice of the effect of the relevant provision of sections 45 and 46.*

Guidance

215 Where the authorised officer has taken action previously described, they are required to affix a prominent notice, which refers to the provisions of section 45 & 46. This notice must be displayed where a gas fitting, part of a gas supply has been disconnected or sealed off, where a gas supply has been disconnected to the premises or part of the premises, or where the supplier has refused a supply. The Notice should be fixed close to the fitting etc., so as to be conspicuous to all.

Ordinance

41(3)

- (3) *The notice required by subsection (2) shall be affixed -*
- (a) *where a gas fitting or any part of the gas supply system on the premises has been disconnected or sealed off, to, or to part of the premises near to, the gas fitting or part of the gas supply system in question,*
 - (b) *where the supply of gas to the premises has been disconnected, to, or to a part of the premises near to, the meter nearest downstream to the point of disconnection or, if there is no such meter, to a conspicuous part of the premises, or*
 - (c) *where the supplier has signified its refusal to give or allow such a supply, to, or to a part of the premises near to, the meter nearest*

Ordinance
41(3)

downstream to the point from which gas would be supplied or, if there is no such meter, to a conspicuous part of the premises.

Section 42

Representations to Department

Ordinance

(1) *A consumer on whom a notice is served under section 41(1) may, within a period of 28 days beginning on the date of the notice, or such longer period as the Department may at any time in any particular case allow, make representations to the Department against the action taken in the exercise of the powers conferred by section 40(c) on any of the following grounds -*

- (a) *that the defect or other circumstances specified in the notice did not constitute a danger such as to justify the action taken specified in the notice,*
- (b) *that the defect or other circumstances so specified did not exist at the time the action was taken, or*
- (c) *that the defect or other circumstances so specified have ceased to exist.*

(2) *Representations under this section are of no effect unless made by notice in writing given to the Department at its principal office and indicating the grounds on which they are made.*

(3) *On receipt of any such representations the Department may, if the consumer or the gas supplier so desires, afford each of them an opportunity of appearing before, and being heard by, a person appointed by the Department for the purpose.*

42(1) – (3)

Guidance

216 The consumer may make representation to the Department against the action within 28 days of the date of the notice served on them under section 41(1); this must be made in writing and it must state the reasons why the circumstances did not justify the action taken, or that the defect was not present or had ceased to exist on the basis of the grounds listed in section 42(1).

Following receipt of written representation, the Department may, if the consumer or gas supplier wishes, afford them the opportunity of being heard by a person appointed by the Department.

Section 43

Directions of Department

Ordinance

(1) *On consideration of representations under section 42 the Department may direct, subject to any right of the gas supplier to refuse to convey or supply gas to the premises -*

- (a) *that any gas fitting or part of the gas supply system on the premises which has been disconnected under this Ordinance shall remain disconnected or shall or may be reconnected,*
- (b) *that any supply of gas to the premises which has been disconnected under this Ordinance shall remain disconnected or shall or may be reconnected, or*
- (c) *where the refusal of the gas supplier to give or allow such a supply has been signified under this Ordinance, that the supplier shall not give a supply of gas or shall or may cause gas to be supplied to the premises,*

43(1)

Ordinance

43(1) (2)

and may give such supplementary directions as it considers to be appropriate in consequence of its consideration of the representations.

(2) The functions of the Department under this section and section 42 may be exercised by -

- (a) the Minister and one other voting member, or*
- (b) any two voting members,*

if in either case authorised in that behalf by the Department.

Guidance

217 The Department may on receiving and or hearing the representation, order that the disconnection or refusal to supply remain in place, or may order reconnection or resumption of supply. The Department's powers are subject to the supplier's right to refuse to convey or supply gas to premises. The Department can also make supplementary direction, as it deems appropriate.

This function of the Department can be exercised by the Minister and one other voting member or any two voting members of the Department.

Section 44

Right of appeal to Royal Court

Ordinance

44(1)-(4)

(1) A person aggrieved by a decision of the Department to make a direction under section 43 may appeal to the Royal Court sitting as an Ordinary Court ("the Royal Court") against the decision.

(2) The grounds of an appeal under this section are that -

- (a) the decision was ultra vires or unreasonable in law,*
- (b) a material error as to the facts has been made,*
- (c) there was a material procedural error, or*
- (d) there was some other error of law, including bad faith or lack of proportionality.*

(3) An appeal under this section shall be instituted -

- (a) within a period of 28 days immediately following the date of the Department's decision, and*
- (b) by summons served on the Minister of the Department stating the grounds and material facts on which the appellant relies.*

(4) The Department may, where an appeal under this section has been instituted, apply to the Royal Court, by summons served on the appellant, for an order that the appeal shall be dismissed for want of prosecution; and, on hearing such an application, the Royal Court may -

- (a) dismiss the appeal or dismiss the Department's application (in either case on such terms and conditions as the Royal Court may direct), or*
- (b) make such other order as the Royal Court considers just,*

and the provisions of this subsection are without prejudice to the inherent powers of the Royal Court or to the provisions of rule 36(2) of the Royal Court Civil Rules, 1989.

Guidance

This prohibition does not however apply when this has to be done in the course of repairing or testing any gas fitting or gas supply system nor when all necessary steps have been taken to remedy the problem which led to the disconnection and prevent a recurrence.

Part VIII Offences and Exceptions

Section 46

Offences

Ordinance

46(1) (2)

- (1) *It is an offence for a person -*
- (a) *to contravene, or to attempt to contravene, any provision of this Ordinance or any direction under section 43, or*
 - (b) *to fail to discharge any duty to which he is subject by virtue of any such provision or direction.*
- (2) *A person guilty of an offence under subsection (1) is liable -*
- (a) *on summary conviction, to a fine not exceeding level 4 on the uniform scale,*
 - (b) *on conviction on indictment, to a fine.*

Section 47

Exception as to liability

Ordinance

47

No person is guilty of an offence by reason of a contravention of section 3(2) or (6), 5(1), 7(3), 15, 16(2) or (3), 17(1), 30 (insofar as it relates to the installation of a gas fire, other gas space heater or a gas water heater of more than 14 kilowatt gross heat input), 33(1), 35 or 36 in any case in which he can show that he took all reasonable steps to prevent that contravention.

Guidance

220 This section provides certain exceptions as to liability, under which a person is not guilty of an offence, where they can show that they took all reasonable steps to prevent contravention of the provision concerned. This publication contains guidance in various areas, e.g. concerning access to premises to discharge landlord's duties under section 36 (e.g. see paragraph 184). However, it is finally for a court to decide whether 'all reasonable steps' have in fact been taken in particular circumstances, and whether a person is guilty of an offence.

221 The exceptions as to liability only apply to the particular provisions specified in section 47. It should be noted that they do not extend to the prohibition in section 30, concerning installation of certain instantaneous water heaters.

Section 48

Exemption certificates

Ordinance

48(1)

- (1) *Subject to subsection (2), the Department may, by a certificate in writing, exempt any person or class of persons from any requirement or prohibition imposed by this Ordinance, and any such exemption may be granted subject to*

Guidance

such as a fitting intended to seal other pipework, e.g. water pipes), and should comply with appropriate standards (see Appendix 4). For instance, suitable screw-in or soldered fittings should be used which securely blank or cap-off open ends of pipes or incomplete gasways in appliances; conventional isolation valves or consumer emergency controls, which might readily be opened by an unauthorised person, must not be used for this purpose.

Ordinance

"contravention" includes failure to comply, and related expressions shall be construed according,

"Department" means the States of Guernsey Commerce and Employment Department,

"distribution main" means any main through which a supplier is for the time being distributing gas and which is not being used only for the purpose of conveying gas in bulk,

49(1)

"emergency control" means a valve for shutting off the supply of gas in an emergency, being a valve intended for use by a consumer of gas;

Guidance

226 The emergency control is a valve intended, and readily accessible, for use by the consumer, i.e. end-user, of gas. For example, a valve located in a meter-room which is locked (for security), and accessible only to a landlord, gas supplier, or emergency services, cannot be regarded as an 'emergency control'. Where a meter is fitted, the meter control valve may be used as the emergency control, subject to certain conditions - see section 9(1) and paragraph 64.

227 Although there may be more than one emergency control serving a particular premises, it is the outlet of the first emergency control downstream of the distribution main which marks the interface between a 'service pipe' and 'installation pipework' (see definition of 'service pipe' below).

Ordinance

49(1)

"flue" means a passage for conveying the products of combustion from a gas appliance to the external air and includes any part of the passage in a gas appliance duct which serves the purpose of a flue;

Guidance

228 Flues come in many forms; they can be natural draught or fan-assisted, open or room-sealed, single or shared, or various combinations of these. For example, they can range from a simple individual natural draught flue to the more complex shared room-sealed natural draught (e.g. U- or Se-duct). Further information on types of flue design is given in appropriate standards (see Appendix 4).

Ordinance

49(1)

"gas" means:

- (a) *any substance in a gaseous state which consists wholly or mainly of –*
 - (i) *methane, ethane, propane, butane, hydrogen or carbon monoxide.*
 - (ii) *a mixture of two or more of those gases, or*
 - (iii) *a combustible mixture of one or more of those gases and air, and*

(b) *any other substance in a gaseous state which is gaseous at a temperature of 15 degrees C and a pressure of 1013.25 millibars and is specified in regulations made by the Department.*

Guidance

229 The definition of 'gas' includes: (a) methane, ethane, propane, butane, hydrogen and carbon monoxide, (b) a mixture of two or more of these gases, and (c) a combustible mixture of one or more of these gases and air. A mixture mainly composed of (a), (b) or (c), and containing another gas (e.g. a flammable, non-flammable or inert gas not itself covered by the definition), is also included. However, any gas wholly comprised of a substance not listed in (a) above, such as acetylene, oxygen or nitrogen is excluded unless specified by regulation. The substances within the definition are covered irrespective of physical form, e.g. both

Guidance

liquid and gaseous phases are included.

230 The Ordinance therefore covers natural gas, LPG, methane from landfill gas etc, when these products are stored, supplied or used in situations within the scope of the Ordinance, e.g. see definition of 'gas fittings' and 'gas appliance', and section 2(1)-(4). Both situations where gas fittings are used in connection with gas (normally gas air mix) conveyed to premises through a distribution main, and where they are used with gas (mainly LPG) supplied from a storage vessel are covered by the Ordinance, see section 2(3).

Ordinance

49(1)

"gas appliance" means an appliance designed for use by a consumer of gas for heating, lighting, cooking or other purposes for which gas can be used but does not include a portable or mobile appliance supplied with gas from a cylinder, or the cylinder, pipes and other fittings used for supplying gas to that appliance, save that, for the purposes of sections 3, 35 and 36, it does include a portable or mobile space heater supplied with gas from a cylinder, and the cylinder, pipes and other fittings used for supplying gas to that heater;

Guidance

231 The definition includes a wide range of appliances fuelled by gas. It is implicit that gas has to be stored, supplied or used (basically as a fuel gas) to be covered by the Ordinance. The venting to atmosphere of waste gas from landfill sites etc is therefore not covered. However, where recovered vent gas from these places is used in appliances at premises subject to the Ordinance, it is covered.

232 The supply of gas to the propulsion system of any vehicle does not come within the scope of the Ordinance (see exception in section 2(3)). Therefore, LPG or natural gas powered vehicles, including fork-lift trucks etc, do not need to conform to this Ordinance.

233 Mobile/portable appliances, where gas is supplied from a cylinder, are not generally covered. However, a mobile or portable space heater, such as an air heater, gas fire or convector, which is supplied with gas from a cylinder is subject to sections 3, 35 and 36 (provided it is in premises covered by the Ordinance). For instance, this means that appliances such as LPG cabinet heaters provided by landlords are required to be properly maintained, and checked for safety at least once per year by a person who is, or is employed by, a member of a class of persons approved by the Department under section 3, e.g. a Gas Safe registered gas installer (see sections 3, 35 and 36). Work (e.g. servicing or maintenance) of any gas appliance, including a mobile or portable space heater, where carried out at premises generally excluded from the Ordinance, such as factories, is not covered, irrespective of whether the appliance is intended for use in situations within the scope of the Ordinance, subject to the requirements in section 3(8) concerning work on gas fittings in certain vehicles, vessels or caravans, see also paragraph 245. However, similar safety controls under separate legislation may apply in circumstances not covered by the Ordinance (see paragraph 238).

Ordinance

49(1)

"gas fittings" means gas pipework, valves (other than emergency controls), regulators and meters, and fittings, apparatus and appliances designed for use by consumers of gas for heating, lighting, cooking or other purposes for which gas can be used (other than the purpose of an industrial process carried out on industrial premises), but it does not mean –

- (a) any part of a service pipe;*
- (b) any part of a distribution main or other pipe upstream of the service pipe;*
- (c) a gas storage vessel; or*
- (d) a gas cylinder or cartridge designed to be disposed of when empty;*

Guidance

234 This definition effectively excludes from the Ordinance any gas fitting, which is part of an industrial process carried out on industrial premises, e.g. gas fired industrial process plant and furnaces. The exclusion extends to industrial premises not covered by the exceptions (e.g. concerning factories, and quarries) in section

Guidance

2(4); this means, for instance, that bitumen boilers and welding torches are not covered by the Ordinance even where they are used at construction sites and similar places which may otherwise fall within scope (see also paragraphs 1-2). Although control devices primarily intended for use by the consumer, e.g. knobs and switches for controlling the heat or temperature functions of the appliance, are covered by the definition, work on such devices is generally excluded from the Ordinance (section 2 refers). The definition of 'gas fittings' excludes any service pipe (e.g. as in a network supplying gas), but covers service pipework, such as used in the supply of gas from an LPG storage vessel.

Ordinance

"gas storage vessel" means a storage container designed to be filled or re-filled with gas at the place where it is connected for use or a refillable cylinder designed to store gas, and includes the vapour valve; but it does not include a cylinder or cartridge designed to be disposed of when empty;

"gas water heater" includes a gas fired central heating boiler;

"injury" means the death of, or an injury to, any person, including any illness or disease and any impairment of a person's physical or mental condition,

"inspector" means an inspector appointed under Section 15 of the Health and Safety at Work (General) (Guernsey) Ordinance 1987;

"installation pipework" means any pipework for conveying gas for a particular consumer and any associated valve or other gas fitting including any pipework used to connect a gas appliance to other installation pipework and any shut off device at the inlet to the appliance, but it does not mean -

- (a) a service pipe;*
- (b) a pipe comprised in a gas appliance;*
- (c) any valve attached to a storage container or cylinder; or*
- (d) service pipework;*

49(1)

Guidance

235 Installation pipework generally connects a meter or emergency control valve to a gas appliance. It includes pipework used to connect an appliance to other installation pipework (i.e. an 'appliance connector') and any shut-off device, e.g. isolation valve, at the inlet to the appliance (section 26(6) refers). However, any pipe comprised in a gas appliance, i.e. forming an integral part of an appliance, is excluded. See diagrams of typical installations in Appendix 5.

Ordinance

"meter bypass" means any pipe and other gas fittings used in connection with it through which gas can be conveyed from a service pipe or service pipework to installation pipework without passing through the meter;

"primary meter" means the meter nearest to and downstream of a service pipe or service pipework for ascertaining the quantity of gas supplied through that pipe or pipework by a supplier;

"re-fillable cylinder" means a cylinder which is filled other than at the place where it is connected for use;

"relevant statutory provisions" has the meaning given by section 35 (1) of the Health and Safety at Work (General) (Guernsey) Ordinance 1987.

"responsible person", in relation to any premises, means the occupier of the premises or, where there is no occupier or the occupier is away, the owner of the premises or any person with authority for the time being to take appropriate action in relation to any gas fitting therein;

49(1)

Ordinance
49(1)

"room-sealed appliance" means an appliance whose combustion system is sealed from the room in which the appliance is located and which obtains air for combustion from a ventilated uninhabited space within the premises or directly from the open air outside the premises and which vents the products of combustion directly to the open air outside the premises;

Guidance

236 The definition of 'room-sealed appliance' is of key importance in the context of section 30, which imposes restrictions on types of appliances which may be installed in certain accommodation. In this definition, the term 'premises' refers to the building or structure in which the appliance is located. The definition includes appliances where combustion air is drawn from an uninhabited space, but this option would be precluded for separate safety reasons in certain situations, e.g. in boats where air may not be drawn from petrol engine spaces.

237 The term 'room-sealed appliance' covers a wide range of appliances, both natural and fanned draught, including those connected to shared flues, e.g. U- and S-duct, and 'vertex' systems - see appropriate standards (Appendix 4). The definition requires combustion products to be vented directly to open air outside premises; openings should therefore be avoided in any flue serving such an appliance (i.e. throughout its length inside any building), apart from any opening which is integral and essential to the correct operation of the flue, purpose-designed and properly located for its application (e.g. a 'vertex' flue in a loft space). It may be necessary to fit a guard around any such flue opening to prevent possible ignition of nearby combustible materials (see also paragraph 228 and Appendix 1).

Ordinance
49(1)

"Royal Court": see section 44,

"service pipe " means a pipe for supplying gas to premises from a distribution main, being any pipe between the distribution main and the outlet of the first emergency control downstream from the distribution main;

Guidance

238 Although some of the sections apply to service pipes, detailed requirements for these pipes are not covered by this Ordinance. Certain duties, e.g. concerning maintenance of service pipes, are also imposed under the general duties of the Health and Safety at Work Ordinance.

239 Service pipes are the property of the gas supplier, who needs to be notified before any work is performed on such pipes, including connecting or disconnecting a meter to a service pipe.

Ordinance
49(1)

"service pipework" means a pipe for supplying gas to premises from a gas storage vessel, being any pipe between the gas storage vessel and the outlet of the emergency control;

"service valve" means a valve (other than an emergency control) for controlling a supply of gas, being a valve -

- (a) incorporated in a service pipe;*
- (b) intended for use by a supplier of gas; and*
- (c) not situated inside a building;*

"supplier" in relation to gas means -

- (a) a person who conveys gas through a distribution main,*
- (b) a person who supplies gas to any premises through a primary meter;*

Ordinance

49(1)

- (c) *a person who provides a supply of gas to a consumer by means of the filling or re-filling of a storage container designed to be filled or re-filled with gas at the place where it is connected for use whether or not such container is or remains the property of the supplier; or*
- (d) *a person who provides gas in re-fillable cylinders for use by a consumer whether or not such cylinders are filled or re-filled directly by that person and whether or not such cylinders are or remain the property of that person, but a retailer shall not be deemed to be a supplier when he sells a brand of gas other than his own;*

Guidance

240 Gas suppliers are subject to certain duties under the Ordinance (e.g. to respond to a gas escape under section 37), and other sections refer to the 'supplier of gas' in connection with duties placed on other persons (such as for notification of defective or dangerous appliances under sections 26 and 34, respectively). The meaning of 'supplier' (and allocation of related responsibilities) depends on the specific circumstances, as determined by the definition in the Ordinance; see paragraphs 241-243.

241 In the case of gas supplied to premises through pipes, the 'supplier' is the person who supplies gas through the primary meter and bills the consumer.

242 In the case of gas, e.g. LPG, supplied by filling a storage tank, or in cylinders, the meaning of 'supplier' depends on the circumstances:

- (a) Gas supplied direct to a consumer. Whether the supply is to a storage tank, or in cylinders, the 'supplier' is the 'gas company', whose gas is used to fill the tank or cylinders concerned - for the latter, this is normally the company specified on gas cylinders (see also paragraph (b)(ii) below).
- (b) Gas supplied to an intermediate person, e.g. landlord, who provides a gas supply on to 'tenant' consumers. Allocation of 'supplier' duties is as follows:
 - (i) gas supplied by filling storage vessel. Where the gas is to be provided on by a landlord for the use of tenant(s) in a building or part of a building (e.g. flat), the LPG company is responsible (section 2(2)(b) provides an exception for the landlord in these circumstances). However, where the gas is provided for use by consumers in premises other than buildings, such as caravans, the landlord (e.g. caravan park operator) is the 'supplier',
 - (ii) gas supplied in cylinders. The gas company attracts supplier-related duties in all cases, but where the landlord provides the gas for use in premises other than buildings, e.g. caravans, mobile homes, residential park homes etc, duties are shared between the gas company and the landlord.

In all of the above situations, allocation of 'supplier' duties is not affected by who owns the storage tank or cylinders concerned. Furthermore, persons involved in intermediate activities only, are not regarded as 'suppliers'.

243 Wherever duties are shared by different persons, close co-operation and clear definition of agreed responsibilities is essential, to ensure requirements are effectively met and there are no gaps in safety cover, e.g. concerning response to a gas escape. Although the meaning of 'supplier' provides the basis for allocating

Guidance

related duties under the Ordinance, this does not prevent dutyholders making contractual arrangements, and section 37 specifically provides for a gas supplier to appoint another person / organisation to act on their behalf.

Ordinance

"work" in relation to a gas fitting includes any of the following activities carried out by any person, whether an employee or not, -

- (a) installing or re-connecting the fitting;*
- (b) maintaining, servicing, permanently adjusting, disconnecting, repairing, altering or renewing the fitting or purging it of air or gas;*
- (c) where the fitting is not readily movable, changing its position; and*
- (d) removing the fitting.*

but the expression does not include the connection or disconnection of a bayonet fitting or other self-sealing connector.

49(1)

Guidance

244 For the purposes of this Ordinance, 'work' includes do-it-yourself activities, work undertaken as a favour for friends and relatives, and work for which there is no expectation of reward or gain, e.g. voluntary activity for charities. This means that anyone carrying out such work must have the necessary competence, as required by section 3(1). However, membership of the Department approved class of persons (under section 3(3)) is required only by businesses carrying out gas fitting work.

245 The definition of 'work in relation to a gas fitting' lists specific activities covered by this term, but this list is not exclusive and other operations may also comprise 'work'. The definition is wide-ranging and includes activities that could affect in any way the safety of a gas fitting (whether new or existing, and whether or not it contains gas). The term is of basic importance in determining the application of 'work-related' requirements under the Ordinance, some of which, e.g. competence requirements under section 3, also apply in respect of work on a gas storage vessel. In the context of 'work', terms not otherwise defined in the Ordinance bear their normal meaning. Installation may refer to either a new or used/second-hand appliance or fitting and is not limited to initial installation in particular premises, i.e. it includes re-installation (e.g. following servicing/repair work which has involved removal of the appliance/fitting), see also section 26(3) and associated guidance. For the purpose of the definition of 'work', 'disconnecting' means physically detaching or uncoupling a fitting (i.e. which involves breaking into a gasway), rather than simply isolating it by means of a valve or similar device, and both 'connecting' and 're-connecting' should be understood accordingly.

246 For the purpose of the definition of 'work', readily movable appliances include appliances such as laboratory Bunsen burners and mobile barbecues, which are readily portable. Other appliances, e.g. free-standing cookers connected by standard flexible hose, are not considered to be 'readily movable', but can be moved temporarily, e.g. to clean the space they normally occupy; this type of activity is not regarded as 'work' within the meaning of this Ordinance. (Where an appliance is connected by means of a bayonet fitting, this will need to be disconnected before moving the appliance – such disconnection is also excluded from the definition of 'work', as is the connection or re-connection of this type of fitting. It may be necessary to detach a stability bracket; if so, this needs to be refitted when the appliance is returned to its original position.) Where an appliance which is not readily movable is repositioned permanently, this is regarded as 'work' for the purpose of the Ordinance;

247 Lighting or re-lighting of an appliance burner/pilot light, e.g. after temporary disruption or isolation of the gas supply (such as when premises are vacated or gas cylinders are changed, or following operation of an over- or underpressure control

Guidance

device), does not itself comprise work. However, the resumption of a gas supply in these or other circumstances may involve 'work', e.g. where purging of any gas fitting or appliance of air or gas is carried out; but in certain cases the checks on appliances under section 26(9) are not required (see section 26(10) and paragraphs 143-145). Any interruption of the gas supply possibly caused by faulty or maladjusted equipment should be thoroughly investigated and remedial action taken, as necessary, in accordance with the requirements for 'work' under the Ordinance.

248 Section 2(3)(c) provides an exception for certain work activities in relation to control devices primarily intended for use by the consumer, e.g. knobs and switches for controlling the heat or temperature functions of the appliance (see paragraph 11).

“working day” does not include any Saturday, Sunday, Christmas Day, Good Friday or public holiday.

Ordinance

(2) *For the purposes of this Ordinance -*

(a) *any reference to installing a gas fitting includes a reference to converting any pipe, fitting, meter, apparatus or appliance to gas use; and*

(b) *a person to whom gas is supplied and who provides that gas for use in a flat or part of premises let by him shall not in so doing be deemed to be supplying gas.*

49(1) (2)

Guidance

249 Landlords providing gas for tenant's use in flats or parts of buildings are not 'gas suppliers' for the purpose of this Ordinance and do not attract supplier-related responsibilities. However, the position may be different where the gas is for use in any premises, which is not a building, e.g. a caravan (see also definition of 'supplier' in section 49(1) and associated guidance). Irrespective of who is the gas supplier, there are separate duties on landlords under section 36, e.g. requiring gas appliances, installation pipework and flues provided for tenants to be maintained in a safe condition and annual safety checks to be carried out on such appliances and flues (see paragraphs 179-198).

Section 50

General provisions as to subordinate legislation

Ordinance

(1) *Regulations under this Ordinance -*

(a) *may be amended or repealed by subsequent regulations hereunder, and*

(b) *may contain such consequential, incidental, supplementary and transitional provision as may appear to be necessary or expedient.*

(2) Any power conferred by this Ordinance to make regulations may be exercised -

(a) *in relation to all cases to which the power extends, or in relation to all those cases subject to specified exceptions, or in relation to any specified cases or classes of cases.*

(b) *so as to make, as respects the cases in relation to which it is exercised -*

(i) *the full provision to which the power extends, or*

50 (1)(2)

- (b) the room or space where the appliance is located is adequately ventilated, and that the means of ventilation is suitable;
 - (c) there are adequate and suitable means for removal of products of combustion from the appliance (see flue requirements in (B) below);
 - (d) the operating pressure and/or heat input of the appliance is correct. The installer should carry out the most appropriate test(s) for the appliance. This information is usually shown in manufacturer installation instructions or on the appliance data badge. In certain cases, e.g. when appliance burners are modified or replaced, such as for conversion from LPG to natural gas, it may be necessary to check both operating pressure and heat input;
 - (e) a visual check is made of the 'flame picture' (i.e. appearance) to ensure that it is satisfactory, or a measurement is made of combustion performance where appropriate;
 - (f) the appliance and associated gas fittings function safely, e.g. safety devices including flame protection, vitiation devices and fan proving systems operate satisfactorily;
 - (g) the gas soundness of the appliance is satisfactory;
 - (h) the appliance is physically stable, securely fitted and properly connected to other fittings.
- (B) Flues (sections 26, 27 and 35/36)

Domestic and other small scale flues

3 Dutyholders should ensure that:

- (a) any flue is inspected and tested sufficiently to determine whether it is suitable and in a proper condition for safe operation of the appliance it is intended to serve. The detailed inspection arrangements necessary to ensure the requirements in (b)-(l) below are met will, to some extent, depend on the particular circumstances/equipment, and must be a matter for judgement by a competent gas installer. However, the following points should be noted:
 - (i) wherever necessary, inspection/tests should be made with the appliance removed;
 - (ii) in some cases, dismantling of equipment might be required, e.g. to establish continuity of a flue path in the heat exchanger of a central heating boiler where malfunction is suspected;
 - (iii) suitable checks for gastightness should be made after any work is done on an appliance, including on installation pipework where this is disturbed directly or indirectly, for instance when an appliance is removed (e.g. see section 22(1));
 - (iv) any loft space through which a flue passes should be examined, where necessary (for instance, during initial installation of an appliance and flue flow test, or subsequent maintenance/safety checks), to ascertain flue integrity through to the outside terminal - see paragraph 184 concerning access for inspection/testing;
 - (v) where access cannot be gained for inspection, such as where a flue runs partly through property not owned by the dutyholder (e.g. landlord) and access is refused by the occupant, all reasonable steps still need to be taken by the dutyholder to ensure overall flue integrity. This may involve making

enquiries with occupants of property (including by 'recorded delivery' correspondence and personal contact as necessary) and requesting to see reports of examinations made by them or on their behalf. Where there are good reasons to suspect flueing problems, e.g. because of flue flow/spillage test failure (see (k) and (l) below) or clear medical evidence of carbon monoxide poisoning, it is essential to check the complete length of the flue; any associated appliance must not be used unless or until this is done;

- (b) a flue is complete and continuous through its length, i.e. is undamaged and is adequately supported. A flue should not have intermediate openings, apart from:
 - (i) a draught stabiliser, balancing damper or relief opening which is in the same room, or space, as the appliance being served;
 - (ii) an opening for inspection or cleaning, which is fitted with a non-combustible gaslight cover; or
 - (iii) an opening integral and essential to the correct operation of the flue, which is purpose-designed and properly located for its application, e.g. an opening in a vertex flue in an unoccupied loft space (a guard should be fitted around such an opening, where necessary, to prevent possible ignition of nearby materials);
- (c) more than one appliance is not connected to a flue, unless the flue has been specifically designed for this purpose;
- (d) the effect of other open-flued appliances in the same room is properly taken into account. Where more than one such appliance is so installed, it should be ensured that:
 - (i) the heat output of the appliances is similar and that their flues terminate at the same height, preferably close together so that they are subject to the same wind conditions; and
 - (ii) flues are effective with all appliances in operation (see (k) and (l) below);
- (e) the terminal is correctly sited; this should include adequate separation from any site boundary to ensure that the flue will continue to function safely and emissions will not present a hazard to any person either on the site concerned or in adjoining property, including in the event of any future building development on adjoining premises (which might extend close or up to the site boundary);
- (f) any chimney has not been closed over/modified so as to interfere with flue operation. Any flue damper or restrictor plates should be removed or permanently fixed open, to avoid obstructing the flue;
- (g) any debris, e.g. in a fire/catchment space, is removed before installing/re-installing an appliance, that the catchment space is of adequate size and that any openings within this space (other than those for the appliance connection and flue) are effectively sealed. Flues and chimneys previously used for oil or solid fuel appliances need to be swept before being used with a gas appliance;
- (h) where a masonry flue seems to be in a poor condition, thorough examination is carried out to determine whether it is safe for continued use. Renovation should be carried out, where necessary, and consideration given to fitting (correctly sized) metal flue liners; in certain cases, liners are required under Building Regulations;

- (i) where components, such as external sections of flues (e.g. terminals), metal flue liners and inspection openings show signs of damage, e.g. corrosion, they are replaced as necessary. When replacing an appliance connected to a chimney lined with a metallic liner, the existing liner should normally be replaced unless it is considered suitable for safe operation throughout the lifespan of the new appliance;
- (j) when flue liners are fitted or replaced, the flue is tested to ensure it is operating satisfactorily (see (k) and (1), below);
- (k) a flue flow test is carried out to check the effectiveness of the flue and ensure that there is no leakage into another part of the premises (including any loft) or, as appropriate, other adjoining premises. (This is particularly important where a number of chimneys combine into a multiple chimney stack.) Smoke coming out of other than the correct terminal, or a down-draught or no-flow condition, indicates an unsatisfactory flue;
- (1) after completion of a satisfactory flue flow test, a smoke spillage test is carried out, with the appliance connected and operating, to check that the products of combustion are being safely removed. The test should be conducted in accordance with the appliance manufacturer instructions, and take into account any factors which may adversely affect flue efficiency, e.g. operation of extractor fans or forced air heating systems in the room housing the appliance or any adjoining room (with interconnecting doors open).

Larger commercial flues

4 Larger commercial (and industrial) premises often have purpose-designed flue systems. The appliance designer/manufacturer instructions need to be followed when installing, servicing and maintaining such systems. The instructions may well stipulate a particular commissioning procedure to be followed. Reference should also be made to appropriate standards.

Appendix II

Examples of potentially unsafe situations (Section 34)

1 This appendix gives some examples of situations which might lead to a gas appliance being considered 'dangerous' in terms of section 34. However, these examples are only intended to provide a general illustration of potentially unsafe situations; the level of risk, and whether a gas appliance is in fact 'unsafe' in any particular case, must be a matter for judgement by a competent person, e.g. a gas installer who is, or is employed by, a member of a class of persons approved by the Department under section 3 (see paragraphs 169-171).

2 Every situation described below will not necessarily lead to a gas appliance being 'dangerous', in practice. In some cases, danger will be clear, such as where gas is escaping or there is a high risk of this happening (e.g. open-ended pipes connected to gas supply), gas appliance safety devices (flame protection etc) are inoperative, or where there are clear signs of products of combustion being emitted into occupied areas (and there is no evidence to show that the problem has been corrected). However, in most situations, the level of risk will largely depend on the individual circumstances, which need to be taken into account in any assessment. In case of doubt, the responsible person/gas installer should seek further advice, for instance by consulting industry (e.g. The Gas Safe Register) guidance on 'unsafe situations' procedures; or contacting the emergency gas service, the Gas Emergency Number

724811. The Gas Safe Register helpline service might also be of assistance in certain cases.

3 The causal factors specified below serve both to indicate features which may contribute to the overall risk in a particular case, and areas which might need to be addressed in associated remedial action. This information (structured under hazards specified in ACOP paragraph 169) is not exhaustive and situations outside the scope of the Ordinance, e.g. involving gas service pipes, are excluded.

(1) Incomplete combustion of gas

4 This includes any case where there is clear evidence of incomplete combustion (e.g. from flame appearance, sooting, or combustion analysis), leading to dangerous emissions of products of combustion into an occupied area, e.g. as evidenced from medically confirmed reports of ill health from users. The potential risk is primarily related to flueless and open-flued appliances and is likely to be most pronounced where they are located in confined/poorly ventilated rooms or compartments (see also (2) and (3) below). It should be noted that certain gas appliances, e.g. some 'living flame' effect fires, are specifically designed to operate safely using incomplete combustion.

5 Factors which may lead to insufficient air being available for complete combustion to take place include:

- (a) inadequate or defective ventilation of the room/area in which the appliance is located, e.g. air bricks/louvres of insufficient size or number, or vent openings obstructed;
- (b) malfunction or failure of fan(s) supplying combustion air to an appliance, e.g. where an airflow proving device is not fitted, or is defective.

(2) Removal of products of combustion not being safely carried out

6 This includes any case where there are clear signs/evidence of significant spillage of combustion products into an occupied area, e.g. from appliance/flue function tests, air sampling or medically confirmed reports of ill effects on users.

7 Factors which may inhibit safe removal of combustion products include where:

- (a) design or construction of a flue/chimney is defective, e.g. flue size is insufficient for the application, or the routing of the flue or position of the termination is incorrect, such as with a wall facing/adjacent termination. Obstruction and inadequate removal/dispersal of combustion products may result, for instance, from the proximity of a building on the site where the appliance is installed, or a structure within neighbouring property where a safe separation distance has not been provided between the flue termination and site boundary (see below and section 27);
- (b) a flue is obstructed, e.g. with soot from previous use with an oil/solid fuel fired appliance or debris (for instance, from an unlined masonry/brick flue). Accumulation of debris in, or the absence of, a catchment space may be an indicator of a potential risk;
- (c) a flue is incomplete or damaged, e.g. as a result of not being adequately supported, or discharges within a building, e.g. a loftspace;
- (d) a manual flue damper is fixed, other than in the open position;

- (e) the efficiency of a flue is adversely affected by ventilation arrangements, e.g. operation of extractor fans in the room housing the appliance, or an adjoining room (with inter-connecting doors open);
- (f) a flueless or open-flued appliance is installed in a confined/poorly ventilated room (see also (1) and (3), and prohibitions in section 30 on the installation of certain gas appliances in specified locations);
- (g) more than one appliance is connected to the same flue, and the flue is not designed for this purpose, and/or the appliances fitted to the flue are in separate rooms ventilated from different sides of the building;
- (h) there is another gas, oil or solid fuel appliance in the same, or closely adjoining room, which has a higher flue or the terminal is located on a different part of the roof. The action of the other flue may cause spillage of combustion products; or,
- (i) there is an open solid fuel fire in the same, or closely adjoining room. The action of the solid fuel fire may cause spillage of combustion products.

(3) Insufficient oxygen available for the occupants of the room/space in which the appliance is fitted

8 This includes any case where there is clear evidence that ventilation is insufficient, e.g. from results of air tests for carbon monoxide/oxygen, and/or medically confirmed reports of ill effects on people in the room or space housing the appliance. In practice, the risk will normally coincide with cases where there is insufficient air for proper combustion (see (1), above); it mainly relates to flueless, open-flued, and other appliances where the combustion air supply is drawn from the room or space housing the appliance.

9 Factors which may lead to insufficient ventilation include where:

- (a) ventilation openings, e.g. airbricks and louvres, are of inadequate size/number, or they are not properly located, e.g. leading to 'dead areas'. This includes where installation of a gas appliance of increased capacity has not been matched by a required increase in air supply;
- (b) ventilation openings are obstructed, e.g. where airbricks are blocked or adjustable louvres/fly screens have been fitted (in contravention of standards) and closed to conserve heat; or
- (c) an appliance has too high a heat input for the room in which it is installed.

(4) Gas leakage

10 This includes any gas leakage (where there is a smell of gas), arising for example from the use of unsatisfactory materials, bad workmanship or lack of maintenance (see also appropriate standards and section 37).

11 Examples of situations where gas escape may or may be likely to occur include where:

- (a) an open-ended pipe has been left connected to a gas supply, i.e. without being sealed off (e.g. see section 22);
- (b) pipework is liable to fail, e.g. as a result of mechanical or corrosion damage; or
- (c) an inappropriate design, construction, or material has been used for the

particular application (such as a flexible connection made of garden hose).

(5) Other danger

12 This may include situations where:

- (a) a primary meter is seriously malfunctioning, e.g. as a result of mechanical or other damage such as from fire exposure or contact with electrical equipment;
- (b) no means is provided for safe regulation of the gas supply pressure (e.g. see section 14);
- (c) an appliance is installed too close to combustible material, giving rise to a risk of ignition/fire, e.g. a gas fire with burners an insufficient distance above a carpet (evidence of scorching may be an indicator);
- (d) an appliance is unsuitable for use with the gas supplied;
- (e) an appliance is dangerously insecure/unstable;
- (f) appliance safety devices, e.g. flame failure devices, are inoperative or have been deliberately defeated;
- (g) more than one appliance is fitted to a 'common' flue and either, or both, of the appliance (s) are not fitted with flame failure devices (see also comments under (2) above); or
- (h) controls on a sealed central heating/water heating system are defective, giving rise to a steam explosion risk.

Appendix III

Summary of legislation

(Note: this appendix does not form part of the Code.)

*The Health and Safety at Work etc (Guernsey) Law 1979, and
The Health, Safety and Welfare of Employees Law, 1950*

These two laws lay the basis for all health and safety related legislation in the Bailiwick and are the result of Project de Loi's, which were referred to Her Majesty in Council for Royal Sanction.

In themselves they merely give an outline to what is to be encompassed by subsidiary legislation in the form of ordinances, the powers to make such ordinances being part of the law.

Health and Safety at Work (General) (Guernsey) Ordinance, 1987

1. This Ordinance applies to everyone concerned with work activities, ranging from employers, self-employed, and employees, to manufacturers, designers, suppliers and importers of materials for use at work, and people in control of premises. It also includes provisions to protect members of the public. The duties apply both to individual people and to corporations, companies, partnerships, and States Departments etc. The duties are expressed in general terms, so that they apply to all types of work activity and work situations. Every employer has a duty to ensure, so far as is reasonably practicable, the health, safety and welfare at work of his or her employees. The principles of safety responsibility and safe working are expressed in sections 1-8. Employers and self-employed are required to carry out their undertakings in such a way as to ensure, so far as is reasonably practicable, that they do not expose people who are not their employees to risks to their health and safety (sections 2(1) and 2(2)). In some areas the general duties have been supplemented by specific requirements in Ordinances made under the powers of the Health and Safety at Work etc (Guernsey) Law 1979, and such Ordinances continue to be made. Specific legal requirements are also included in earlier legislation which is still in force, particularly The Safety of Employees (Miscellaneous Provisions) Ordinance, 1952. Failure to comply with the general requirements of the Ordinance, or specific requirements found elsewhere may result in legal proceedings.

2. Although some of the duties imposed by the Ordinance and related legislation are absolute, many are qualified by the words 'so far as is reasonably practicable' or 'so far as is practicable'. If someone is prosecuted for failing to comply with a duty which is qualified by these words, it is up to the accused to show to the court that it was not reasonably practicable or practicable, as appropriate, for him/her to do more than was done to comply with the duty.

3. The judgement of what is reasonably practicable means weighing up the seriousness of the risk against the difficulty and cost of removing it.

4. Where the difficulty and cost are high and a careful assessment of the risk shows it to be insignificant, action may not be necessary although in some cases there are things that have to be done at all costs. No allowance is made for size, nature or profitability of a business.

5. Sections 18-20 provide for improvement and prohibition notices to be issued; section 25 provides for prosecution and penalties; section 36 provides for Regulations to be made; sections 13-14 provide for Codes of Practice to be approved, and for their use in legal proceedings.

Appendix IV

Appropriate standards, ACOP's, guidance and relevant information sources

The publications listed below were current when this ACOP/guidance was first published but the list should be taken to refer to any subsequent amendments or latest editions.

Appropriate standards

The following British Standards (listed under subject area) are regarded as 'appropriate standards' for the purpose of this ACOP/guidance – see explanatory note in the Introduction to this publication. The list is not comprehensive and is subject to change as standards are revised and new standards introduced.

British Standards are available from:

BSI Library and Bookshop, BSI House,
389 Chiswick High Road, London, W4 4AL
Tel: 020 8996 7858 / 7004
Fax: 020 8996 7005
Email: bookshop@bsi-global.com

Terminology

BS 1179: Part 6: 1980 *Glossary of Terms Used in the Gas Industry: Combustion and utilisation, including installation at consumer's premises*

Ventilation

BS 493: 1995 *Specification for airbricks and gratings for wall ventilation*

BS 5440-2: 2009 *Specification for installation of ventilation for gas appliances*

BS 5925: 1991 *Code of Practice for ventilation principles and designing for natural ventilation*

BS EN 721: 2004 *Leisure accommodation vehicles. Safety ventilation requirements*

DW/172 *Standard for kitchen ventilation systems*

Flues

BS 41: 1973 *Specification for cast Iron spigot and socket flue or smoke pipes and fittings*

BS 567: 1973 *Specification for asbestos-cement flue pipes and fittings, light quality*

BS 715: 2005 *Specification for metal flue boxes for gas-fired appliances not exceeding 20 kW*

BS 835: 1973 *Specification for asbestos-cement flue pipes and fittings, heavy quality*

- BS 5440-1:2008 *Flueing and ventilation for gas appliances of rated input not exceeding 70 kW net (1st, 2nd and 3rd family gases). Specification for installation of gas appliances to chimneys and for maintenance of chimneys*
- BS 5440-2: 2009 *Installation and maintenance of flues and ventilation for gas appliances of rated input not exceeding 70kW net (1st, 2nd and 3rd family gases). Specification for installation & maintenance of ventilation provision for gas appliances*
- BS 5854: 1980 *Code of Practice for flues and flue structures in buildings*
- BS EN 1856-1:2009 *Chimneys. Requirements for metal chimneys. System chimney products*
- BS EN 1856-2:2009 *Chimneys. Requirements for metal chimneys. Metal flue liners and connecting flue pipes*

Installation

- BS EN 1775: 2007 *Gas supply. Gas pipework for buildings. Maximum operating pressure less than or equal to 5 bar. Functional recommendations*
- BS 5482-1: 2005 *Code of Practice for domestic butane – and propane-gas-burning installations. Installations at permanent dwellings, residential park homes and commercial premises, with installation pipework sizes not exceeding DN 25 for steel and DN 28 for corrugated stainless steel or copper.*
- BS 5482-2: 1977 *Domestic butane- and propane-gas-burning installations. Installations in caravans and non-permanent dwellings.*
- BS 5482-3: 2005 *Code of Practice for domestic butane and propane gas-burning installations. Installations in boats, yachts and other vessels.*
- BS EN 1949: 2002 *Specification for the installation of LPG systems for habitation purpose s in leisure accommodation vehicles and in other vehicles*
- PD 5482-3: 2005: *Code of Practice for domestic butane and propane gas-burning installations. Installations in boats, yachts and other vessels.*
- BS EN ISO 10239: 2008 *Small craft. Liquefied petroleum gas (LPG) systems*
- BS 5546: 2000 *Specification for installation of hot water supplies for domestic purposes, using gas-fired appliances of rated input not exceeding 70 kW.*
- BS 5864: 2004 *Installation and maintenance of gas-fired ducted air heaters of rated input not exceeding 70kW net (2nd and 3rd family gases). Specification.*
- BS 5871-1: 2005 *Specification for the installation and maintenance of gas fires, convector heaters, fire/back boilers and decorative fuel effect gas appliances. Gas fires, convector heaters, fire/back boilers and heating stoves (2nd and 3rd family gases)*
- BS 5871-2: 2005 *Specification for the installation and maintenance of gas fires, convector heaters, fire/back boilers and decorative fuel effect gas appliances. Inset live fuel effect gas fires of heat input not exceeding 15kW, and fire/back boilers (2nd and 3rd family gases).*

- BS 5871-3: 2005 *Specification for the installation and maintenance of gas fires, convector heaters, fire/back boilers and decorative fuel effect gas appliances. Decorative fuel effect gas appliances of heat input not exceeding 20kW (2nd and 3rd family gases).*
- BS 5871-4: 2007 *Specification for the installation and maintenance of gas fires, convector heaters, fire / back boilers and decorative fuel effect gas appliances. Independent gas-fired flueless fires, convector heaters and heating stoves of nominal heat input not exceeding 6kW (net) (2nd and 3rd family gases)*
- BS 6172: 2004 *Installation and maintenance of domestic gas cooking appliances (2nd and 3rd family gases)*
- BS 6173: 2009 *Specification for installation of gas-fired catering appliances for use in all types of catering establishments (2nd and 3rd family gases)*
- BS 6230: 2005 *Specification for installation of gas-fired forced convection air heaters for commercial and industrial space heating (2nd and 3rd family gases).*
- BS 6400-1: 2006 *Specification for installation of domestic-sized gas meters maximum rated capacity not exceeding 6 m³/h (2nd and 3rd family gases). Low pressure (2nd family gases)*
- BS 6400-2:2006 *Specification for installation, exchange, relocation and removal of gas meters with a maximum capacity not exceeding 6 m³/h (2nd and 3rd family gases) - Medium pressure (2nd family gases)*
- BS 6400-3: 2007 *Specification for installation exchange, relocation and removal of gas meters with a maximum capacity not exceeding 6 m³/h Low and medium pressure (3rd family gases)*
- BS 6644: 2005
+A1: 2008 *Specification for installation of gas-fired hot water boilers of rated inputs between 70kW (net) and 1.8 MW (net) (2nd and 3rd family gases).*
- BS 6798: 2009 *Specification for installation of gas-fired boilers of rated input not exceeding 70kW net*
- BS 6891: 2005
+ A2: 2008 *Installation of low pressure gas pipework of up to 35 mm (R1?) in domestic premises (2nd family gas). Specification – Incorporating Corrigendum No.1*
- BS 6896: 2005 *Specification for installation of gas-fired overhead radiant heaters for industrial & commercial heating (2nd and 3rd family gases)*
- BS EN 15287-1: 2007 *Installation of factory-made chimneys to BS 4543 for domestic appliances. Method of specifying installation design information*
- BS 7624: 2004 *Specification for installation and maintenance of domestic direct gas-fired tumble dryers of up to 6kW heat input (2nd and 3rd family gases).*
- BS 7671: 2008 *Requirements for electrical installations. IEE Wiring Regulations – Seventeenth edition*
- BS 8446: 2005 *Specification for the installation & maintenance of open-flued, non-domestic gas-fired laundry appliances*

Valves, meters and regulators (governors)

BS EN 88-1: 2007 *Pressure governors for gas appliances for inlet pressures up to and including 500 mbar.*

BS EN 161: 2007 *Automatic shut-off valves for gas burners and gas appliances*

BS 1552: 1995 *Specification for open-bottomed taper plug valves for gas pressures up to 200 mbar.*

BS EN 12864:2001:

+ A3: 2009 *Low-pressure, non adjustable regulators having a maximum outlet pressure of less than or equal to 200 mbar, with a capacity of less than or equal to 4kg/h, and their associated safety devices for butane, propane or their mixtures*

BS EN 13785:2005:

+A1: 2008 *Regulators with a capacity of up to and including 100 kg/h, having a maximum nominal outlet pressure of up to and including 4 bar, other than those covered by EN 12864 and their associated safety devices for butane, propane or their mixtures*

BS EN 13786:2004:

+ A1: 2008 *Automatic change-over valves having a maximum outlet pressure of up to and including 4 bar with a capacity of up to and including 100 kg/h, and their associated safety devices for butane, propane or their mixtures*

BS 7461: 1991 *Specification for electrically operated automatic gas shut-off valves fitted with throughput adjusters, proof of closure switches, closed position indicator switches or gas flow control.*

Tubing

BS 669 *Flexible hoses, end fittings and sockets for gas burning appliances*

Part 1: 1989 *Specification for strip-wound metallic flexible hoses, covers, end fittings and sockets for domestic appliances*

Part 2: 1995 *Specification for corrugated metallic flexible hoses, covers, end fittings and sockets for domestic appliances.*

BS 2775: 1987 *Specification for rubber stoppers and tubing for general laboratory use*

BS 3212: 1991 *Specification for flexible rubber tubing, rubber hose, and rubber hose assemblies for use in LPG vapour phase and LPG/air installations.*

BS 4089: 1999 *Specification for metallic hose assemblies for liquid petroleum gases and liquefied natural gases*

BS EN 751-1: 1997 *Sealing materials for metallic threaded joints in contact with 1st, 2nd & 3rd family gases & hot water. Anaerobic jointing compounds*

BS EN 751-2: 1997 *Sealing materials for metallic threaded joints in contact with 1st, 2nd & 3rd family gases & hot water. Non-hardening jointing compounds*

BS EN 751-3: 1997 *Sealing materials for metallic threaded joints in contact with 1st, 2nd & 3rd family gases & hot water. Unsintered PTFE tapes*

BS 6501-1: 2004 *Metal hose assemblies. Guidance on the construction and use of corrugated hose assemblies.*

BS EN 1762: 2003 *Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2, 5 Mpa). Specification.*

Appliances

BS EN 203-1: 2005

+A1: 2008 *Gas heated catering equipment. General safety rules.*

BS EN 297: 1994 *Gas-fired central heating boilers. Type B₁₁ and B_{11BS} boilers fitted with atmospheric burners of nominal heat input not exceeding 70 kW.*

BS EN 483:1999

+A4: 2007 *Gas-fired central heating boilers. Type C boilers of nominal heat input not exceeding 70 kW*

BS EN 625: 1996 *Gas-fired central heating boilers. Specific requirements for domestic hot water operation of combination boilers of nominal heat input not exceeding 70 kW.*

BS EN 676: 2003 *Automatic forced draught burners for gaseous fuels.*

BS 5258 *Safety of domestic gas appliances*

Part 1: 1986 *Specification for central heating boilers and circulators*

Part 9: 1989 *Specification for combined appliances: fanned-circulation ducted-air heaters/circulators*

Part 15: 1990 *Specification for combination boilers*

BS 5809: 1980 *Specification for safety and efficiency of the gas heating equipment of commercial dish washers.*

BS 5885-1: 1988 *Automatic gas burners. Specification for burners with input rating 60 kW and above.*

BS 5885-2: 1987 *Automatic gas burners. Specification for packaged burners with input rating 7.5 kW up to but excluding 60 kW.*

BS 5978: 1989 *Safety and performance of gas-fired hot water boilers (60 kW to 2 MW heat input)*

Part 1: 1989 *Specification for general requirements.*

Part 2: 1989 *Specification for additional requirements for boilers with atmospheric burners.*

Part 3: 1989 *Specification for additional requirements for boilers with forced or induced draught burners.*

BS 5986: 1980 *Specification for electrical safety and performance of gas-fired space heating appliances with inputs 60 kW to 2 MW.*

BS 5990: 2006 *Specification for direct gas-fired forced convection air heaters with rated heat inputs greater than 330 kW but not exceeding 2 MW for industrial and commercial space heating. Safety and performance requirements (excluding electrical requirements) (2nd family gases)*

BS EN 525:2009 *Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW*

BS 5991: 2006 *Specification for indirect gas fired forced convection air heaters with rated heat inputs greater than 330 kW but not exceeding 2 MW for industrial and commercial space heating. Safety and performance requirements (excluding electrical requirements) (2nd family gases)*

BS 6896: 2005 *Specification for installation of gas-fired overhead radiant heaters for industrial and commercial heating (2nd and 3rd family gases).*

BS 7462: 1991 *Specification for electrical safety of domestic gas appliances.*

BS 7977-1:2009 *Specification for safety and rational use of energy of domestic gas appliances. Radiant/convectors*

BS 7977-2: 2003 *Specification for safety and rational use of energy of domestic gas appliances. Combined appliances. Gas fire/back boiler*

BS EN 1266: 2002 *Independent gas-fired convection heaters incorporating a fan to assist transportation of combustion air and/or flue gases*

BS EN 26:1998 *Gas fired instantaneous water heaters for the production of domestic hot water, fitted with atmospheric burners*

BS EN 30-1-2:1999 *Domestic cooking appliances burning gas. Safety. Appliances having forced-convection ovens and/or grills. Section 2 Forced convection ovens/grill*

BS EN 30-1-3: 2003 *Domestic cooking appliances burning gas. Safety. Appliances having a glass ceramic hotplate*

BS EN 656:2000 *Gas-fired central heating boilers. Type B boilers of nominal heat input exceeding 70 kW but not exceeding 300 kW*

BS EN 676:2003 *Automatic forced draught burners for gaseous fuels*

BS EN 30-2-2:1999 *Domestic cooking appliances burning gas. Rational use of energy. Appliances having forced-convection ovens and/or grills. Section 2. Forced convection ovens/grills*

BS EN 89: 2000 *Gas-fired storage water heaters for the production of domestic hot water*

BS EN 449: 2002 + A1: 2007 *Specification for dedicated liquefied petroleum gas appliances. Domestic flueless space heaters (including diffusive catalytic combustion heaters)*

BS EN 483: 1999 + A4: 2007 *Gas-fired central heating boilers. Type C boilers of nominal heat input not exceeding 70 kW*

BS EN 509: 2000 *Decorative fuel-effect gas appliances*

BS EN 525: 2009 *Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW*

BS EN 461:1999 *Specification for dedicated liquefied petroleum gas appliances. Flueless non-domestic space heaters not exceeding 10 kW*

BS EN 498: 1998 *Specification for dedicated liquefied petroleum gas appliances. Barbecues for outdoor use*

BS EN 732: 1999 *Specifications for dedicated liquefied petroleum gas appliances. Absorption refrigerators*

BS EN 778: 2009 *Domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 70 kW, without a fan to assist transportation of combustion air and/or combustion products*

BS EN 1596: 1998 *Specification for dedicated liquefied petroleum gas appliances. Mobile and portable non-domestic forced convection direct fired air heaters*

BS EN 13410:2001 *Gas-fired overhead radiant heaters. Ventilation requirements for non-domestic premises*

BS EN 60335-2-102:2006 *Household and similar electrical appliances. Safety. Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections*

General

BS 476 - 22: 1987 *Methods for the determination of the fire resistance of non-loadbearing elements of construction.*

BS 1710: 1984 *Specification for identification of pipelines and services.*

BS 8313: 1997 *Code of Practice for accommodation of building services in ducts*

BS 7967-1: 2005 *Carbon monoxide in dwellings & the combustion performance of gas-fired appliances – Guide for identifying & managing sources of fumes, smells, spillage / leakage of combustion products & carbon monoxide detector activation*

BS 2967-2: 2005 *Carbon monoxide in dwellings & the combustion performance of gas-fired appliances – Guide for using electronic portable combustion gas analysers in the measurement of carbon monoxide & the determination of combustion performance*

BS 2967-3: 2005 *Carbon monoxide in dwellings & the combustion performance of gas-fired appliances – Guide for responding to measurements obtained from electronic portable combustion gas analysers*

BS 2967-4: 2007 *Carbon monoxide in dwellings & the combustion performance of gas-fired appliances – Guide for using electronic portable combustion gas analysers as part of the servicing & maintenance of gas-fired appliances*

BS 7967-5 *Measurement of carbon monoxide, carbon dioxide and the combustion performance of gas-fired equipment – Guide for using electronic portable combustion gas analysers in non-domestic premises for the measurement of carbon monoxide & carbon dioxide in indoor air and the determination of combustion performance*

BS 8313: 1997 *Code of practice for accommodation of building services in ducts*

BS EN 12327: 2000 *Gas supply systems. Pressure testing, commissioning and decommissioning procedures. Functional requirements*

BS EN 15001-1: 2009 *Gas installation pipework with an operating pressure greater than 0.5bar for industrial installations and greater than 5bar for industrial and non industrial installations – Detailed functional requirements for design, materials, construction, inspection and testing*

BS EN 15001-2: 2008 *Gas installation pipework with an operating pressure greater than 0.5bar for industrial installations and greater than 5bar for industrial and non industrial installations – Detailed functional requirements for commissioning, operation and maintenance*

BS EN 1949: 2002 *Specification for the installation of PG systems for habitation purposes in leisure accommodation vehicles & in other road vehicles*

BS EN 10239: 2008 *Small craft – Liquefied petroleum gas (LPG) systems*

LP Gas Association Codes of Practice and guidance

Code 1 *Bulk LPG storage at fixed installations*

Part 1: *Design, installation and operation of vessels located above ground*

Part 2: *Small bulk installations for domestic premises*

Part 3: *Examination and Inspection*

Part 4: *Buried / mounded LPG storage vessels*

Code 7 *Storage of full and empty LPG cylinders and cartridges*

Code 17 *Purging LPG vessels and systems*

Code 21 *Guidance for Safety Checks on LPG appliances in caravans*

Code 22 *LPG piping system design and installation*

Code 24 *The use of LPG cylinders*

Part 1: *The use of propane cylinders at residential premises*

Part 2: *The use of butane cylinders at residential premises*

Part 3: *Use of LPG cylinders in mobile catering vehicles and similar commercial vehicles*

Part 4: *The use of LPG for catering and outdoor functions*

Part 5: *The storage and use of LPG on construction sites*

Part 6: *The use of propane in cylinders at commercial and industrial premises*

Code 25: *LPG central storage and distribution systems for multiple consumers*

GN 2 *A guide to servicing cabinet heaters*

Available from: mail@uklpg.org

UKLPG, Bow Court, Coventry, West Midlands, CV5 6SP

Web site address: www.uklpg.org

Institution of Gas Engineers (IGE) technical publications

IGE/UP/1 Ed 2 *Strength testing, tightness testing and purging of industrial and commercial gas installations. MOP \leq 16 bar*

IGE/UP/1A Ed 2 *Strength testing, tightness testing and purging of industrial and commercial gas installations. MOP \leq 40 bar*

IGE/UP/1B Ed 2 *Tightness testing and direct purging of small Natural Gas installations*

IGEM/UP/2 Ed 2 *Installation pipework on industrial and commercial premises (including amendments published July 2008)*

IGE/UP/3 Ed 2 *Gas fuelled spark ignition & Dual fuel engines*

IGE/UP/4 Ed 3 *Commissioning of gas fired plant on industrial and commercial premises.*

IGE/UP/6 Ed 2 *Application of positive displacement compressors to natural gas fuel systems. MOP \leq 400 bar.*

IGE/UP/7 Ed 2 *Gas installations in timber framed buildings*

IGE/UP/10 Ed 3 *Installation of gas appliances in industrial and commercial premises*

IGE/UP/11 *Gas installations for educational establishments*

IGE/UP/12 *Gas fired process plant*

IGE/TD/4 Ed 4 *Gas services*

IGE/G/1 - 3rd Imp *Defining the end of the network, meter installation etc.*

Note: IGE/G/1 – 3rd Impression is available as a free download from IGEN & can be viewed online at the following

URL:<http://www.igem.org.uk/download/document/IGEM-G-1%203rd%20Impression.pdf>

IGE/G/5 *Gas in flats & other multi-dwelling buildings (including amendments published April 2009)*

IGEMG6 *Gas supplies to mobile dwellings*

IGE/GM/4 Ed 2 *Flow metering practice for pressures between 38 & 100bar*

IGE/GM/5 Ed 3 *Selection, installation & use of electronic gas meter volume conversion systems*

IGE/GM/6 *Diaphragm and rotary displacement meter installations. >6 m³h⁻¹. MOP ≤ 75 mbar.*

IGE/GM/7 A *Electrical connections for gas metering equipment*

IGE/GM/8 part 1 *Non-domestic meter installation. Flow rate exceeding 6m³h⁻¹ and inlet pressure not exceeding 38 bar*

IGE/GM/8 part 2 *Locations, Housings and compounds*

IGE/GM/8 part 3 *Installation and commissioning*

IGE/GM/8 part 4 *operation and commissioning*

IGE/GM/8 part 5 *Operation and maintenance*

IGE/S/20 *Dealing with reported gas escapes*

IGE/SR/24 *Risk assessment techniques*

IGE/SR/25 *Hazardous area classification of natural gas installations (including amendments published March 2006)*

These publications are available from:

IGEM House, High Street, Kegworth, Derbyshire, DE74 2DA

Tel: 0844 375 4436

Fax: 01509 678198

Email: General@igem.org.uk

British Gas publications

Commercial (and industrial) installations

IM/28: 1993 *Appliances in commercial garages*

This British Gas publication is available from:

IGEM House, High Street, Kegworth, Derbyshire, DE74 2DA

Tel: 0844 375 4436

Fax: 01509 678198

Email: General@igem.org.uk

Other publications

Code of practice for the construction, machinery, equipment, stability, operation and examination of motor vessels, of up to 24 metres load line length, in commercial use and which do not carry cargo or more than 12 passengers. HMSO 1993 ISBN 0 11 551185 7

The safety of small workboats & pilot boats - a code of practice. Stationery Office 1998 ISBN 0 11 55 2006 6

The Building and Approved Inspectors (Amendment) Regulations 2006 Approved document F 2006 – *Means of Ventilation*. Great Britain Department of the Environment Great Britain Welsh Office

The Building and Approved Inspectors (Amendment) Regulations 2006 Approved document J 2002– *Combustion appliances and fuel storage systems*. Great Britain Department of the Environment Great Britain Welsh Office. ISBN 101 85946209X

Sources of other relevant information

General advice on gas safety issues

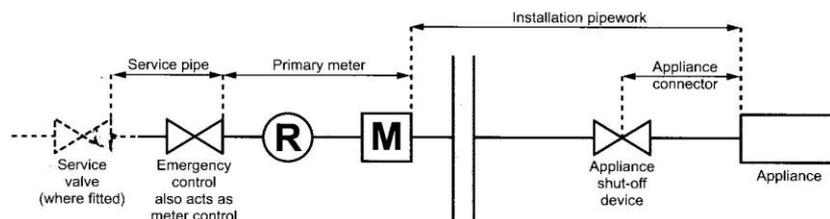
Accredited certification scheme for gas fitting operatives

Information, including on assessment standards, accredited certification bodies, and training providers, is available from The Gas Safe Register, PO Box 6804, Basingstoke, Hants, RG24 4NB

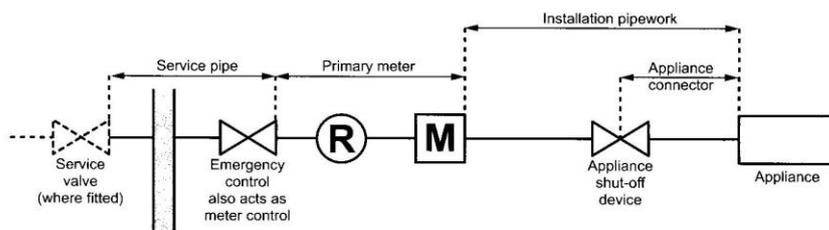
Appendix V Diagrams of typical installations

1. These simplified installation diagrams are only intended for use as an aid to identify and indicate the relative positions of components described in the Ordinance, ACOP and guidance.
2. It must be stressed that the diagrams are only general illustrations of typical arrangements and variations may therefore occur in specific circumstances. For instance, in certain cases (eg diagrams c (ii), (d) and (f), the 'common' or 'remote' valve shown as the first emergency control downstream of the distribution main will not in fact be an emergency control, where intended for use by the gas supplier / or emergency services rather than gas consumers. In such cases, a valve or valves downstream (e.g. within individual dwellings) will act as the first emergency control and define the boundary between the service pipe and installation pipework.
3. The upstream boundary of the service pipe (i.e. with the distribution main) in diagrams (a)-(f) is not shown.

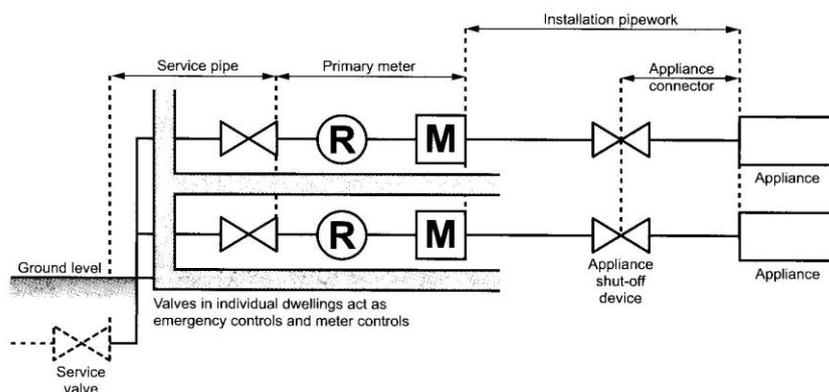
(a) Outside meter installation



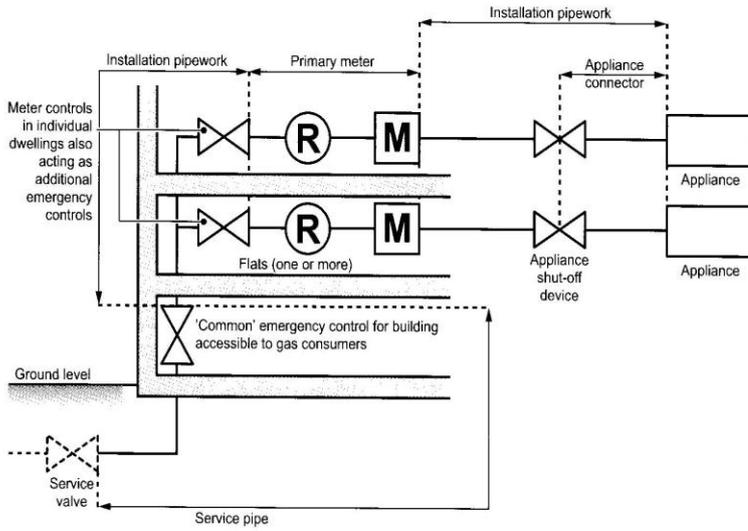
(b) Inside meter installation



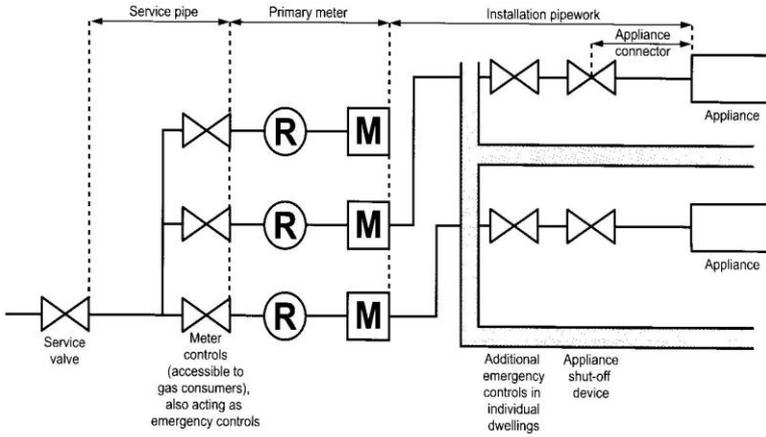
(c)(i) Multi-occupancy installation — external riser



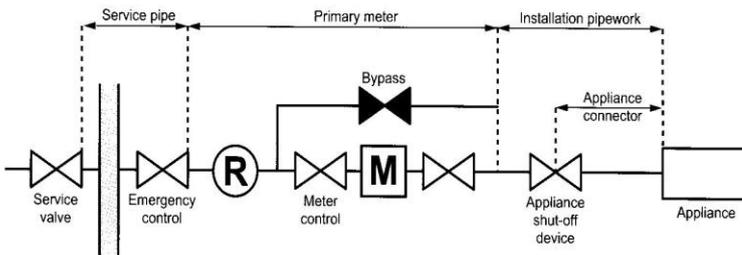
(c)(ii) Multi-occupancy installation - internal riser



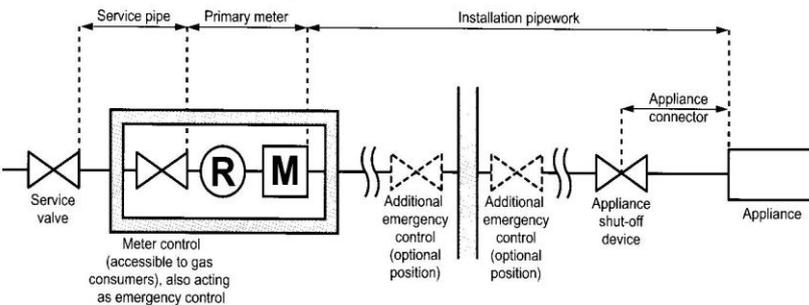
(d) Multi-occupancy installation (remote meters)



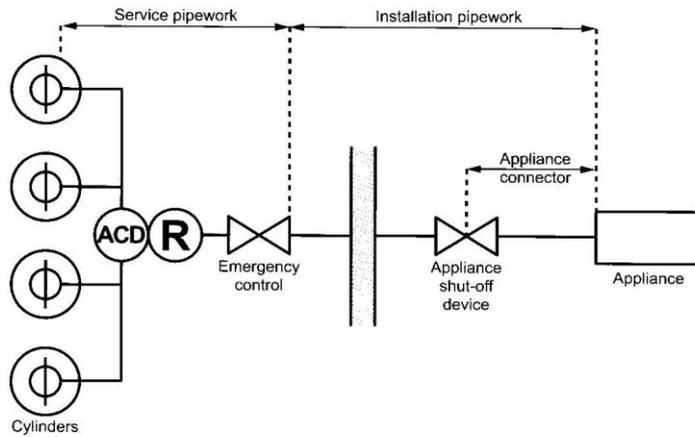
(e) Meter with bypass, eg industrial/commercial



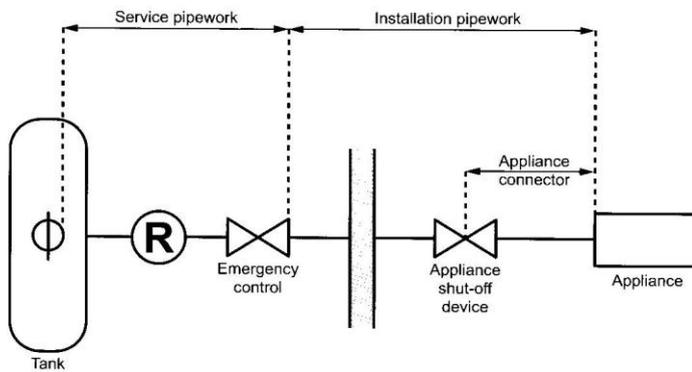
(f) Meter remote from premises, eg meter houses



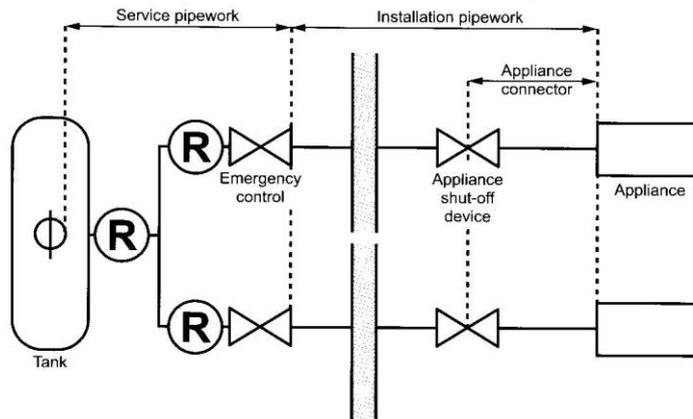
(g)(i) LPG systems – cylinder installation



(g)(ii) LPG systems – single bulk tank installation



(g)(iii) LPG systems – single bulk tank installation (multi-residence)



(R) Regulator

(M) Meter

 Gas emergency control - situated as near as is reasonably practical to the point where the pipe supplying gas enters the premises or building (see also paragraph 2 of this appendix)

 Vapour valve on the storage vessel

(ACD) Automatic change-over device