**Gas Safety Management Plan**

**(Section A)**

**Bournemouth AFCO**

**24/09/2021**

**Produced to meet the requirements of the**

**Gas Safety (Installation and Use) Regulations 1998**

**Unique Document Reference:**

**WX07**

 Obtained from DIO E&C

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**Amendments and Reviews**

This is to be completed in accordance with section 2.5 and 2.6.

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**References**

1. Gas Safety (Installation & Use) Regulations 1998
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3. Gas Safety (Management) Regulations 1996
4. JSP 815 – Defence Health, Safety and Environmental
5. JSP 375 Vol 3 Chapter 4 Annex C – Management of Health and Safety in Defence
6. MOD Gas Safety Case
7. JSP 375.Vol 2 Leaflet 39

**Establishments Key Personalities (Gas) Contact’s**

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Tel No.** | **Email** |
| CO/HoE | Not identified |  |  |
| Senior DIO Estate Representative or Equivalent[[1]](#footnote-1) | Nicola Johns | 01823 250113 | wx-estates@rfca.mod.uk  |
| MMO Site Manager | Paul Hinton | 01202 557734 | Paul.hinton847@mod.gov.uk  |
| GSM | Neville King  | 07816 168471 | neville.king@dnv.com  |
| RP (Gas) | David Cooper | 07761 758675 | david.cooper@dnv.com  |

**1. Approval of Gas Safety Management Plan Section A**

This Gas Safety Management (GSMP) Plan has been prepared to enable the Ministry of Defence (MOD) to satisfy the requirements of the Gas Safety (Installation and Use) Regulations (GS(IU)R) 1998.

The GSMP describes the management arrangements which are in place to control the risks from natural gas at Bournemouth AFCO, 244 Holdenhurst Road, Bournemouth, Dorset, BH8 8AZ.

This GSMP was prepared by Defence Infrastructure Organisation (DIO) on behalf of the Commanding Office / Head of Establishment (CO/HoE) by DNV and is subject to periodic review as indicated in the plan.

**Authorisation for Implementation**

Gas Safety Management Plan for Bournemouth AFCO, 244 Holdenhurst Road, Bournemouth, Dorset, BH8 8AZ.

The content and format of this Gas Safety Management Plan are agreed by DIO and authorised for implementation by:

Pending – J Obbard SME(Gas)

The content and format of this Gas Safety Management Plan has been agreed by the Senior DIO Estate Representative or Equivalent and future works following the findings will be supported by the Senior DIO Estate Representative or Equivalent:

Signature:……………………………………………… Date……………………………….

The content and format and content of this Gas Safety Management Plan have been agreed by the HoE:

Signature:……………………………………………… Date……………………………….

This GSMP has been devised for the use of the Crown and its contractors in the execution of contracts for the Crown. The Crown hereby excludes all liability (other than liability for death or personal injury) whatsoever and however arising (including, but without limitation, negligence on the part of the Crown, its servants or agents) for any loss or damage however caused where the Plan is used for any other purpose.

**2. Introduction**

2.1 The Management of Health and Safety at Work Act (HASAW) 1974 requires employers to put in place arrangements for the effective planning, organisation, control, monitoring and review of the preventive and protective measures necessary to ensure health and safety at work is properly managed and to establish, where necessary, appropriate procedures to be followed in the event of serious and/or imminent danger.

2.2 This document contains the GSMP (Section A) for the MOD establishment at Bournemouth AFCO, 244 Holdenhurst Road, Bournemouth, Dorset, BH8 8AZ. Implementation of this plan will enable the establishment to demonstrate compliance with the GS(IU)R for working on and maintaining gas systems.

**Note:**

a. Section ‘A’ of the Gas Safety Management Plan supports the requirements under the Gas Safety (Implementation and Use) Regulations 1998 which applies to utilisation pipework and equipment installed downstream (outlet side) of Emergency Control Valves (ECVs) for individual premises, plant or processes.

b. Section ‘B’ applies to the gas safety management arrangements associated with natural gas networks.

c. Section ‘C’ relates to LPG networks.

2.3 The GS(IU)R place 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. The Regulations deal with the safe installation, maintenance and use of gas fittings, appliances and flues and generally apply to any gas as defined in the Gas Act and GS(M)R. (A summary of requirements of the GS(IU)R is provided in Annex A)

2.4 CO/HoE (as the duty holder with authority over and responsibility for the activities within a MOD establishment – Joint Service Publication (JSP) 815) are required to ensure that a GSMP has been prepared and maintained for the Establishment(s) under their control. The CO/HoE is to be supported in this role by the following persons/organisations.

a. For Establishments or areas of an Establishment which fall within the scope of a Regional Prime Contract:

(1) The Defence Infrastructure Organisation Deputy Head Hard FM (DIO D HFM)

(2) The Maintenance Management Organisation (MMO) (the Regional Prime Contractor)

b. For Establishments maintained under any other form of contract and areas of an Establishment not within the scope of a Regional Prime Contract:

 (1) The MOD manager responsible for the MMO

(2) The service partners - Public Funded Initiatives (PFI), Public Private Partnership (PPP), Multi Activity Contract (MAC) and United States Visiting Forces (USVF)

 

2.5 Monitoring of the implementation of the GSMP will take place at regular intervals (quarterly during the first year of implementations and then at periods not exceeding 12 month) to make sure that the arrangements are working and that people are fully aware of what their responsibilities are in order to comply with the requirements of the above legislation. The arrangements will need to be reviewed and amendments made particularly when there are changes or modifications to the estate gas infrastructure, including any changes to leases and licences on the establishment. The arrangements shall be **reviewed every twelve months**, (even if there have been no changes), or more frequently if the situation requires. Details of the review(s) are to be recorded within the plan.

2.6 The details of the review, when it is made, are to be written down, including whether the arrangements are still satisfactory or whether any changes are made. Everyone who needs to know (those affected by any change) should be informed of any changes made.

**3. Key Requirements**

3.1 The GSMP introduces formal control of work on or near gas systems. The level of control is similar to that provided by other MOD management procedures. Unlike other disciplines, however, there is a nationally recognised registration scheme for operatives working on gas systems ‘Gas Safe Register’. This is recognised in the GSMP. (See Annex B for details of Gas Safe Register)

**4. Roles and Responsibilities**

4.1 This encompasses all those who are involved in the execution, supervision, management and monitoring of work on gas systems[[2]](#footnote-2).

1. **Commanding Officer/Head of Establishment** - In order to have an effective GSMP, the CO/HoE is to ensure;

(1) Clear lines of responsibility are established for the plan’s management and implementation;

(2) Detailed risk assessments of the gas network are to include schematic plans of the system;

(3) Competent contractors/persons are engaged to undertake work on the system (registered with the ‘Gas Safety register’);

(4) A maintenance regime is maintained to monitor/implement control measures,

(5) Adequate records are maintained.

1. **Landlord** - MOD as a Landlord is responsible for:

(1) Ensuring gas fittings and flues are maintained in a safe condition. Gas appliances should be serviced in accordance with the manufacturer’s instructions. If these are not available it is recommended that they are serviced annually unless advised otherwise by a Gas Safe registered engineer;

(2) Ensuring an annual safety check is carried out on each gas appliance/flue. Before any new lease starts, must make sure that these checks have been carried out within one year before the start of the lease date, unless the appliances in the property have been installed for less than 12 months, in which case they should be checked within 12 months of their installation date;

(3) Having all installation, maintenance and safety checks carried out by a Gas Safe registered engineer;

(4) Keeping a record of each safety check for at least two years;

(5) Issuing a copy of the latest safety check record to existing tenants within 28 days of the check being completed, or to any new tenant before they move in (in certain cases there is an option to display the record).

1. **The Gas Safety Manager (GSM)** - With regard to the management of work on gas systems, the GSM will:

(1) Confirm that a sufficient number of Responsible Persons (Gas) (RP(Gas)) are appointed with specific responsibility for the management of work on gas systems;

(2) Ensure that a demarcation agreement is drawn up and agreed. This is to be in the form of a schematic drawing for each gas distribution system, and is to be displayed and available to all interested parties;

(3) Confirm in writing for each site or geographical area the custodian of the Schematic Drawings & Register of Gas Appliances.

1. **The Responsible Person (Gas)** will:

(1) Ensure that, where a company is employed to work on gas systems, the individuals concerned are registered with the Registration Body and have a certificate of competence appropriate to the type of work and system to be worked upon;

(2) Maintain, for each geographical area, a database of sites on which gas systems are maintained or operated;

(3) Ensure that, for each geographical area, a database of competent staff (Approved Gas Fitters) is maintained;

(4) Ensure that a schematic drawing detailing the pipe work installation in each building is maintained and available to all Approved Gas Fitters;

(5) Ensure that a register of every gas appliance and flue is maintained and available to all Approved Gas Fitters

(6) Undertake six monthly checks of the system, documents & records operated and maintained by the Gas Supervisors.

1. **The Employer of a Registered Gas Safe Engineer -** Every company employed to carry out work on gas systems, appliances or ancillary equipment on the MOD Estate is to have suitable and sufficient management procedures in place to discharge the duty of the Employer under the regulations. The employer of an approved gas fitter will;

(1) Obtain and maintain Corporate Registration from the Registration Body;

(2) Ensure that, where directly employed staff are engaged on work on gas systems, the individuals are trained to the appropriate standards and registered with the Registration Body and have a certificate of competence appropriate to the type of work and system to be worked upon;

(3) Ensure that, where a sub-contractor is employed to work on gas systems, the individuals concerned are registered with the Registration Body and have a certificate of competence appropriate to the type of work and system to be worked upon;

(4) Maintain records of training of individuals assessed as competent and any assessments carried out by the Registration Body;

(5) Ensure that records of employment, training and assessment of ‘competent persons’ are available to the GSM and RP (Gas) for audit purposes;

(6) Ensure that any modifications to installed pipe work are communicated to the RP (Gas) including the provision of an updated schematic drawing for the installation;

(7) Ensure that the RP (Gas) is informed of the installation or removal from a site of any gas appliance and/or flue;

(8) Undertake routine checks (in line with the requirements of Gas Safe Register) of all employees and contractors employed on gas works.

1. **Approved Gas Fitters** will:

(1) Carry out work in a competent manner in accordance with industry best practice;

(2) Co-operate with management in the adoption of safe systems of work as dictated by both this and other MOD Safety Rules & Procedures.

(3) Advise management of any work situation which could result in either serious or immediate danger to health and safety.

1. **The Registration Body**:

(1) ‘Gas Safe Register’[[3]](#footnote-3) is appointed by the Health & Safety Executive (HSE) to operate a mandatory registration scheme for competent businesses which carry out gas work. (See Annex B for more details)

**5. Training**

5.1 By law anyone carrying out work on gas appliances or fittings as part of their business must be competent and registered with the Gas Safe Register.

**6. Risk Assessment**

6.1. The Management of HASAW require all employers and self-employed persons to assess risk to workers and any others who may be affected by their undertaking. Their application within the MOD is detailed in JSP 375.Vol 2 Leaflet 39.

6.2 The general issues to be considered in carrying out a risk assessment include:

a. Permission from the appropriate manager for the work

b. Who will be affected by the work

c. A method statement and plan of work

d. The requirement for permits, sanctions or standing instructions to be issued

e. The number of personnel needed, their trades and skill levels

f. The need for persons to work accompanied

g. Competence

h. Training

i. Means of safe access and egress

j. The work equipment and its availability

k. Location and availability of safety equipment, portable access ladders etc.

l. The conditions to be encountered at the point(s) of work:

(1) Carry out work in a competent manner in accordance with industry best practice

(2) Air quality

(3) Exposure to gases

(4) Entry into a confined space

(5) High or low temperatures

(6) Humidity levels

(7) Illumination

(8) Noise levels

(9) Weather conditions

(10) Working at height

(11) Wet surfaces

(12) The presence or potential presence of asbestos

m. Any relevant MOD, statutory or any other regulations

n. Other MOD Safety Rules and Procedures

o. Emergency procedures

p. Other specific hazards associated with gas system

6.3 Specific issues that may need to be addressed when carrying out a risk assessment on a gas system include:

a. Limitations on the timing and scope of work

b. The methods of isolation

c. Isolating from other part of the system

d. Procedure for electrical isolation

e. Procedure for gas system isolation

f. Isolating exhaust gases

g. The procedure for purging

h. The need for any other work, which would create a hazard if undertaken at the same time, to be suspended and left in a safe condition

i. Proving the purged state

j. Asbestos control measures

k. A method to ensure adequate ventilation and dilution or freeing of toxic or flammable gases

l. The space required to carry out the work

m. Procedure for commissioning the system

n. Proving of safety devices

o. Operation of other equipment

p. Provision for a competent person to examine the completed work.

**7. Inspections and Tests**

7.1 Regular inspection of equipment is an essential part of any preventive maintenance programme. Records of maintenance, including inspection and test results are to be maintained preferably throughout the life of equipment. Completion and/or test certificates are mandatory.

7.2 The following lists the documents most common to the MMO’s activities and are to be processed when applicable, copies of which are to be issued to and held by the RP (Gas):

a. Gas Safety Inspection

b. Landlord’s Gas Safety Certificate

c. Electrical Cross Bonding

d. Combustion Report Form

e. Warning/Advice Notice as appropriate

7.3 Annex C is an example of the maintenance inspections that would normally be undertaken as part of the Planned Maintenance Operations (PMO).

7.4 Annex D is the site-specific Record and Procedures for this establishment.

**8. Audit and Monitoring**

8.1 System audits will be conducted by the GSM.

8.2 System audits will review, as a minimum the existence and continued competence of the appointments mandated by the GSMP Section B and the existence and completeness of the documents referred to in those procedure.

8.3 Monitoring of work on gas systems will be undertaken as required, by the Employer. This will include checks on the current Registration of the Approved Gas Fitter; the adherence to safe work instructions and Quality Assurance procedures; witnessing the results of tests and the checking of any completed records.

8.4 Audits and monitoring by the Employer of an Approved Gas Fitter are to be carried out as required to satisfy the requirements and maintain registration with the Registration Body.

**9. Emergency Procedures**

9.1 It is statutory requirement to provide information to individuals for the securing of safety in an emergency.

9.2 Emergency procedures are to be prepared by the line management in consultation with the GSM for all facilities in which there is a gas supply. The procedures must be recorded and held with other health and safety documents and in other appropriate places. The emergency procedures are to include, where appropriate:

a. Fire precautions

b. venting of gas to atmosphere

c. isolation arrangements

d. escape and evacuation procedures

e. rescue arrangements

9.3 A flowchart for dealing with unsafe conditions is included at Annex E

**10. Inspections and Investigations by External Authorities**

10.1 A number of external Authorities have the legal right to undertake inspections and investigations on gas systems details of these are provided in Annex F

**11. Gas Safety Certificates for Landlords**

11.1 By law, landlords must provide up-to-date gas safety certificates to their tenants. This certificate shows the tenant appliances have been serviced and the property is gas safe.

11.2 The ‘Landlord Gas Safety Record’ is often referred to as a ‘Gas Safety Certificate’ or ‘CP12’ form. As a minimum, the record of a gas safety check must contain:

a. A description of and the location of each appliance or flue checked

b. The name, registration number and signature of the individual carrying out the check

c. The date on which the appliance or flue was checked

d. The address of the property at which the appliance or flue is installed

e. The name and address of the landlord (or his agent where appropriate)

f. Any defect identified and any remedial action taken

g. A statement confirming that the safety check completed complies with the requirements of the Gas Safety (Installation and Use) Regulations 1998

**12. Abbreviations**

CO/HoE Commanding Officer/Head of Establishment

DIO Defence Infrastructure Organisation

GS(I&U)R Gas Safety (Installation & Use) Regulations

GSMP Gas safety Management Plan

GS(M)R Gas Safety Management Regulations

GSM Gas Safety Manager

HASAW Health and Safety at Work Act

JSP Joint Services Publication

LPG Liquid Petroleum Gas

MAC Multi activity Contract

MMO Maintenance Management Organisation

MOD Ministry of Defence

PFI Private Finance Initiative

PPP Public Private Partnership

RP (Gas) Responsible Person (Gas)

**13. Further reading**

a. Management of Health and Safety at Work Regulations

b. The Gas Safety (Rights of Entry) Regulations 1996

c. Safety in the installation and use of gas systems and appliances - ACoP and Guidance L56

d. HSE Leaflet - Gas Appliances ‘Get them checked, keep them safe’ – INDG238 (rev3)

e. HSE Leaflet - A guide to landlord’s duties: INDG285 (rev2)

**14. Safety Advice**

14.1 Advice can be obtained from:

 a. HSE Gas Safety Advice Line: 0800 300 363

 b. HSE’s Gas Safety website: [www.hse.gov.uk/gas/index.htm](http://www.hse.gov.uk/gas/index.htm)

 c. Gas Safe Register website: [www.gassaferegister.co.uk](http://www.gassaferegister.co.uk)

**15. Codes of Practice & Standards**

15.1 LPG Association Codes of Practice and Guidance[[4]](#footnote-4)

a. LP Gas Association Codes of Practice and guidance

(1) Code 1 Bulk LPG storage at fixed installations;

(a) Part 1: Design, installation and operation of vessels located above ground

(b) Part 2: Small bulk installations for domestic purposes

(c) Part 3: Examination and inspection

(d) Part 4: Buried/mounded LPG storage vessels

(2) Code 7 Storage of full and empty LPG cylinders and cartridges

(3) Code 17 Purging LPG vessels and systems

(4) Code 21 Guidance for safety checks on LPG appliances in caravans

(5) Code 22 LPG piping system design and installation

(6) Code 24 Use of LPG cylinders;

(a) Part 1: The use of LPG cylinders at residential and similar premises

(b) Part 3: The use of LPG in mobile catering vehicles and similar

commercial vehicles

(c) Part 4: The use of LPG for catering and outdoor functions

(d) Part 5: The storage and use of LPG on construction sites

(e) Part 6: The use of propane in cylinders at commercial and industrial premises

15.2 Institution of Gas Engineers and Managers (IGEM) technical publications[[5]](#footnote-5)

a. IGEM/UP/1 Edition 3 - Strength testing, tightness testing and direct purging of industrial and commercial gas installations

b. IGEM/UP/1A Edition 3 – Strength testing, tightness testing and direct purging of small low pressure industrial and commercial natural gas installations

c. IGEM/UP/1B Edition 3 – Tightness testing and direct purging of small Liquefied Petroleum Gas / Air, Natural Gas and Liquefied Petroleum Gas installations

d. IGEM/UP/2 Edition 3 – Installation pipework on industrial and commercial premises

e. IGEM/UP/4 Edition 4 – Commissioning of gas fired plant on industrial and commercial premises

f. IGEM/UP/6 Edition 2 – Application of compressors to natural gas fuel systems

g. IGEM/UP/7 Edition 2 – Gas installations in timber framed and light steel framed buildings

h. IGEM/UP/9 Edition 2 – Application of Natural Gas and fuel oil systems to gas turbines and supplementary and auxiliary fired burners

i. IGEM/UP/10 Edition 4 – Installation of flued gas appliances in industrial and commercial premises

j. IGEM/GM/5 Edition 3 – Selection, installation and use of electronic gas meter volume conversion systems

k. IGEM/GM/6 Edition 2 – Non domestic meter installations. Standard design

l. IGEM/GM/7A – Electrical connections for gas metering equipment

m. IGEM/GM/7B – Hazardous area classification for gas metering equipment

**Annex A**

**Summary of Requirements of the Gas Safety (Installation and Use) Regulations 1998**

1. 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 relevant statutory instrument; GS(I&U)R (SI 1998 No 2451)

2. The Regulations are divided into 7 Parts;

a. Part A (Regs 1&2) Deals with the citation, interpretation of terms and the application of the regulations (not shown below)

b. Part B (Regs 1-10) Addresses duties, responsibilities, workmanship. General installation precautions and emergency controls.

c. Part C (Regs 11-17 Is concerned with the installation of meters and regulators.

d. Part D (Regs 18-24) Specifies the regulations for installation pipework

e. Part E (Regs 25-34) Covers the safety requirements for appliances

f. Part F (Regs 35-36) Addresses the responsibilities of employers, self employed and landlord’s duties to maintain appliances

g. Part G (Regs 37-41 Is the ‘catch-all’ category for the gas related work that does not fit naturally elsewhere.

3. The Regulations[[6]](#footnote-6), (subject to certain exceptions/provisos):

a. Require 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 HSE; this means that they should be registered with the ‘Gas Safety register’ *–(Changed from CORGI from 1st April 2009)* (regulation 3);

b. Require 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 HSE (regulation 4);

c. Require 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 (regulation 5);

d. Specify measures to be taken by any person working on a gas fitting against danger from gas release, and requirements for sealing gasways and testing gas tightness 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, and the storage of natural gas at domestic premises is prohibited (regulation 6);

e. Require gas fittings to be protected from damage, including corrosion, and from blockage by a foreign body, e.g. dirt/dust (regulation 7);

f. Prohibit 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 Regulations, as well as work on a gas fitting or associated flue/ventilation system which results in danger to any person (regulation 8);

g. Require 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 (regulation 9);

h. Require electrical continuity to be maintained during work on a gas fitting, where necessary to avoid danger (regulation 10);

i. Require 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 (regulations 11-12);

j. Specify requirements for meter housings concerning safe dispersal of any gas escape, avoidance of combustible materials, and provision of keys to enable consumer access (regulation 13);

k. Stipulate 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 (regulation 14);

l. Require 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 (regulation 15);

m. Prohibit 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 (regulation 16);

n. Require 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 notice showing the configuration of the gas system (regulation 17);

o. Require 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 (regulation 18);

p. Specify 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 (regulation 19);

q. Require installation pipework to be installed so as to avoid impairing the structure or fire resistance of a building (regulation 20);

r. Require a receptor to be fitted to installation pipework where liquid or solid deposits may occur, eg from 'wet gas' (regulation 21);

s. Specify 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 (regulation 22);

t. Require 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 (regulation 23); require 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 (regulation 24);

u. Require 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 (eg 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 (regulation 26);

v. Require 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 (regulation 27);

w. Require a gas appliance to be installed in a position readily accessible for operation, inspection and maintenance (regulation 28);

x. Require 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 (regulation 29);

y. Prohibit 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 (regulation 30);

z. Prohibit installation of suspended appliances unless the installation pipework is capable of supporting the weight imposed and the appliance is designed to be so supported (regulation 31);

aa. Specify 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 (regulation 32);

bb. Specify requirements for testing gas tightness 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 (regulation 33);

cc. Require 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 or transporter, as appropriate (regulation 34); require 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 (regulation 35);

dd. Require 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 regulation 30 (e.g. certain instantaneous water heaters) is fitted in any room occupied or to be occupied as sleeping accommodation after the Regulations came into force. This includes any room converted into such accommodation after that time (regulation 36);

ee. Specify action to be taken by gas suppliers and persons responsible for premises in event of an escape of gas other than natural gas (as covered by the Gas Safety (Management) Regulations 1996); this extends to the emission of, or suspected emission of, carbon monoxide from an appliance using gas, other than natural gas supplied from a network (regulation 37);

ff. Require protective measures as stipulated by the gas transporter, 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 (regulation 38).

 **ANNEX B**

**Brief explanation of Gas Safe Register and example of Gas Safe Register Identity Card**

1. Gas Safe Register deals with all aspects of the downstream gas industry covering the Gas Safety (Installation and Use) Regulations 1998. It covers both piped natural gas and liquefied petroleum gas.

2. It is the law that anyone carrying out gas work that is within the scope of the Regulations is on the Gas Safe Register. The Gas Safe Register maintains a register of details of businesses and operatives who are competent to undertake a variety of gas work.

3. Registered gas engineers are issued with an Identity Card an example is shown below;

4. **General enquiries**

a. **By phone:** 0800 408 5500 **-** If you have hearing difficulties you can use our text phone service on 0800 408 0606.

b. **By email:** enquiries@gassaferegister.co.uk

c. **By post:** PO Box 6804
 Basingstoke
 RG24 4NB

5. **In an emergency**

a. Free 24-hour National Grid Gas Emergency Helpline:

(1) England, Scotland and Wales: 0800 111 999

(2) Northern Ireland : 0800 002 001

**ANNEX C**

**Example of the maintenance inspections that would normally be undertaken as part of the Planned Maintenance Operations under the heading Gas Safety (installation and Use) Regulations 1998**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Task No.** | **Item Description** | **Task** | **Lead Ref.** | **Status** | **Frequency** | **Remarks** | **Responsibility** |
| 1 | Gas Safety (Installations & Use) Regulations | a) Check each appliance for correct operationb) Test safety devices & ventilation air provisions | HSE L56BS 5839-1: 2002BS 5839-6: 2004JSP426 | PMS | Annually | To be carried out by a Competent Person who is a member of an organisation registered with Gas Safe Register |   |
| 2 | a) Inspect above ground pipework & installations.b) Check operation of safety isolation valves | PM | 2 Yearly |   |   |
| 3 | Inspect & service gas installations (Landlord's Gas Safety Check) to include smoke and CO detectors | PMS | Annually | **Domestic Properties Only** |   |
| 4 | a) Check appliances & pipework for correct operation.b) Test safety devices & ventilation air provisions | PMS | Annually | **Catering Equipment Only** |   |
| 5 | a) Gas regulators: b) Carry out a periodic inspection. | PM | 5 Yearly |  |   |
| 6 |  | Check meter box/compound are clear of combustible materials |  | PMS | Annually |  |  |
| 7 |  | Check that Emergency Notices are prominently displayed on or near the meter |  | PMS | Annually |  |  |
| 8 |  | Check that accurate line diagrams are in place on or near primary meter and emergency controls connected to the primary meter |  |  |  | **Natural Gas only** |  |
| 9 |  | Check that accurate line diagrams are in place on or near storage tanks and emergency controls connected to the system |  |  |  | **LPG only** |  |
| 8 | **LPG** Underground Pipework | a) Review the current risk assessmentb) Carryout periodic inspection in accordance with inspection plan | TM No. 84 Mar 07 | PM | Annually |  |   |

L56 - Safety in the installation and use of gas systems and appliances - ACoP and Guidance

BS 5839-1: 2002 - Cracking the new Fire Code

BS 5839-6: 2004 - Fire detection and fire alarm systems for buildings. Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings

JSP426 - MOD Fire Safety Manual

TM 84 LP Gas Association Technical Memorandum No 84

**ANNEX D**

**Site Specific Records and Procedures**

|  |
| --- |
| **Site Specific Records and Procedures** |
| **Name of Site:** Bournemouth AFCO |
| **Site Address:** Bournemouth AFCO, 244 Holdenhurst Road, Bournemouth, Dorset, BH8 8AZ |
| **Gas Safe Manager:** Neville King | **Contact Details:****Address:** DNV, Holywell Park, Ashby Road,Loughborough, LE11 3GR**🕿:** 07816 168471**🖂:** neville.king@dnv.com |
| **Responsible Person (Gas):** David Cooper | **Contact Details:****Address:** DNV, Holywell Park, Ashby Road,Loughborough, LE11 3GR**🕿:** 07761758675**🖂:** **d**avid.cooper@dnv.com  |
|  |  |
| **Site Gas Infrastructure Details** | ***This section is to detail the following:*** |
| Details of the Source (Natural gas (EGDN) and / or LPG) | **Organisation:** SGN**Address:** Axis House, 5 Lonehead Drive, Newbridge, Edinburgh EH28 8TG**🕿:** 0800 912 1700**🖂:** customer@sgn.co.uk  |
| Gas Supplier | **Organisation:** Corona Energy Limited**Address:** Building 2 Level 2, Croxley Park, Watford, United Kingdom, WD18 8YA**🕿:** 0800 804 8589**🖂:** info@coronaenergy.co.uk |
| Meter Asset Manager (MAM), Organisation | **Organisation:** Energy Assets Ltd**Address:** 6 Almondvale Business Park,Almondvale Way, LivingstonEH54 6GA**🕿:** Ralph Reekie - (0150) 6405405**🖂:** ralphreekie@EnergyAssets.co.uk |
| Natural Gas fed from a Gas Network | Bournemouth AFCO is a single site establishment which comprises of a single low pressure gas supply from SGN’s network.This feeds an individual regulated MAM owned meter within an external meter box to the rear of the building (South) which supplies gas to a single site appliance.Meter- U16 (16M³/hr) MPRN 3907399508The gas is used on a commercial scale for an Armed Forces Recruitment Centre at a working pressure of 21mbar, for heating and hot water. All gas incidents should be telephoned through to the National Gas Emergency number 0800 111 999. The DNV Gas Responsible Person shall be informed immediately by site personnel. |
| **LPG Gas (including Storage Tanks)** | No LPG on establishment  |
| **Details of the Site External Installation Pipework** | Building 1 has less than1m of 1” iron pipe externally installed. This is in a good condition and has been installed for approximately <10 years. |
| **Details of the Areas Served** | The gas supplies a single 85.8 kw boiler in a plantroom at the rear of the premises.*A detailed breakdown of the buildings and appliances within can be found at Annex E* |
|  |  |
| **Site Gas Infrastructure Drawings** | *This section is to contain site record drawings and line drawings of the external installation pipework, these drawings are to cover the following:* |
| Natural Gas fed from a Gas Network | *The primary meter housing up to and including the first valve internal to a building/location or the point at which the pipework is capped.* |
| LPG Gas (including storage tanks) | *The tank farm up to and including the first valve internal to a building or the point at which the pipework is capped.* |
| Site | Source | Drawing No | Comments |
| Bournemouth AFCO | DNV | TBC | No existing drawing. Drawing shall be produced by DNV within 12 months of first issue of this GSMP A. |

|  |  |
| --- | --- |
| **Building List and Internal Gas Installation Pipework Drawings** | *This section is to contain building record drawings and line drawings of the internal installation pipework, these drawings are to cover the following:* |
| Natural Gas & LPG | *The first valve internal to a building/location up to and including the equipment or the point at which the pipework is capped* |
| Site | Building | Drawing No | Comments |
| Bournemouth AFCO | Single building – Plant Room | TBC | No existing drawing. Drawing shall be produced by DNV within 12 months of first issue of this GSMP A. |
|  |  |  |  |
| **Site Procedure for Reporting Incidents (Inc Gas Escapes)** | *This section is to include a copy of the Establishments procedures for reporting gas incidents (including gas escapes) to the HSE.* |
| In accordance with the MOD Gas safety case flow chart 14.1, The Responsible Person (Gas) is responsible for reporting gas incidents to the HSE under the requirements of RIDDOR. (This action will be done in close liaison with the DNV H&S Advisor). |
| Investigate incident as per figure 14.1 and section 14.1.2 of the MOD exemplar gas safety case. Fig 14.1 |

|  |  |
| --- | --- |
| **Site Procedure for dealing with reports of gas incidents** | *This section is to contain the Establishment’s site specific procedure for dealing with reports of gas incidents with regards the external installation pipework, internal installation pipework and equipment and the details of all individuals with responsibilities under this procedure.* |
| External Installation Pipework | *Enter the details of the procedure to be followed, including contact details and named individuals with responsibilities*Procedure for an incident involving the External Installation Pipework on site:* Call National Gas Emergency line on 0800 111 999, open 24 hours per day.
* The EGDN shall attend and make safe a gas incident.

DNV Gas Responsible Person shall be informed immediately by the site personnel. |
| Internal Installation Pipework  | Procedure for an incident involving the Internal Installation Pipework on site:* Call National Gas Emergency line on 0800 111 999, open 24 hours per day.
* The EGDN shall attend and make safe a gas incident.
* DNV Gas Responsible Person shall be informed immediately by the site personnel.
 |
| Equipment | Procedure for an incident involving the Equipment Installation on site:* Call National Gas Emergency line on 0800 111 999, open 24 hours per day.
* The EGDN shall attend and make safe a gas incident.

DNV Gas Responsible Person shall be informed immediately by the site personnel. |
| LPG Bulk Storage Vessels Up To 1st Stage Regulator | No LPG on establishment |

**ANNEX E**

**Equipment List**

1. Equipment list needs to be updated when the equipment is removed or replaced and noted as an amendment to this document.

|  |  |
| --- | --- |
| **Equipment List** | *This section is to include details of all equipment connected to the site gas installation pipework.* |
|  | ***Network:*** |  |
| **Site** | **Building** | **Location** | **Equipment Details** | **Flue Type** | **Use of Gas**  | **Comments** |
| Bournemouth AFCO | Single site, main building. | External meter box rear of property | U16 gas meter | N/A  | Metering |  |
| Bournemouth AFCO |  | Plantroom at rear of property |  | Open flue | Heating and hot water | 85.8 kw |

**ANNEX F**



**Applying GIUSP**

**ANNEX G**

**Carbon Monoxide**

1. Unsafe gas appliances produce a highly poisonous gas called carbon monoxide (CO). It can cause death and serious long term health problems such as brain damage.

2. In 2008/2009, 14 people died from CO poisoning and 234 suffered health problems from CO exposure. This poisonous gas is released when gas appliances are incorrectly fitted, badly repaired or poorly maintained.

3. An annual safety check (by a Gas Safe register engineer) will provide some degree of assurance that appliances are safe. This will prevent persons being exposed to low levels of CO. Properly managed, gas is safe. Poorly managed, gas can produce harmful levels of carbon monoxide.

**What is carbon monoxide?**

4. Carbon monoxide (CO) is a highly poisonous substance which is produced by the incomplete burning of gas and Liquid Petroleum Gas (LPG). This can happen if a gas appliance has been incorrectly fitted, badly repaired or poorly maintained or if flues, chimneys or vents are blocked.

5. Persons could be inhaling CO without realising it. CO can't be sees, smelt or tasted, but at high levels it can kill in minutes. Even breathing in a small amount can cause loss of consciousness and death.

**Carbon monoxide alarms**

6. HSE strongly recommends the use of audible carbon monoxide (CO) alarms as a useful back-up precaution but they must not be regarded as a substitute for proper installation and maintenance of gas appliances by a Gas Safe Registered engineer. Before purchasing a CO alarm, always ensure it complies with British Standard EN 50291 and carries a British or European approval mark, such as a Kitemark. CO alarms should be installed, checked and serviced in line with the manufacturer's instructions.

7. Although carbon monoxide (CO) is a colourless, odourless and tasteless gas, signs that indicate incomplete combustion is occurring, resulting in the production of CO, include:

a. Yellow or orange rather than blue flames (apart from fuel effect fires or flueless appliances which display this colour flame)

b. Soot or yellow/brown staining around or on appliances

c. Pilot lights that frequently blow out

d. Increased condensation inside windows

1. This job title will vary depending on the organisation responsible, e.g SEFM, EFM, Site Manager etc [↑](#footnote-ref-1)
2. The following details for Gas Safety Manager , Responsible Person (Gas), Approved Gas Fitter and Registered Body are taken from JSP 375 Vol 3 Chapter 4 Annex C [↑](#footnote-ref-2)
3. Gas Safe Register is run by Capita Gas Registration and Ancillary Services Limited [↑](#footnote-ref-3)
4. These publications are available from The LP Gas Association, Unit 14, Bow Court, Fletchworth Gate, Burnsall Road, Coventry CV5 6SP [↑](#footnote-ref-4)
5. These publications are available from The Institution of Gas Engineers and Managers, Charnwood Wing, Holywell Park, Ashby Road, Loughborough, Leicestershire LE11 3GH [↑](#footnote-ref-5)
6. *Extract from Gas Safety (Installation and Use) Regulations 1998 - Approved Code of Practice and Guidance - L56 HSE BOOKS* [↑](#footnote-ref-6)