

Health and Safety Department

Management of Gas Installations Policy

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August 2016	Conversion of existing FM Gas safety policy to University policy.	SJC	HSE Committee			
May 2019	Section 3 items 3.2 & 3.3 minor alterations. 3.4 updated to current requirements. Organogram moved to appendix 17. Appendix 2 emergency reporting procedure updated. Appendix 12 – Pre contract survey form removed - replacement procedure added. Appendix 16 RIDDOR gas related information added. Minor alterations throughout.	Gavin Noon	HSE Committee			
November 2022	General updates to internal department terminology throughout. Appendix 2 reporting gas escapes or fumes now references the Gas Safety Case Procedure – LU/GAS/6. Appendix 17 organogram updated.	Jonathan Cripps	HSE Committee			

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1. Policy Statement

Loughborough University take the management of gas safety very seriously, we accept our responsibility as an employer, University and landlord and expect all in-house gas engineers and contractors to work to the highest of standards and adopt the current best practice models of operation across our portfolio of properties.

In turn we also require internal processes to be managed competently across the University stock. With this in mind Loughborough University has produced the Policy for the management of gas installations, which highlights processes to comply with when managing gas related work and documentation.

The policy is designed to provide unambiguous guidance on how the University should manage all gas safety related functions. The intention of this document is to enable Loughborough University to fulfil their obligations under the Gas Safety (Installation and Use) Regulations 1998 as well as to maintain minimum standards of safety and quality across the gas related operations.

Within the gas industry, standards and technology change very quickly, therefore for this document to remain up to date it must be reviewed at regular intervals. To fall in line with best practice methods the document is version controlled and will be reviewed every three years by the Loughborough University Estates & Facilities Management team, or more frequently where there has been a change in legislation or industry guidance. Readers should always ensure that the latest standards and guidance are used when working with gas installations.

What is covered by this policy?

This policy applies to all workplace activities relating to the installation, commissioning, modification and operational use of natural gas service systems.

Occasionally research, development and design activities take place on the campus. In such cases, these activities, if formally ratified by the Health and Safety executive, will fall outside the scope of this policy. Such activities must be carried out under independent risk assessment by competent people.

2. Hazards associated with Gas installations

There are essentially two major hazards associated with gas services.

- Carbon Monoxide Poisoning
- Risk of explosion and fire

Carbon Monoxide poisoning is by far the biggest killer. It is a colourless, odourless gas that has approximately the same specific density as air. It is toxic in extremely low concentrations. Concentrations of CO in air at 0.01% by volume will cause a headache within 2-3 hours. Concentrations as low as 0.04% by volume present a risk to life after 2-3 hours exposure. 1.28% concentration will result in death within 2-3 minutes. Carbon Monoxide is produced when gas fails to burn correctly.



Natural gas is essentially Methane with a few additives that are

designed to improve efficiency and enable detection by the human sense of smell. In its natural state it is colourless and odour less. This additive aids the location of leaks. The gas has an explosive range of 5% to 15% by concentration in air. There are many examples of gas explosions that have occurred in recent years.

3. Roles and Responsibilities

3.1 Corporate Governance

Governance structure for management of H&S within Loughborough University - Definitions of Nominated Staff

Duty Holder: COO (senior person responsible)

The Chief Operating Officer (COO) is the Statutory Duty Holder and, as the senior person responsible, has overall accountability for all aspects of the management of health and safety in the University organisation.

Designated Person: Director or Dean

A person appointed by Loughborough University who has managerial authority and responsibility for the control of health and safety legislation within their area.

Auditor / Verifier of Authorised Persons

An individual or company with the required knowledge, training and experience with necessary independence from local management to undertake independent audits within the organisation and propose remedial action. This individual will also assess the suitability and appointment of Authorised Persons, once proposed by the Duty Authorised Person.

Duty Authorised Person

A person, either employed by the University or another organisation, with the required knowledge, training and experience, appointed by the Designated Person in writing, to take managerial responsibility for the implementation of policy and procedures for a specific area of health and safety legislation. There is a single Gas DAP for the University:-

- a) To ensure day to day compliance in regard to Gas Safety.
- b) To review as necessary the university management plan.
- c) To assist and offer advice in regard to Gas Safety across all areas of the University.
- d) Ensures the Gas Appliance Asset Register is accurate.

Authorised Person

A person, either employed by the University or another organisation possessing proficient technical knowledge and having received appropriate training, appointed by the Duty Authorised Person in writing to take responsibility for the Implementation of the policy and procedures as specified of a specific area of H&S legislation.



No school or professional service other than E&FM shall carry out any works on any certified gas installation.

Competent Person

The operative / individuals, either employed by the University or another organisation, recognised by the Authorised Person as having the competence to undertake the task and follow the relevant process/procedure.

An Organogram showing Corporate Governance, with regards to Gas safety at Loughborough University is contained within Appendix 17.

3.2 Responsibilities of schools / professional services

Compliance

At all times the Schools must comply with the Loughborough University Management of Gas Safety Policy. Schools will not be expected to manage any Certified Gas works, although it is permissible to purchase a gas appliance and fit to an approved fitting e.g. a cooker with a bayonet fitting but would exclude threaded fittings that require greater competency to avoid leaks etc. It is also permissible for the school or professional service to co-ordinate maintenance of gas appliances.

The Schools though should have an understanding of regulations that relate to Gas Safety. Any appliance procured or removed by any school or professional service is required to be registered on the Loughborough University gas asset register referenced in section 3.4 below.

If agreed with E&FM, any school or professional service may co-ordinate maintenance of gas assets. In such cases, this will include responsibility for the production, retention and audit of records produced from such visits.

Duties of Deans of Schools/ Directors of Professional Services

To ensure any gas appliance is added to the latest Loughborough University gas asset register.

To ensure that any gas appliance is properly operated and in accordance with the manufacturer's instructions and staff or students are suitably trained to have sufficient knowledge to do this.

Any gas appliance is maintained in accordance with current legislation and regulations.

Control of Contractors

Any gas related work is the responsibility of the E&FM Project Manager. It is the responsibility of Directors of Professional Services and Deans of Schools to contact the E&FM Project Manager if they have any concerns over the performance of the gas contractor working in their area. Any contractor employed by any school or professional service must fully comply with the requirements of this policy.

Contractors' Health and Safety Induction



Contractors working at the University must have received the University safety induction and hold a valid contractor's pass before starting work.

Training

It is the responsibility of deans and professional service managers to ensure staff are trained to use appliances in accordance with their design and manufacturer's guidance. Staff must be aware and trained in how to respond to gas emergencies.

Estates & Facilities Management Responsibilities Overview

Estates & Facilities Management (E&FM) are responsible for the co-ordination and delivery of all works associated with gas installation and maintenance.

Estates & Facilities Management are responsible for the production and maintenance of associated information related to University wide gas assets, services and equipment. This will include the production of landlord gas safety certificates where required. By agreement, schools or departments may co-ordinate maintenance of their own assets.

As part of this service, E&FM are responsible for any person carrying out these duties, E&FM must ensure the technician is suitably qualified and currently registered with Gas Safe as being competent for the duty specified.

If unsure about any matter regarding the maintenance, operation or installation of a gas appliance or service please contact the Loughborough University Duty Authorised Person.

The E&FM Project Manager has the responsibility to manage the works and to review all documents including Risk Assessments, Method Statements and notifications.

Schools' Relationship to E&FM

Estates & Facilities Management organise all works that involve maintenance and modification of gas assets. Schools and tenants will operate these assets and must do so in accordance with the manufacturer's instructions.

Summary of responsibilities of Schools:-

- Allocate the necessary resources, both in terms of time and financial re-sources to ensure gas safety is maintained within their area of occupation.
- Provide the necessary information; instruction and training to enable staff to operate gas services and appliances in a safe manner.
- Ensure that any matter brought to their attention with regard to Gas safety is given prompt and appropriate attention.
- Allow access to equipment
- Assist with monitoring of compliance status and performance.
- Retain records for inspection of gas related work on asset they operate.
- Liaise with the E&FM Project Manager to ensure all contractors engaged by the Department are adequately supervised and conduct their work in accordance with current legislation.



Isolations

Should there be a requirement for any work on any live gas systems, they must be isolated in accordance with Loughborough University isolations procedures. Valves must be locked, labelled and registered with the local Estates & Facilities Management representative.

3.3 Leaseholders

Leaseholders are independent bodies; as such they are fully responsible for the maintenance, operation and modification of any gas systems within their demise. Should the gas system derive from University premises, as a provided service, e.g. for space heating requirements, responsibility for maintenance, servicing and replacement of the system will remain with the University. Responsibility for maintenance of devices will remain with the lease holder (Appendixes 8, 9, 10 and 13).

3.4 Gas Asset List

The Facilities Information Team (FIT) shall be responsible for updating the gas asset register. It shall be the responsibility of all University Staff who may remove, replace or install new gas appliances to complete the 'Asset Data Register Template' or 'Asset Movement/disposal notification form'.

It shall also be the responsibility of all E&FM staff responsible for having work carried out on gas appliances, to pass on copies of the gas safety check records and landlord certificates for any new or re-located gas appliances to FIT on completion of the work. This includes where existing appliances may have been re-tested or re-commissioned as part of the works.

Appendix 1 – Abbreviations



- ACS Accredited Certification Scheme
- AECV Additional Emergency Control Valve
- AR At Risk
- CO Carbon Monoxide
- DAP Duty Appointed Person
- ECGA Electronic Combustion Gas Analyser
- ECV Emergency Control Valve
- ESP Emergency Service Provider
- GIUSP Gas Industry Unsafe Situations Procedure
- GSIUR Gas Safety (Installation and Use) Regulations 1998
- GSR Gas Safe Register
- HSE Health and Safety Executive
- HSWA Health and Safety at Work act
- ID Immediately Dangerous
- IGEM Institution of Gas Engineers and Managers
- LGSR Landlords Gas Safety Record
- LPG Liquefied Petroleum Gas
- NCS Not to Current Standards
- NG Natural Gas
- PGT Public Gas Transporter
- RIDDOR Reporting of Dangerous Diseases and Occurrences Regulations 2103



Appendix 2 – Emergency Procedures

2.0 Unsafe situations – Reported gas escapes or fumes

The emergency procedures for the reporting of gas escapes or fumes are now in line with the LU Gas Safety Case. The below procedures have been taken directly from LU/Gas/6 – Emergency Procedures.

2.0.1 Purpose

This Emergency Procedure has been prepared to specify the roles and responsibilities of University staff and organisations concerned with, and acting on behalf of, the University in dealing with reported emergency situations on the University Gas Distribution Network.

2.0.2 Scope

This procedure is to be followed in the event of any smell of gas or products of combustion being detected within University property or the University grounds. The procedure should be followed by Residents, Students, University Employees, Staff and Contractors.

2.0.3 Procedure overview

The procedure covers the following possible occurrences within the confines of the University boundary.

- Smell of gas reported inside or outside property.
- Smell of products of combustion inside or outside property.
- Activation of carbon monoxide alarms
- Fires or explosions (where gas is suspected to be involved)
- Damaged Gas Pipes
- Fluctuating Gas Pressure
- Other emergency situation e.g. persons feeling unwell / nauseous solely in the presence of a gas burning appliance.

The procedures are indexed as follows:-

- Information for Residents, Students and University Employees/Staff.
- Information for University Help Desk Staff responding to a reported incident
- Information for University Security staff.
- Information for University Gas Safe registered plumber
- Information for Plumbing/Heating & HVAC Manager or Maintenance Services Manager
- Information for the University Network GIRS registered contractor
- Information for the University Duty Authorised Person (DAP)



2.0.4 Instructions to Residents, Students and University Employees/Staff

Should, they smell gas

- 1) During normal working Hours telephone University HELP DESK on 01509 222121
- 2) Outside normal working Hours telephone University SECURITY on 01509 222141

Provide the Help Desk or Security with your name and the details of where you smelled gas and a telephone number where you can be contacted. This number should not be in or near to the place where you smelled gas.

Normal working hours are stipulated as follows:

Monday to Friday – 8:30am to 5:00pm

In the event that an report of a gas escape occurs out of normal working hours, at a weekend or a university closure day, Security should be contacted following the outside normal working hours procedure.

2.0.5 Instructions to the Help Desk During Normal Working Hours

1. The person dealing with the report from the customer shall advise the customer of the following;

• Where possible, turn off the gas supply at the emergency control valve (or local isolation valve) unless located in the cellar or basement.

- extinguish all sources of ignition / naked flames
- do not smoke
- · do not operate any electrical switches
- ventilate the building by opening doors and windows
- if the smell persists vacate the premises
- ensure access to the premises is possible

2. On receiving a report of a possible gas related incident, complete Gas Reporting Form

3. Check if the person making the report has already reported the matter to the National Gas Emergency Service. Obtain a telephone number from the person making the report where they can be contacted. This number should not be in or near the place where they smelled gas

4.If the person making the report has not contacted the National Gas Emergency Service, take from them the following details: -

- Exact address where gas was first smelled.

- A telephone number – fixed or mobile – where they can be contacted. The telephone should not be in or near to the place where they smelled gas.

5.Immediately telephone National Gas Emergency Service on: 0800 111 999 report the smell of gas if not already reported

6.Advise the National Gas Emergency Control Centre to direct the Emergency Engineer to site Security or Help Desk



7. Telephone one of the University Gas Safe Registered

Plumbers to attend site. The Plumbing/Heating & HVAC Manager shall also be made aware of the situation or Maintenance Services Manager if they are unavailable. In the event when neither of these individuals are available, the University Gas Duty Appointed Person shall be contacted.

Peter Miller, Gas Safe Registered Plumber

Mobile: 07895331890

Matthew Polkey, Plumbing/Heating & HVAC Manager

Mobile: 07895331869

Adey Bonser, Maintenance Services Manager

Office: 01509 222131 Mobile: 07969919639

Jonathan Cripps, University Gas Duty Appointed Person

Office: 01509 222138 Mobile: 07814288498

8.Inform and request that person/persons to attend site.

9.Escort the National Gas Emergency Engineer to the location of the smell of gas and assist as requested.

10.If they arrive at the site of the gas escape before the National Gas Emergency Engineer check that the advice given by the National Gas Emergency Service on turning off gas at the property meter and ventilating property has been complied with. If they can see, hear or feel gas escaping, evacuate persons from the area, including themselves, to a place of safety. Do not operate any electrical switches or doorbells.

2.0.6 Instructions to the Security Outside Normal Working Hours

1. The person dealing with the report from the customer shall advise the customer of the following;

- Where possible, turn off the gas supply at the emergency control valve (or local isolation valve) unless located in the cellar or basement.
- extinguish all sources of ignition / naked flames
- do not smoke
- · do not operate any electrical switches
- ventilate the building by opening doors and windows
- if the smell persists vacate the premises
- ensure access to the premises is possible

2. On receiving a report of a possible gas related incident, complete Gas Reporting Form.

3. Check if the person making the report has already reported the matter to the National Gas Emergency Service. Obtain a telephone number from the person making the report where they can be contacted. This number should not be in or near the place where they smelled gas



4. If the person making the report has not contacted the National Gas Emergency Service, take from them the following details: -

- Exact address where gas was first smelled.

- A telephone number – fixed or mobile – where they can be contacted. The telephone should not be in or near to the place where they smelled gas.

5. Immediately telephone National Gas Emergency Service on: 0800 111 999 report the smell of gas if not already reported

6. Advise the National Gas Emergency Control Centre to direct the Emergency Engineer to site Security or Help Desk

7. Telephone the on-call Maintenance Operative to attend site.

8. Inform and request that person to attend site.

9. Escort the National Gas Emergency Engineer to the location of the smell of gas and assist as requested.

10. If you arrive at the site of the gas escape before the National Gas Emergency Engineer check that the advice given by the National Gas Emergency Service on turning off gas at the property meter and ventilating property has been complied with. If you can see, hear or feel gas escaping, evacuate persons from the area, including yourself, to a place of safety. Do not operate any electrical switches or doorbells.

11. If a member of the site "roaming" Security Staff is present, or likely to be present, at the location of the gas escape, ensure they are aware of the need to avoid introducing possible sources of ignition e.g. smoking, operating electrical switches or doorbells. Also ensure that they do not allow members of the public near the location, especially if they can see, hear or feel gas escaping. If this is the case they should evacuate persons from the area, including themselves, to a place of safety.

2.0.7 Instructions to the University Gas Safe Registered Plumber

Should on receiving information that a smell of gas has been reported:

1. Check with Helpdesk or Security that a National Gas Emergency Engineer has been requested to attend.

2. Attend site without delay, liaise with and assist the National Gas Emergency Engineer.

3. If you arrive at the site of the gas escape before the National Gas Emergency Engineer check that the advice given by the National Gas Emergency Service on turning off gas at the property meter and ventilating the property has been complied with. If you can see, hear or feel gas escaping, evacuate persons from the area, including yourself, to a place of safety. Do not operate any electrical switches or doorbells.

4. If the gas escape is obviously down steam of the meter/building ECV isolate the gas supply and carry out repairs as necessary or call the Plumbing/Heating & HVAC Manager or Maintenance Services Manager to arrange for a Gas Safe subcontractor to attend site as necessary.

5. If the escape appears to be upstream of the secondary meter isolation valve, or you are unsure call the to arrange for the attendance of the Plumbing/Heating & HVAC Manager or Maintenance Services Manager who will arrange for a GIRS registered



contractor and/or to arrange for the primary meter ECV to be closed.

6. Remember the first priority is to safeguard life and property – including your own!

7. Inform and liaise with the Plumbing/Heating & HVAC Manager or Maintenance Service Manager at all times

2.0.8 Instructions to the Plumbing/Heating & HVAC Manager or Maintenance Services Manager

Should, on receiving information that a smell of gas has been reported:

1. Check with Help Desk or Security that the incident has been adequately reported to the National Gas Emergency Service.

2. Ensure Security or Help Desk are assisting or will assist the NG Emergency Engineer to locate the address of the incident and support as necessary.

3. Ensure the Gas Safe Registered Plumber or on-call Maintenance Operative arrive on site without delay to liaise with the National Gas Emergency Engineer as required.

4. If they arrive at the site of the gas escape before the National Gas Emergency Engineer check that the advice given by the National Gas Emergency Service on turning off gas at the property meter and ventilating the property has been complied with. If they can see, hear or feel gas escaping, evacuate persons from the area, including yourself, to a place of safety. Do not operate any electrical switches or doorbells.

5. If the gas escape is obviously downstream of the emergency control valve /building ECV isolate the gas supply and carry out repairs as necessary with qualified personnel.

6. If the escape appears to be upstream of the secondary meter isolation valve, or you are unsure arrange for a GIRS registered contractor and/or to arrange for the primary meter ECV to be closed. If the primary meter ECV is to be isolated to rectify the escape of gas on the private network, the gas appliances within the connected buildings shall be electrically isolated and the AECV's in each building shall be isolated before isolating the primary meter ECV. The gas network shall only be recommissioned after the decommissioned pipework has been tested and subsequently purged from air to gas.

7. If necessary, and only when the immediate threat to life and property has been adequately controlled, accept the "Transfer of Responsibility" form from the National Grid Gas Emergency Engineer. These shall only be accepted by the Plumbing/Heating & HVAC Manager, Maintenance Services Manager or the University Gas Duty Appointed Person.

8. The National Gas Emergency Engineer may then be allowed to leave site.

9. Record details of the incident to update the pipework replacement programme.

10. If necessary arrange to report details of the incident to the HSE under Gas Safety (Management) Regulations 1996 (GS(M)R) or Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).



2.0.9 Instructions to the GIRS registered infrastructure contractor

If you are called to attend site:

1. Check with Security or Help Desk that the matter has been reported to the National Gas Emergency Service.

2. Attend site without delay, liaise with and assist the National Gas Emergency Engineer and the Plumbing/Heating & HVAC Manager or Maintenance Service Manager as required.

3. If you arrive at the site of the gas escape before the National Gas Emergency Engineer check that the advice given by the National Gas Emergency Service on turning off gas at the property meter and ventilating the property has been complied with. If you can see, hear or feel gas escaping, evacuate persons from the area, including yourself, to a place of safety. Do not operate any electrical switches or doorbells.

4. Liaise with the Plumbing/Heating & HVAC Manager or Maintenance Service Manager on actions/repairs necessary.

5. Remember the first priority is to safeguard life and property – including your own!

2.0.10 Instructions to the University Gas Duty Appointed Person

1. Check with Security or Help Desk that the matter has been reported to the National Gas Emergency Service and that the gas escapes form has been completed and emailed over for filing.

2. Ensure the appropriate steps have been taken to protect life and property in line with the emergency procedures.

3. If neither of the Plumbing/Heating & HVAC manager or Maintenance Services Manager are available, the University Gas Duty Appointed Person shall take on those responsibilities within the emergency procedures.



Reported Gas Escapes and Fumes Form

Have you informed the customer to:			Yes or	No	If No, why?			
 Turn off the gas supply at the emergency control valve, unless in cellar or basement Extinguish all sources of ignition/naked flames Not to smoke Not to operate any electrical switches/telephones or mobiles Ventilate the building by opening doors and windows Ensure access to the premises is possible If smell persists vacate the premises 			d	· · · · · · · · · · · · · · · · · · ·				
Record the follow	wing:							
Name of caller:			e of cu					
		(if dif	ferent	rom c	aller)			
Address:							Postcode:	
Telephone numbe	er:	Mobi	le:					
·								
Location of gas es	scape / fumes							
Looudon of guo of	boape, lamoo							
la tha gaa	Controlled			or		Lines	ntrollad	
Is the gas escape / fumes	Controlled			or	Uncontrolled			
Report received b	W:					l		
Name:	<u></u>	Job role:						
Date//							la se	
Actions taken:		Time				am	/pm	
Actions taken.								
Passed to ESP:								
	Date/		/		-			
	Timeam/pm						am/pm	
ESP reference								
number:								
			.					
Passed to Name: Date				Time				
Mechanical			/			am/pm		
Team				/		aiii/piii		
-								

Employee Name..... Signature....

2.1 Gas Industry Unsafe Situations Procedure



Introduction

Gas Safe registered engineers have a responsibility to advise the responsible person for a property when they find dangerous gas installations or appliances.

What actions they take is determined by the requirements of the Gas Safety (Installation and Use) Regulations 1998 and the guidance given in the "Gas Industry Unsafe Situations Procedure" (GIUSP).

When a registered gas engineer identifies an unsafe situation they should try to find the cause and repair any faults. Where this is not possible they should explain that the fault(s) should be repaired before the installation is used again. If it can't be corrected immediately they should make the installation safe, after first seeking permission from the user / responsible person to do so. This is normally done by disconnecting or by turning off the gas to the affected part of the installation. This will be dependent upon how serious the defects are.

When the gas engineer has identified a gas related danger is present within property they will attach a warning label to the dangerous gas fitting and issue a written warning notice.

The warning notice will identify what classification of 'safety defect category' the engineer has deemed the installation to be, they will be either;

- Immediately dangerous (ID), or
- At Risk (AR)

Copies of any warning notices issued by the contractor should be kept on file by the University for future reference. More guidance and information around risk classification can be gained from the current edition of the GIUSP which is issued by Gas Safe Register as Technical Bulletin 001.

The University must take prompt action to correct any safety defects found on appliances or fittings they own.

2.2 – Carbon Monoxide Alarm Activation

Introduction

This section will assist the University in meeting their legal duties and correctly classifying unsafe gas installations in accordance with the Gas Safety (Installation and Use) Regulations and the current British Standards applicable to carbon monoxide alarm activation BS7967.

The scope of this procedure will apply to all contractors undertaking gas work on their behalf. This procedure will apply to all existing gas installations and appliances installed.

When responding to a call from a customer where it is alleged the carbon monoxide alarm has activated it will be necessary to establish whether any persons within the property have been taken ill or hospitalised. If they have, ensure that the ESP is notified immediately (complete the gas escapes and fumes form to record all information) then follow the guidance given from the ESP.

It must be noted that the activation of an alarm is not to be taken as "just the batteries need changing" or "the alarm is faulty".



The contractor must confirm if the alarm has activated, for how long, at what frequency and in what circumstances, they must confirm if the alarm is working in accordance with the alarm

instructions. If the alarm activation is indicating the presence of CO they must follow the guidance given in BS 7967 to investigate.

2.2.1 Safety principles

All reports of fumes, smells, spillage/leakage of combustion products and CO detector activation described in this process shall be adhered to following the basic rules:

- Protect life
- Protect property
- Locate all fuel burning appliances
- Locate any escape of gas, fumes, smells or spillage/leakage of combustion products
- · Confirm the safe installation and operation of all suspect gas appliances
- Advise the customer of any remedial action that is required
- Complete all necessary reports, documentation and action as advised in the Gas
 Industry Unsafe Situation Procedures

2.2.2 Fumes investigation is to be carried out

The tenant will be advised that a preliminary investigation is to take place. The tenant will have also been instructed to seek medical advice to ascertain if they have been affected by carbon monoxide. Hospital/Doctor blood tests are the preferred method for blood level confirmation.

During the gas contractors visit they will carry out an investigation using a portable electronic combustion gas analyser as per BS 7967.

On completion of their investigation the contractor will complete a 'Fumes Investigation Report'.

The GIUSP must be followed at all times.

2.2.3 Actions taken following a positive reading of carbon monoxide (CO)

Notify the University Health and Safety Team.

Establish an incident file, witness statements / reports required from all involved in the initial report.

Prior to any remedial work being undertaken an independent investigator / consultant may be invited to investigate the situation in addition to the installer / service contractor. The Universities Health and Safety team are to be kept informed and participate in the decision making process.



Carbon Monoxide Alarm Activation Establish on report if anyone If someone has been hospitalised, inform the has been ESP, then follow their lead hospitalised If no one has been hospitalised the On completion of Complete a fumes contractor should investigation investigate fully complete fumes report form following guidance report form given in BS 7967 Positive readings found, follow GIUSP Tenants to be advised to seek and inform the medical advice Universities Health & Safety team Implement an incident file

Prior to remedial works being undertaken it may be prudent to invite a third party in to also investigate

Appendix 3 – Gas Safe Registration



Introduction

Since April 2009, Gas Safe Register is the official body for gas safety and gas safe registered installers in the United Kingdom, Isle of Man and Guernsey. To work legally on gas appliances and installations a business must be on the Gas Safe Register.

Gas Safe Register deals with all aspects of the downstream gas industry covered by the following regulation;

• The Gas Safety (Installation and Use) Regulations 1998

These regulations cover both piped natural gas and liquefied petroleum gas (LPG). It is law that anyone carrying out gas work that is within the scope of these regulations is on the Gas Safe Register.

Gas Safe Register will

- Raise public awareness of gas safety and the gas register of installers
- Manage inspection and enforcement
- Provide technical support and standards updates to registered engineers

Gas Safe Registration

Gas Safe registration is for a period of twelve months, on renewal each business will received for each year registered a business registration certificate, plus each engineer will receive their own individual licence card.

Examples of the front and back of the Gas Safe ID card;



Appendix 4 – Using External Gas Contractors



Introduction

This section should be followed when recruiting businesses or individual gas engineers to undertake domestic and non-domestic gas work downstream of any building entry ECV/AECV. Works on Loughborough University's Gas Network must follow the LU Gas Safety Case along with its procedure documentation. This guidance should be used in conjunction with any standard procurement criteria that is utilised by the University.

This process does not attempt to replace any existing Procurement policies but should be used as an extra guide when recruiting a gas engineering business. The aim is to ensure that the University recruits businesses and engineers that are suitably qualified and experienced for the work they will be expected to undertake.

A systematic approach should ensure that the process is transparent, easily understood and achieves the desired end; that being the most suitable organisation is offered the work.

Note (1)

Gas Safe registration is only valid for a twelve month period before renewal is required.

Note (2)

Accredited Certification Scheme (ACS) engineer specific assessment qualifications are only valid for a five year period, before renewal is required.

4.1 Initial selection

Advertisements should be placed in the relevant format; they should reference the type of work to be undertaken e.g. Domestic, Non Domestic or LPG.

The advert must specify that all applicant businesses must be registered with 'Gas Safe' for the work elements that they are intending to cover.

The advert should specify the minimum qualification levels acceptable on the contract, these being ACS gas fitting qualifications, and the qualifications should also be combined with additional work experience.

Initial sorting of the applications would not necessarily need to be carried out by someone who is gas technically competent. The person undertaking the initial check would however, need to be aware of the minimum requirements for training and qualifications required for the contract so that this could be checked against the application information.

The question MUST be asked of the applicant business as to whether they or any operative has ever been involved in a gas safety related HSE investigation; if so all details should be provided.

After the initial vetting process has weaned out candidate businesses that are not suitable due to lack of relevant qualifications, geographical location etc. request that Loughborough Universities Facilities Management team, assess the applications. This next assessment should utilise the information regarding past experience alongside the qualifications to determine the most suitable applicants to be selected for interview.



4.2 Detailed selection

Certain documents will require reviewing, for the gas contracting business and individual engineers; these should include but not be limited to;

- Business Gas Safe registration details / certificate (requires renewal after 12 months)
- Individual engineers Gas Safe ID cards (front and back, requires renewal after 12 months)
- Business public and employers liability insurance details / certificate (requires renewal after 12 months)
- Individual engineers City & Guilds SNVQ or industry equivalent
- Individual engineers apprenticeship certificates
- Individual engineers ACS certificates (requires renewal every 5 years)

Supplied registration details and documents are to be cross-referenced with Gas Safe register.

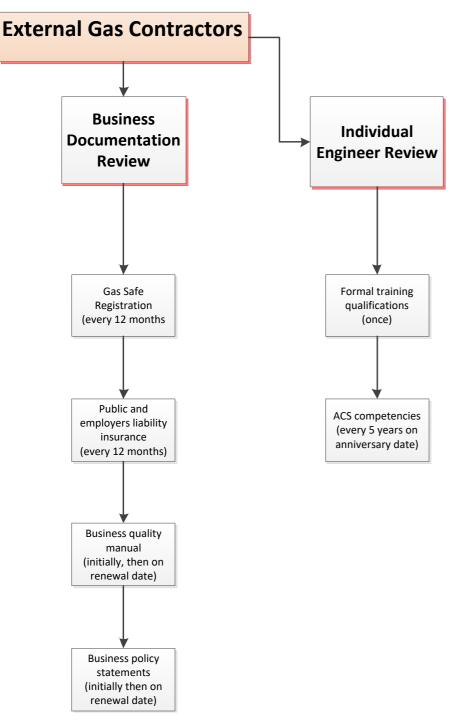
Other documents will require reviewing for the gas contracting business; these should include but not be limited to;

- does the gas contracting business have a quality manual
- does the gas contracting business have policy statements
- does the gas contracting business have a defined quality control process

At this stage it is imperative to ascertain if the gas contracting business will utilise sub-contract labour, if so all of the above information will be required for each provider to the main gas contractor.

All evidence sourced from the contractor must be held on file. The files must be updated on a rolling cyclical period, as and when each renewal process is reached.





NOTE! If sub contractors are utilised all of the above information will also be required to cover them to work on-site

Appendix 5 – Control of specialist tools



Introduction

The objective of this section of the policy is to ensure that when contractors are requested to attend any site that is under the control of Loughborough University to undertake gas work they are equipped with correctly calibrated specialist tools and equipment for the work in hand.

Tools that are required to be re-calibrated will be Electronic Combustion Gas Analysers (ECGA) and electrical test equipment.

The University will ensure that contractors are aware of their responsibilities where applicable to only using correctly calibrated equipment.

Where special instrumentation is provided such as ECGAs or electrical testing equipment it will be the responsibility of the contractor to make sure that all equipment is calibrated by the correct manufacturer or their agent at the time interval as indicated by the manufacturer. Where specialist instrumentation is utilised by contractors current in-date calibration certificates are to be provided to the University.

The contractors will maintain a log of all the equipment that requires calibration. Where instrumentation is out-of-date engineers will not use such equipment but will source equipment that is suitably calibrated and in-date.

It will be the engineer or contractors responsibility to check the current calibration date prior to using the instrument.

All in-house engineers must also only use correctly calibrated equipment, it will be the duty of the engineer and line manager to ensure this process is adhered too.

The management process;

5.1 Contractors

At the start of any contract the contractors must provide calibration certification for all specialist tools that are to be utilised within University properties.

The contractor must manage the re-calibration process for all their specialist tools.

The contractor must provide the University re-calibration certification before the cyclical anniversary date expires.

5.2 The in-house team

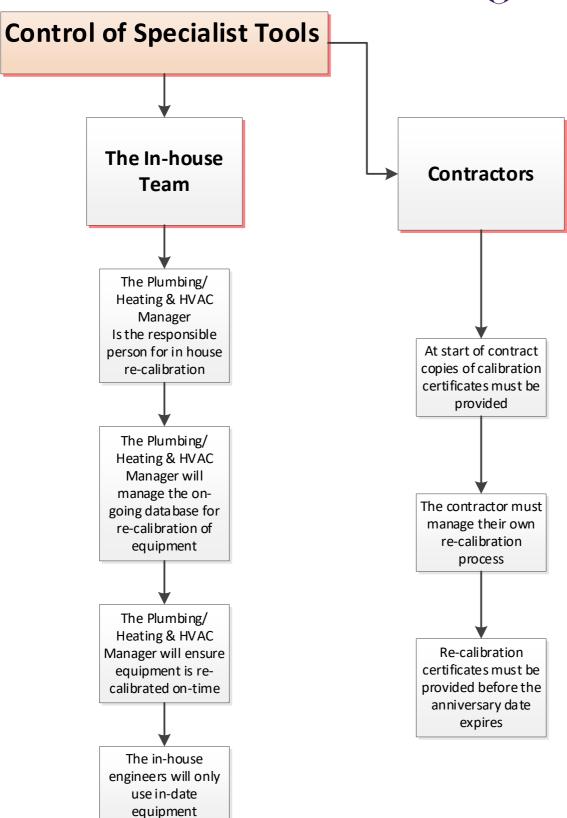
The Plumbing/Heating & HVAC Manager will be responsible for ensuring the recalibration of equipment takes place.

The Plumbing/Heating & HVAC Manager will ensure that an asset register of equipment exists, it is kept up to date and recalibration certificates are stored centrally for reference.

The Plumbing/Heating & HVAC Manager will be responsible for organising that the recalibration of equipment takes place with the right service provider and within the designated cyclical dates.

The in-house engineers will be responsible for only using in-date equipment.







Appendix 6 – Landlords Gas Safety Records

Introduction

The GSIURs outline the responsibilities of what is expected of a landlord under regulation 36. This regulation specifically deals with the installation, maintenance and use of gas appliances, fittings and flues in domestic and certain commercial premises. They place duties on landlords to ensure that gas appliances, fittings and flues provided for customers are safe for continued use.

These duties are designed to protect the customer's safety, and are in addition to the more general ones that landlords have under the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety at Work Regulations 1999.

6.1 Duties of a landlord

The landlord is required to;

- ensure gas fittings and flues are maintained in a safe condition
- ensure gas appliances are serviced in accordance with the manufacturer's instructions if these are not available and the engineer is not conversant with the appliance installed, manufacturer's installation instructions will need to be obtained
- ensure an annual safety check is carried out on each gas appliance chimney / flue
- have all installation, maintenance and safety checks carried out by a competent "Gas Safe" registered engineer
- issue a copy of the latest safety check record to existing customers within 28 days of the check being completed (in certain cases there is an option to display the record centrally at a mutually agreed place.
- make sure, before any new tenancy starts, either via a void or mutual exchange, that the property is safe to let and the in-coming tenant receives a current copy of the LGSR
- keep a record of each safety check for at least two years
- it should not be assumed that an annual service inspection meets the safety check requirement, or that a safety check will, on its own, be sufficient to provide effective maintenance. The landlord gas safety check and annual service/maintenance are two distinct requirements

6.2 Gas equipment covered by the checks

The safety check and maintenance requirements generally apply to any gas appliance fitting or chimney / flue installed in the 'relevant premises' except that;

Appliances owned by the customer are not covered;

- an appliance owned by the customer but connected to a chimney / flue owned by the landlord is not covered, but as the chimney / flue is part of the fabric of the building it is always advisable to safety check the installation so as to ensure the chimney / flue remains fit for purpose
- any appliances and chimney / flues serving 'relevant premises' (such as central heating boilers not installed in customers' accommodation, but used to heat them) are covered.



 The landlord's duty to maintain and carry out safety checks applies to fixed as well as portable appliances, such as LPG cabinet heaters. The gas contracting engineers will need to be vigilant when checks are made as to the ownership and use of mobile cabinet heaters and LPG potable appliances. Where such appliances are provided on an emergency provision, the appliance will need to be checked in accordance with the manufacturer's installation and use instructions.

6.3 The Landlord Gas Safety Record

6.3.1 The LGSR is a legal document and is therefore to be completed in accordance with the conditions below;

- the gas engineer is to complete ALL relevant sections on the form in clear legible writing only or where applicable by electronic systems
- no alterations should be made to any information entered on the form by the engineer / contractor, the use of correcting fluid or other materials for deletion of incorrect entries is not permitted
- all information entered onto the form should be clear, concise, 'jargon' free and plain enough to be understood by the customer and other 'non-experts' who may view the record
- in the boxes for details of "Any Faults" and "Remedial Action Taken" the gas engineer / contractor is to state clearly if he has carried out the noted rectification work or if it is still outstanding
- a copy of the record is to be left with or posted to the customer, if the customer has any doubt over statements made or resultant actions taken regarding the condition of any appliances or entries they should be fully explained
- information entered onto the record is not to include any comments about the customer's property itself, should the engineer feel such comments are necessary to justify any action taken/not taken, he should do so in writing separately to ensure the landlord is made aware
- should any completed record not be to the satisfaction of the landlord it will be returned to the gas contractor, who will then be instructed to arrange for the engineer to revisit the property to carry out the check again and re-issue a new record, a copy of the new record will be given to the customer together with an explanation of why this occurred
- all gas appliances fitted within the property of the landlord including customer owned are to be recorded on the LGSR

6.3.2 Information required to be recorded on the landlord's gas safety record;

- the date on which the pipework, appliance or chimney / flue was checked
- the address of the premises at which the pipework, appliance chimney / flue is installed.
 In the case of University owned properties, this will include the unique building number reference.
- the name and address of the landlord of the premises at which the pipework, appliance or flue is installed
- location details and description of each appliance or flue checked
- any defect identified
- any remedial action taken
- confirmation that the check undertaken complies with the requirements of the Gas Safety (Installation and Use) Regulations, which state, "Where a person performs



work on a gas appliance, he/she shall immediately thereafter examine;

- a) the effectiveness of the chimney / flue
- b) the supply of combustion air
- c) its operating pressure or heat input, or where necessary both
- d) its operating pressure so as to ensure its safe functioning
- the name and signature of the individual carrying out the check
- the "Gas Safe" Registration number of the individual, or employer

Note! Where applicable and the manufacturer requires the check to be carried out, record the relevant results from a flue gas analysis test, record these results on the LGSR as appropriate, this will confirm the manufacturer's additional appliance safety checks have been undertaken.

• A signature of the Loughborough University Facilities management representative who has received the record.

6.3.3 Desktop Review of the Landlords Gas Safety Record

As part of a quality check, a desk top review of completed LGSRs will be undertaken by the University. This process can be carried out by non-technical staff on a best endeavour basis from the Facilities Management Team and must be assigned to someone's job role. A 100% check must be undertaken on the following points, Note! Technical aspects will be reviewed and checked under the quality control process;

- the date on which the pipework, appliance or flue was checked
- the address of the premises at which the pipework, appliance/s or flue is installed
- the name and address of the landlord of the premises at which the pipework, appliance or flue is installed
- location details and description of each appliance chimney / flue checked
- the name and signature of the individual carrying out the check
- the "Gas Safe" Registration number of the individual, or employer

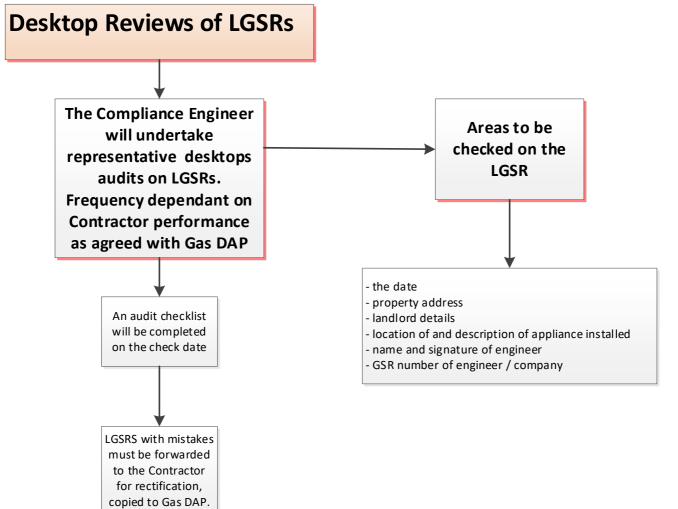
A record must be kept of what records have been checked, when the check took place, by whom and what anomalies were identified.

Those LGSRs with mistakes identified, must in the first instance be forwarded to the Health & Safety (Quality Control) team for their guidance.

Example LGSR audit checklist:

Date of desk top audit	Date on LGSR	Address	Appliances listed	Engineers printed name and signature	Gas Safe Registration number listed	Name of person checking LGSR	Passed to QC team
25/01/14	01/02/14	123 Smith St	2	\checkmark	\checkmark	A N Other	No
26/01/14	х	1 John St	1	х	\checkmark	A N Other	Yes







Appendix 7 - Hard to Access properties

Tenanted houses and sub warden properties are private residences. In order to enter these premises to carry out gas services maintenance, permission must be gained beforehand and this is recorded on a University SAW 19 form. These can be obtained through your University contact and / or the University key room. Please note as permission needs to be granted, this may take up to two weeks. In the event no access is granted the University must be formally notified. Please see procedure for entry into wardens and sub-wardens.

Void and empty Properties

Introduction;

The objective of this section is to ensure that when an existing tenancy has expired and the property is classed as void, a gas safety check and cut and cap process is undertaken. Then when the tenancy starts, suitable landlord's gas safety checks are undertaken (this will change the cyclical anniversary date of the property).

The University will also ensure that customers are aware of their responsibilities only to use "Gas Safe" registered installers to undertake gas work, i.e. for the installation of their own gas cooking appliances.

This section is intended to provide guidance regarding the gas installation and appliances, to ensure, so far as reasonably practicable, that the health and safety of customers is not compromised. This process is also to be referenced with any other void property procedure to avoid duplication and keep all involved in the process up to date on their actions.

In order to comply with the requirements of the current Gas Safety (Installation and Use) Regulations, gas safety checks should be completed for all new tenancies and the appropriate landlord gas safety record be produced.

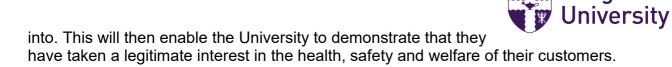
When the property is vacated, the likelihood is that the gas and electrical supplies may still be left on. It would therefore be reasonable for the University to carry out a safety check of the whole installation, then make safe via a cut and cap process, this should be undertaken as near as possible to the time that the University were made aware of the void situation. This would minimise the possibility of the new customers or persons working in the property being exposed to any risk of injury from any gas related unsafe situation.

Before the initial voids 'cut and cap' visit the University and contractor are to liaise and decide whether to drain the central heating system of water, this would ensure that water damage from burst pipes would not cause an issue during periods when the property is vacant.

When the property is re-allocated to another customer, it should be made clear to the new customer that it is their responsibility to arrange for the reconnection of the utility supplies with their choice of supplier. It would be appropriate to suggest that where possible the date for the reconnection of the utilities should be the same date as the customers takes legal possession of the property. This should also be before the planned re-commissioning process is undertaken by the University contractor.

Once a date for the reconnection of the supplies has been established, the University should instruct the contractor to re-commission and carry out full operational safety checks and or service on the whole of the gas installation and issue a suitable LGSR.

In addition, the University feel it is important to recognise duty of care and the need to instruct the new customer on the safe operation of the gas equipment in the property they are moving



7.1 The process

The office process (stage 1)

The University will assign specific individuals who will have responsibilities for managing the voids process and who will set up and maintain suitable records.

The University will plan for the contractor to visit and make the property gas safe; they will also liaise with the contractor so as to decide if the heating system is to be drained of water (over cold periods / estimated prolonged periods).

Documentation received back from the contractor will be inputted onto the database system.

The Estates & Facilities Management team will be notified that the property has been made gas safe and is awaiting any potential upgrade works.

Contractor process (stage 1)

Contractors operative to visually inspect the complete gas installation and report back to the University any defect works for rectification before the next tenancy begins, undertake a gas tightness test and then disconnect the installation at the meter with the appropriate fitting.

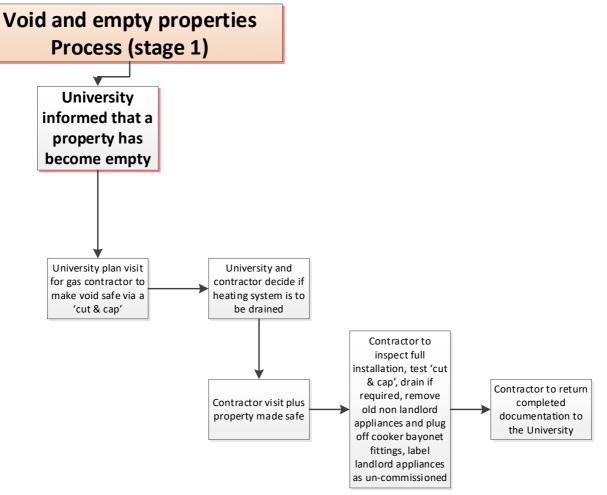
The operative is to remove any old appliances left by the previous customers and seal the pipework with an appropriate fitting.

Cooker bayonet connectors are to be removed and plugged off plus any other open ended pipework is also to be suitably sealed.

The remaining landlord appliances are to be labelled as un-commissioned, heating systems are to be drained and suitably labelled on instruction from the University.

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The office process (stage 2)



University to compile a customer's starter pack.

The University to liaise with the customers to ensure both gas and electric services are connected before the gas contractor arrives.

The University will instruct the contractor to re-commission all gas appliances and carry out a full LGSR.

Paperwork received back from the contractor will be input onto the database system, changes in the cyclical anniversary date will be made. Any new LGSR produced will be sent to the new customer.

Contractor process (stage 2)

Contractor will follow instructions on work required as detailed by the University.

If the electric and gas services are not connected the Contractor will pass back to the University to re-allocate at a later date.

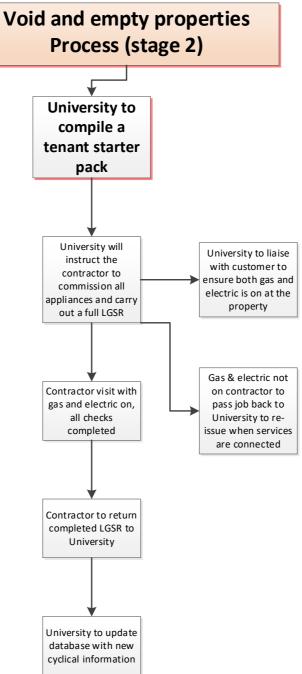
Tasks to be undertaken on site;

- · reconnect the installation and carry out tightness test
- re-fill heating system with water if required
- service or safety check appliances
- re-commission all appliances, follow manufacturers guidance, and regulation 26.9

Complete relevant documentation and instruct the customers on the operation of all landlord appliances and systems.

Return all documentation to University.





Appendix 8 – Mutual Exchanges



Introduction

The objective of this section is to ensure that when a mutual exchange takes place the University is aware of the outgoing customer and which gas appliances where applicable may be legally removed from the property. The University will also give guidance to the incoming customer on how to best utilise the already installed appliances and systems. Where customers exchange properties the University will ensure that the gas installation pipework, chimney/flue where applicable and appliances are safe for use prior to or during the exchange process taking place.

The University will also ensure that customers are aware of their responsibilities only to use "Gas Safe" registered installers to undertake gas work they may wish to have carried out on their own appliance i.e. installation of a cooker.

In order to comply with the requirements of the current Gas Safety (Installation and Use) Regulations, gas safety checks should be completed for all new tenancies and the appropriate gas safety record obtained.

With mutual exchanges the aim will be to carry out the safety check on the day of the exchange. If this is not possible a gas safety check will be undertaken prior to the existing customer moving out.

If the exchange is planned to take place over the weekend, the University will cap off both gas installations on the last weekday before exchange, then re-connect and re-commission the appliances on the first working day after the weekend. The intention being that a customer is never placed in an unsafe gas situation.

8.1 The process

The University are to obtain all information on mutual exchanges as soon as reasonably practicable in order to plan for gas safety checks to be carried out as close to the exchange dates as possible, if the exchange is to take place within 8 weeks of LGSR cyclical anniversary date then the full LGSR check is to be undertaken.

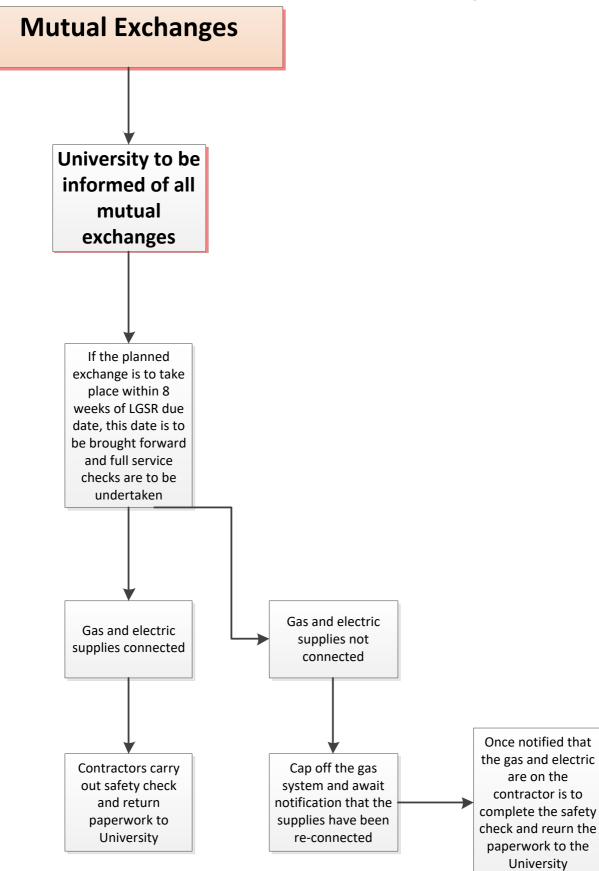
If the planned exchange is to take place at the weekend, both properties will have the safety checks undertaken before each tenant moves out, then each property will have the gas capped off. The re-connection and re-commission process will take place on the first working day after the exchange.

All mutual exchange customers will be advised to ensure that the electric and gas supplies are both on, to allow for full appliance operational checks to take place. If any service is not connected the complete gas system will be disconnected and made safe until such time that the University is notified of their re-connection, which would then allow for the re-connection and recommissioning of the gas systems to take place.

The University will inform all exchange customers that if they want to have their own gas appliances connected, i.e. cookers, to only use suitably qualified and registered Gas Safe companies to undertake the work.

All completed LGSR documentation will be returned to the University by the contractor, to allow for storage and inputting onto the database system.





Appendix 9 – Customers Own Appliances



Introduction

Under the Gas Safety (Installation and Use) Regulations 1998 the landlord is responsible for only relevant gas appliances (ones that they own). Customers (including tenants and residents) may have their own appliances installed into the property; this section explains the process that the Universities contractors should take when encountering an appliance that is customer owned.

9.1 The process

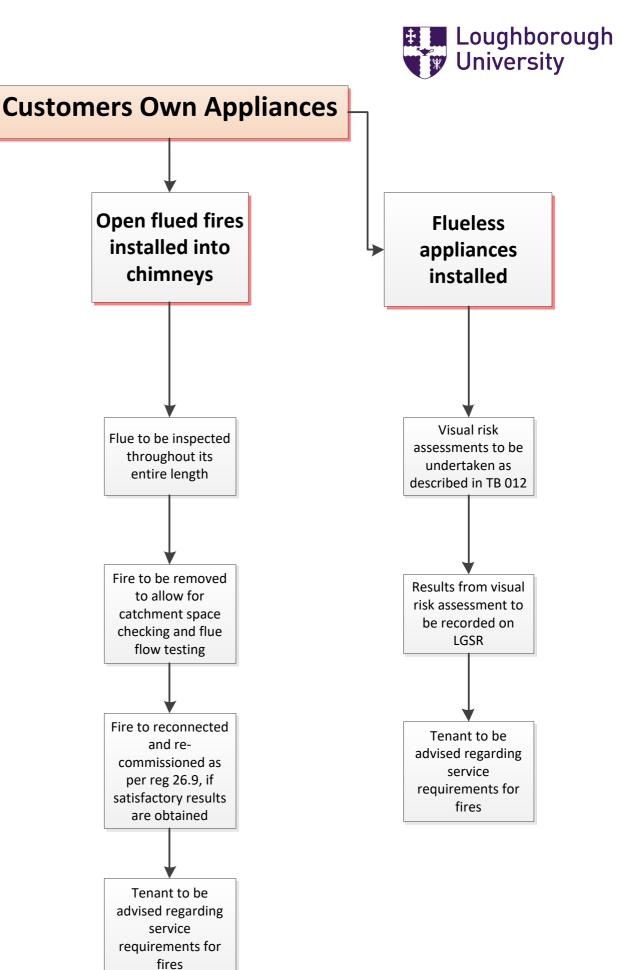
Customers own appliances receive a visual inspection as part of the annual gas safety check. A visual inspection of the customers cooker is to be carried out and any "at risk" (AR) or "immediately dangerous" (ID) issues are to be recorded on the landlord gas safety record and fed back to the University as the landlord. Where necessary and with the users permission the appliance / installation will be made safe by isolation or disconnection. Where any none gas safety none standard installation issues are identified these should also documented and reported to both the customer and University.

Chimneys and flues serving customers own appliances (generally gas fire) are not covered by Regulation 36 of the Gas Safety (Installation and Use) Regulations, but the Health and Safety at Work etc. Act (HSW Act) covers a wider range of duties that extend to the fabric of a building including chimneys. The Health & Safety Executive believe that under the HSW Act chimneys serving customers own appliances should be maintained so as to be fit for purpose. Therefore, where a customer's fire is installed it will be inspected for safety, if incorrectly installed the customer will be requested to get the original installer back to make good and bring the installation up to current standards.

The landlord's chimney/flue system should be visually inspected as far as is reasonably practical throughout its length. A flue flow and spillage test should be carried out in accordance with the current Gas Safety (Installation and Use) Regulations, regulation 26 (9), manufacturer's installation instructions and British Standard BS 5440. In addition to the flue flow and spillage testing, the appliance should be removed and the catchment space visually inspected. The closure plate (if applicable) and appliance must be refitted in accordance with the manufacturer's instructions. In all cases where gas work is undertaken, as defined under the Gas Safety (Installation and Use) Regulations, the checks required under Regulation 26 (9) must be undertaken and the results of these tests recorded.

With customers own balanced flued and flueless appliances such as gas cookers / convector heaters and flueless gas fires the contractor will carry out a visual inspection of the appliance only. Any obvious defects shall be dealt with via the GIUSP and actions noted on the LGSR and additional warning notices.

In all cases the customers are to be advised of the service requirements on appliances that they own.



Appendix 10 – Boiler Plant Rooms



Introduction

Loughborough University have throughout the site a number of communal or district boiler plant rooms. The University need to ensure a rigorous planned and preventive maintenance schedule with set frequencies is adhered to. Please note that under the Gas Safety (Installation and Use) Regulations 1998 regulations 35 and 36 lay down the legislative platform for these checks.

Loughborough University operate three medium temperature heating systems (MTHW) in Building 123 (S Building Boiler House), Building 024 (Sir Frank Gibb Labs) and Building 059 (Holywell Energy Centre). When working with these systems it is important to comply with HSE guidance note BG01.

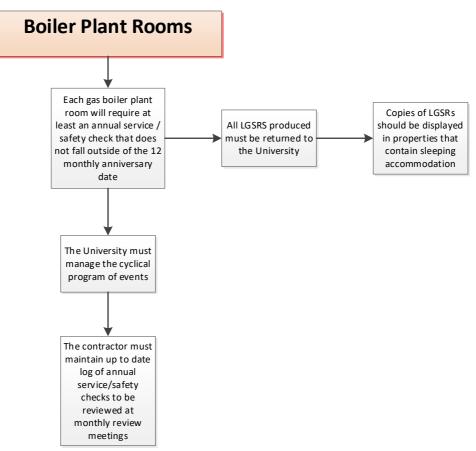
10.1 The process

Every non-domestic gas appliance and chimney / flue will require as a minimum one service / maintenance / safety check carried out every year. Every complete record must be forwarded onto the Facilities Management team. Records must be recorded in the FM archive and / or electronically available to the University and its agents.

A copy of this record should be displayed in a prominent place in the premises for example the building notice board where the plant room supplies sleeping accommodation.

The University must manage the programme, so as to ensure that contractual timeframes are adhered to.

The Universities gas contractor must keep up to date records and logs for each plant room boiler house they are responsible for, these must remain in each plant room with the appliance manufacturer's installation and maintenance instructions.







Introduction

Regulation 35 and 36 of the Gas Safety (Installation and Use) Regulations places the onus for undertaking mandatory 12 monthly maintenance and safety checks firmly on the shoulders of the University. So as to be in a position of being able to demonstrate compliance with these regulations, correct control of information is essential.

The Universities Facilities Information Team utilise an EXCEL file where data is entered, stored and uploaded onto a central system so as to control this very important information. The information is shared with the contractor so as to form a live working document where the cyclical programme of events can be managed from.

11.1 The process

All boiler plant room and domestic gas appliance cyclical programmed events must be entered onto the live database. This database will form the basis of future access dates so close management is essential.

The database should be shared with the contractor, so that they can plan suitable resource in a timely manner so as to ensure that all visits are completed within the allotted timeframe.

The contractor must report back on the following:

- access date
- failed access date
- number of attempts to gain access
- work completed
- any outstanding work
- any appliance that has been isolated or disconnected due to safety reasons

It will be the responsibility of the Estates & Facilities Management team to update the database with the information provided by the contractor.

11.2 Training Requirements

Only Gas safe trained and approved persons are permitted to work on natural gas systems and services Registration must be :-

- a) Current i.e. in date
- b) Relevant to the task they are carrying out

This does not limit the more regular review and audit of training records to ensure compliance is maintained.

It is the responsibility of line managers to ensure all training in their team is kept up to date. If in doubt ask!

11.3 Location of records

At Loughborough University, all Gas records are stored in electronic format in the 'FM Assets folder in Workspaces. In addition records are kept and maintained by the University approved contractor for maintenance.



11.4 How long are records kept?

All gas service records shall be retained for not less than a period of 3 years.

Asset tagging/labelling

All gas appliances, associated emergency isolation valves, solenoid valves and gas proving systems should have Archibus bar code labels fixed to them. Any new, replacement or disposal of assets should be notified to the Facilities Information Team as per the Asset Numbering Policy.

Appendix 12 – Property Alterations



Introduction

The purpose of this section is to ensure that the University and their contractors are aware of the effects of alterations to properties that could affect the safety of existing gas fittings. These property alterations or refurbishments could be any of the following, please note that this is not an exhaustive list:

- window replacements
- cavity wall insulation
- replacement ventilation
- fitting extract fans
- reducing chimney heights
- enclosing an existing flue / appliance
- building extensions
- installing cladding
- extending existing flues
- conversions from flat to pitched roofs
- · rooms converted to sleeping accommodation
- kitchen upgrade / replacement

Before any significant alteration is made to any premises where a gas appliance, installation, chimney or flue-way is installed any implications for the gas appliance installation safety needs to be properly addressed. If followed it could be demonstrated that the University have exercised due diligence prior to and during the work process.

12.1 Legislation guidance

The above works must be undertaken with due regard to the current Gas Safety (Installation and Use) Regulations; Regulation 8 (Existing Gas Fittings).

Regulation 8 (1) Existing gas fittings states:

'No person shall make any alterations 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 vessel in such a manner that, if the fitting or vessel had been installed after the alteration, there would have been a contravention of, or failure to comply with, these regulations.'

This regulation embraces a wide range of physical alterations to premises that may affect the safety of an existing gas fitting installed in the premises where the alteration is to be made. Before a significant alteration is made to premises where a gas appliance or gas fittings are installed their safety needs to be properly assessed.

Regulation 8(2) Existing gas fittings, states:

'No person shall do anything which would affect a gas fitting or 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, except that this paragraph does not apply to an alteration to premises.'

This regulation applies to everyone, not just gas installers. It supplements Regulation 8(1), by prohibiting other activities (i.e. except alterations to premises) which have potential to compromise safety; this might for instance include modifications which cause

blockage/obstruction of an air supply vent or flue. As in Regulation



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

Modification of any gas fitting should be made only by a competent person who is, or is employed by, a "Gas Safe" registered company. 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 person before the gas fitting concerned is taken into use, to ensure that appropriate standards have been met and safety has not been compromised.

Regulation 8(3) Existing gas fittings, states:

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

12.2 The process

The persons responsible for managing the works from E&FM, defined as the Project Manager, must firstly assess whether there are any gas appliances or associated flues within the building or area where any alterations are to be carried out.

If it is established that there are no gas appliances or flues located in the building or work area, then no further consultation will be required with any of the Mechanical Maintenance Team or Mechanical Engineering Team.

Where it is identified that there are gas appliances or flues or if any doubt exists, then a consultation process needs to take place with the Mechanical Maintenance Team or Mechanical Engineering Team which may be one of the following posts/persons.

- Gas DAP Jonathan Cripps
- Plumbing/Heating & HVAC Manager Matthew Polkey
- Maintenance Services Manager Adey Bonser
- Gas Safe Registered Plumber Peter Miller.

Generally, the E&FM Project Manager shall provide an overview of the proposed works and how this may possibly affect the safety of the existing gas appliances or flues. On larger projects this consultation process should form part of the E&FM handover procedure and associated documents.

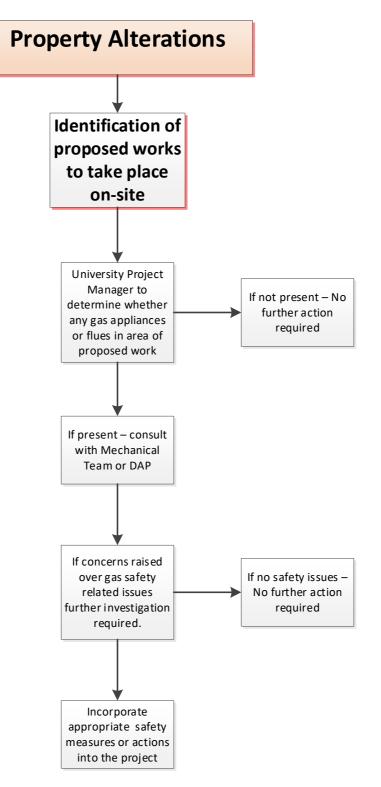
In some circumstances, it may require the appliance chimney or flue to be disconnected during the alterations and re-commissioned on completion of works. This may be required with works such as cladding, roofing or chimney / flue work.

Any alterations where the work has affected or been carried out on the gas installation, the Project Manager shall ensure that all the installations affected are tested and left in a safe condition. A "Gas Safe" registered company must carry out this work. The content and extent of these checks must include but not be limited to the requirements of Gas Safety Regulation 26.9.

Certificates and testing

It shall be the responsibility of the Project Manager, to pass on copies of the gas safety check records and landlord certificates to the Facilities Information Team (FIT), where existing appliances may have been re-tested or re-commissioned as part of the works.





Appendix 13 – Quality Control



Introduction

A quality control process is a pivotal management tool that if implemented correctly will not only confirm the onsite quality performance of engineers, but also re-affirm that all on site risks are managed by the University in a structured format.

The types of quality control inspections that should be implemented are a measured mixture of 'work in progress' and post inspection visits. The process could involve an external third party / so as to satisfactorily assess the quality of performance.

The contractors should also undertake a percentage rate of quality control inspections (usually 100% installations and 10% servicing and repair) whose results should be provided to the University for assessment.

The University has a duty under the Health and Safety at Work etc. Act and the Management of Health and Safety Regulations to:

- assess the risk of the health and safety of all employees and also anyone else who may be affected as a result of work undertaken
- endeavour to provide comprehensive information, instruction, training and supervision with the aim of ensuring, so far as is reasonably practicable, the health and safety at work of every employee or person so affected
- risk assess all work activities

The quality control process should allow trends to be tracked and dealt with so as to plug any potential safety gap that may be highlighted. All engineers across all appliance types should be included into the process

Any proposed auditing regime should address all of the issues listed below;

- all engineers should be quality control checked
- all work types should be quality control checked
- documentation produced by engineers should be included into the quality control process
- quality control process to be modelled on a risk assessment format
- responsibility for managing any quality control audits should be assigned to an individual's job role
- all audits should be analysed and findings should be interpreted for review by management
- reports should identify trends
- all reports, findings and recommendations should be recorded so as to demonstrate that the University are managing a robust quality control process

Quality control ensures that gas engineers are undertaking work in a professional and competent manner whilst not being directly supervised.

A selection of gas work carried out by a gas engineer will be inspected to ensure that, as a minimum, all checks and tests required by the Gas Safety (Installation and Use) Regulations, appliance manufacturer's instructions, industry standards have been undertaken.

The number of checks carried out will be proportional to the type, scope, and amount of gas work undertaken. The frequency and quantity of quality control checks will be dependent on the findings.



To achieve this, the 'risk assessment' will be based on three types of work:

- installation
- service
- repair

The quality control process will include an element of external third party inspection. The external reporting mechanism will ideally include national benchmarking statistics so as to allow the University to assess its contractors own performance in comparison to other housing providers.

The process will retain its flexibility in direct proportion to the findings of any audit. The procedure will allow for trends and individual performance to be monitored and documented in such a way that would clearly demonstrate that the University are taking all reasonable steps to ensure that safe gas work is being carried out by its gas contractors.

13.1 The process

Quality control checks will be carried out on each engineer. The University will ensure each engineer operational or intended for use on the contract is included into this process.

- Suitably competent (with experience of gas work either is or has been gas safe approved). Maintenance Services staff will conduct a review of at least 10 random appliances on a 6 monthly basis.
- The University Compliance Engineer will carry out an independent inspection of LSGR's on at least an annual basis.

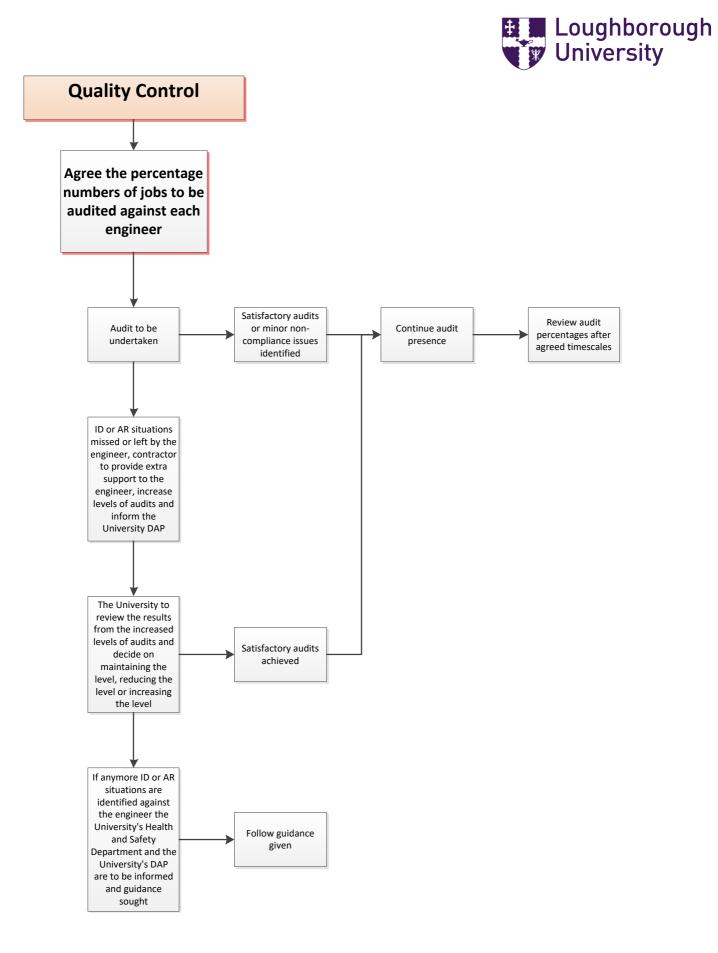
If the process identifies ID or AR installations that have been either caused by or missed by the engineer, an increased amount of quality control checks are to be implemented on the individual concerned. These checks are to be undertaken on a post inspection basis. The engineer concerned must be interviewed, initially to discuss the findings. Extra support / mentoring / training should be considered by the contractor. The University DAP must be informed of all matters relating to the issue identified, including improvement actions.

The results from the increased level of audits must then be reviewed by the University a decision must be made on maintaining, increasing or decreasing the levels of audits.

If the results from the additional quality control visit as undertaken identify more ID or AR installations against the engineer involved the results should be escalated straight to the Universities Health and Safety Department and University DAP for their guidance.

All areas of work are to be Quality Control checked;

- Installation (By the project manager and approved gas safe engineer).
- Servicing By the relevant contractor and sample checked by a University representative.
- Records reviewed annually by the University compliance officer.



Appendix 14 - Leaseholders



Introduction

The responsibility for gas safety within a leasehold property is not an obligation that the University are duty bound to manage, as the gas safety element falls outside the landlords remit under the GSIURs.

This can cause issues in respect of safety as some leasehold properties neighbour University properties. So because of the close proximity of the dwellings this could mean that nearby properties and their occupants could be affected by the escape of carbon monoxide, leaks from gas pipework or appliances, which could all be attributed to the lack of gas safety maintenance within a close-by leasehold property.

Loughborough University recognise this potential issue, so therefore encourage their leaseholders to ensure that a gas safety maintenance and safety check regime is followed.

Unfortunately, the University cannot force a leaseholder to follow a structured programme of maintenance, but the University can encourage and provide advice so as all University visitors are only ever present within a well a managed and gas safe environment.

Appliance manufacturers always state that a regime of maintenance should always be undertaken on their appliances at regular twelve monthly intervals. Therefore the leaseholders should ensure that all installed gas appliances within their properties are serviced annually by a competent Gas Safe Registered company.

Loughborough University encourage the leaseholders on our site to utilise the service of our term gas contractors to undertake the minimum annual visit. This will allow them to benefit from the reduced rates of servicing and safety checking, that the University can obtain from bulk buying purchase power.

14.1 The process

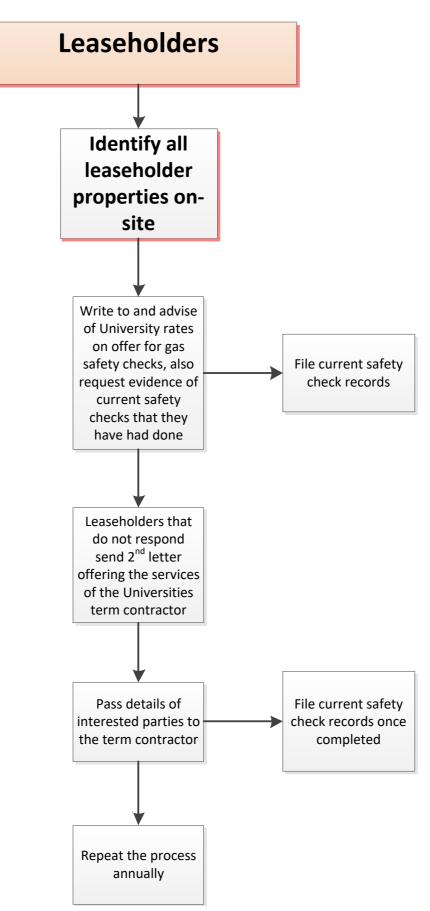
Identify all leasehold addresses on-site, send the initial gas certification request this should be addressed to the leaseholder requesting evidence of the current gas safety or servicing checks that have taken place, offer the services of the Universities term contractor to undertake the gas safety work at the University rate.

Those leaseholders that do not respond should be sent a 2nd letter offering the services of the Universities term contractor.

Information in regards to those leaseholds that have taken advantage of the scheme can be provided to the Universities term contractor.

It is recommended that this process is repeated annually.







Appendix 15 – Legislation and Guidance

- 1) General list of Legislation
 - a. Health and Safety at Work Act 1974
 - b. The Gas Safety (Installation and Use) Regulations 1998
 - c. The Gas safety management Regulations 1996
 - d. The Gas Safety (rights of entry) Regulations 1996
 - e. Building regulations or building standards as appropriate
 - f. RIDDOR Reporting of Injuries, Diseases and Dangerous occurrences Regulations 2013
- 2) General list of Guidance Documents
 - a. Institution of Gas Engineers and Managers (IGEM standards)
 - b. Gas industry unsafe situations procedure.
 - c. BG01 Guidance on the safe operation of boilers

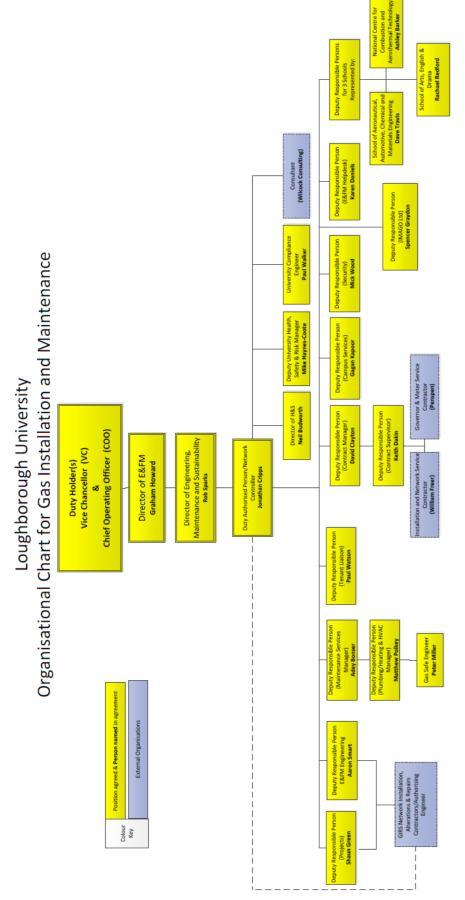
Appendix 16 – Loughborough University Procedures

Procedure for notifying HSE

Loughborough University have a process in place where all Unsafe situations (RIDDOR reportable) are reported through the University health and safety team.

Section 11 of RIDDOR deals specifically with gas related injuries and hazards and is split into two parts. Part 1 relates reporting of incidents where harm to person(s)has occurred and part 2 relates to the reporting of dangerous occurrences. HSE guidance relating to this can be found at the following web pages.

http://www.hse.gov.uk/riddor/reportable-incidents.htm#gas



Appendix 17 – Organogram

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