REGULATED QUALIFICATION FRAMEWORK (RQF)

QUALIFICATION SPECIFICATION

- **LCL Awards Level 4 Certificate in Gas Safety Management of Catering Premises**

1. Objective:

The qualification allows learners to continue to learn, develop and practise the skills required for employment within the {scope} sector. The area and scope of this qualification is for learners to demonstrate they know and understand;

How the Gas Safety (Installation and Use) Regulations impact upon the gas safety management role, how to appoint and manage competent external gas contractors, to ensure operational performance of gas operatives is monitored and how to deal with reports of gas escapes or fumes.
How the gas combustion process works, the effects that Carbon Monoxide (CO) has on the human body, how Carbon Monoxide detectors are used to reduce the risk of Carbon Monoxide poisoning and the requirements for gas operatives responding to alarm activation or reports of fumes.

The requirements of the legislation and normative standards and codes of practice that are relevant to gas safety, application of the relevant legislation, normative standards and codes of practice (CoP) to gas safety situations, the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) within the gas industry, the Gas Industry Unsafe Situation Procedure (GIUSP) and the legal requirements for businesses and individuals carrying out gas work.
The requirements for ventilation (make up air) and canopy extraction systems used in catering installations, the relationship between the operations of the canopy extract system and the health and safety of kitchen personnel, of installation pipework in kitchens, the requirements of appliance installation, commissioning and maintenance.

The target groups for the qualification are those learners who are;

1 Qualification that indicates an individual can undertake a specific role in the workplace and that may be relied upon by employers.

2. Qualification Framework:

The qualification comprises of 4 mandatory Units:

Unit Title	Unit Reference Number	Type of Unit	Level
Gas Safety Facilities Management	LCL-G4002	Knowledge	4
The Combustion Process and Analysis of Non Domestic Appliances	LCL-G4006	Knowledge	4
Gas Safety Legislation	LCL-G4009	Knowledge	4
Catering Installations and Appliances	LCL-G4013	Knowledge	4

Qualification Structure:

- **LCL Awards Level 4 Certificate in Gas Safety Management of Catering Premises**
- **QAN –** (603/1007/8)
- **QW -** C00/2509/7
- The Guided Learning Hours (GLH) are **43 hours**
- The Total Qualification Time (TQT) is **77 hours**
- The total credit required to achieve the qualification is **8**

3. Unit Grading Structure:

The learner is required to successfully achieve a pass in each unit for this qualification to be awarded.

4. Unit specification:

LCL-G4002: Gas Safety Facilities Management
Assessment Method {SR}

Learning Outcome 01: The learner will know how the Gas Safety (Installation and Use) Regulations (GSIUR) impacts on gas safety facilities management responsibilities.
The learner can:

1.1 Describe the requirements of the GSIUR that place specific duties on businesses responsible for managing gas work and gas installations.
1.2 Describe how the GSIUR impacts on the way in which businesses structure programmes of gas work to ensure compliance with Regulation 8.
1.3 Describe how Regulation 36 of the GSIUR applies where a non-domestic gas appliance is located on site and is providing a service (heating, hot water or catering) to a building used for rented accommodation

Learning Outcome 02: The learner will know how to appoint and manage gas fitting operatives and contractors.
The learner can:

2.1 Specify the criteria to be considered when employing or appointing:
- Gas fitting operatives
- Contractors.

2.2 Explain the role of Gas Safe Register in maintaining the register of gas operatives and businesses.
2.3 Design a process or method to monitor the gas qualifications and competences held by operatives and contractors.

Learning Outcome 03: The learner knows how to monitor the operational performance of gas fitting operatives and contractors.
The learner can:

3.1 Analyse the following regulatory and guidance documents to identify the requirements for quality controlling and monitoring of gas work:
- Gas Safety (Installation & Use) Regulations
- Health and Safety at Work Act HASWA
- HSE publication “Use of contractors a joint responsibility”.

3.2 Outline 3 methods of quality controlling operative’s work and confirm the advantages and disadvantages of each method.
3.3 Develop a quality control procedure to measure the performance of operative’s gas work.
3.4 Specify action plans for monitoring the improvement of operatives or contractor’s performance where failings have been found in:
- Completion of documentation
- Maintenance work
- Installation work
- Fault diagnosis
- Identification of gas safety defects.

Learning Outcome 04: The learner will know how to deal with reports of gas escapes, fumes or carbon monoxide/dioxide alarm activation.
The learner can:

4.1 Describe the management responsibilities when receiving a report of a gas escape, fumes or carbon monoxide/dioxide alarm activation.
4.2 Develop a procedure for responding to a report of a gas escape, fumes or carbon monoxide/dioxide alarm activation.
4.3 Develop a procedure to be used where a variation to the guidance in the Gas Industry Unsafe Situations Procedure is necessary to deal with a gas emergency.
4.4 Outline the management and emergency actions to be taken where occupants have been confirmed as been subjected to CO poisoning.

LCL-G4006: The Combustion Process and Analysis of Non-Domestic Appliances
Assessment Method {SR}

Learning Outcome 01: The learner will know the process of combustion, factors affecting combustion and combustion analysis.
The learner can:

1.1 Explain how the combustion process of gas takes place and state the products of complete and incomplete combustion.
1.2 Describe the effect that the following situations have on the combustion process and how those situations affect the constituents of the products of combustion;
- A lack of ventilation.
- Blocked lint arrestors.
- Oversized burner injectors.

1.3 Describe the operation of different types of safety devices fitted to appliances designed to shut off the appliance in the event of a build-up of combustion products in or around the appliance.
1.4 Explain the effect of vitiation on the combustion process.
1.5 Describe how Carbon Monoxide (CO), Carbon Dioxide (CO2) and CO/CO2 ratio measurement is used to determine the state of combustion within an appliance.
1.6 State the formula used to determine the CO/CO2 ratio.
1.7 Describe the flame picture of an appliance with complete and incomplete combustion, incorporating a:
- Natural draught burner.
- Fan draught burner.

1.8 Describe the signs of incomplete combustion in and around an appliance.
1.9 State the manufacturing standard for portable electronic combustion performance equipment used for;
- Combustion analysis.
- Atmosphere sampling for CO & CO2

1.10 Describe the calibration requirements and the operational checks to be carried out prior to the use of portable electronic combustion performance equipment.
1.11 Outline the process for carrying out combustion performance analysis on a Type B appliance incorporating a;
- Natural draught burner.
- Fan draught burner.

1.12 Outline the procedure for carrying out analysis of indoor ambient atmospheres.

Learning Outcome 02: The learner will understand the effects CO has on humans.
The learner can:

2.1 Describe why CO is dangerous to life.
2.2 Describe the effects CO has on humans.
2.3 Describe how incomplete combustion from gas appliances can lead to death or serious injury due to CO poisoning.
2.4 Explain the actions be taken to minimise the risk of appliances producing CO.
2.5 Identify the causes of CO in a property other than from gas appliances.

Learning Outcome 03: The learner will know how CO detectors are used to reduce the risk of CO poisoning and the requirements for gas engineers responding to CO alarm activation or reports of fumes.
The learner can:

3.1 Describe the operation and use of different types of CO detectors and recommend which type should be use in properties containing gas appliances
3.2 Describe why CO detectors should be not be used as the first line of defence against CO poisoning.
3.3 Explain the importance of the correct positioning of a CO detector to ensure maximum protection against poisoning.
3.4 Describe how gas operatives can be protected from CO poisoning when responding to CO alarm activation.
3.5 Describe the actions to be taken by gas operatives when on site and dealing with a response to CO alarm activation.
3.6 Describe the precautions to be taken by gas operatives attending premises where CO poisoning has occurred.

Unit LCL-G4009: Gas Safety Legislation
Assessment Method {SR}

Learning Outcome 01: The learner will know the requirements of the legislation and normative standards and codes of practice that are relevant to gas safety.
The learner can:

1.1 Describe how each of the following relates to gas safety:
1.2 Outline the requirements of the following Gas Safety (Installation & Use) Regulations:
- Regulation 3 Qualifications and Supervision
- Regulation 4 Duties on the Employer
- Regulation 8 Existing Gas Fittings
- Regulation 18 Safe Use of Pipes
- Regulation 26 Gas Appliances – Safety Precautions
- Regulation 27 Flues
- Regulation 30 Room Sealed Appliances
- Regulation 33 Testing of Appliances
- Regulation 34 Use of Appliances

1.3 Outline the main points of the Gas Safety Management Regulations in relation to gas escapes and other emergencies.
1.4 Describe how the GSIUR have influenced the design and publication of gas safety normative standards and codes of practice.

Learning Outcome 02: The learner will be able to apply the relevant legislation, normative standards and codes of practice (CoP) to gas safety situations.
The learner can:

2.1 Identify the normative standard or CoP & its section and the gas operative's documentation that apply in each of the following situations:
- Open flue chimney blocked by birds' nest
- Gas escape caused by poor workmanship
- Open ended gas pipe connected to a gas installation
- A new construction enclosing an existing chimney outlet.

- Open flue gas appliances with only 85% of the required permanent ventilation to outside air provided.

2.2 Describe how gas safety legislation applies to completing a gas safety record form.
2.3 Describe the range of normative standards and CoP available to gas operatives and give a scenario where they would apply.

Learning Outcome 03: The learner will know how to apply the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) within the gas industry
The learner can:

3.1 Describe the content and purpose of RIDDOR applied to the gas industry.
3.2 Give 6 examples of situations that are RIDDOR reportable.
3.3 Describe the reporting process for RIDDOR including relevant documentation.

Learning Outcome 04: The learner will know how to apply the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) within the gas industry
The learner can:

4.1 Describe the content and purpose of the GIUSP
4.2 Provide 3 different examples of each category of unsafe situation that is classified as:
- Immediately Dangerous (ID)
- At Risk (AR)

4.3 Explain the importance of the GIUSP documentation issued by a gas operative and the actions taken by the operative according to the 2 categories of unsafe situation.

Learning Outcome 05: The learner will know the legal requirements for businesses and individuals carrying out gas work.
The learner can:

5.1 Describe the legal requirements for the following;
- Installation businesses employing gas operatives
- Self-employed gas operatives
- Individuals carrying out gas work outside the scope of the Gas Safety (Installation & Use) Regulations GSIUR.

Unit LCL-G4013: Catering Installations & Appliances
Assessment Method {SR}

Learning Outcome 01: The learner will know the requirements for ventilation and canopy extraction systems used in catering Installations.
The learner can:

1.1 Explain the reasons for providing ventilation (make up air) and canopy extract systems in kitchens.
1.2 Outline the different methods of providing ventilation (make up air) in kitchens and state their advantages and disadvantages.
1.3 Outline the different methods of calculating canopy extract flow rates required for the removal of products of combustion and cooking odours from kitchens.
1.4 Describe the preferred method of calculating canopy extract flow rate for the removal of products of combustion and cooking odours from kitchens.
1.5 Outline the different types of canopies installed in kitchens.
1.6 Describe the installation requirements for canopies installed in kitchens.

1.7 Describe the adverse effects of a poorly maintained canopy extract system.
1.8 Describe the requirements where make up air is provided mechanically
1.9 Describe the requirements where make up air is provided mechanically
1.10 Describe the construction requirements for vents and grills providing make up air.
1.11 Outline the ventilation (make up air) and extract requirements for small kitchens and food technology areas in educational establishments.

Learning Outcome 02: The learner will know the requirements for ventilation and canopy extraction systems used in catering Installations.
The learner can:

2.1 State which appliance types must be installed under a canopy extract system and explain the reasons why.
2.2 Describe the installation requirements to ensure safe operation where a mechanical extract or ventilation (make up air) system is installed.
2.3 Explain the requirements where a canopy extract system is not interlocked with the gas supply or where the interlock can be by passed.
2.4 Explain how to evaluate the effectiveness of a canopy extraction system
2.5 Describe the requirements of the equipment used to evaluate the effectiveness of a canopy extraction system.
2.6 Describe the actions to take where the canopy extract system is proven to be ineffective.
2.7 Describe the effects of raised levels of CO2 on kitchen personnel and state the levels of CO2 at which the Gas Industry Unsafe Situations Procedure applies.
2.8 Describe the requirements for installing CO2 monitoring systems in kitchens.

Learning Outcome 03: The learner will understand the requirements of installation pipework in kitchens.
The learner can:

3.1 Outline the planning and design criteria for the installation of pipework in kitchens.
3.2 Describe the adverse effects that a kitchen environment can have on installation pipework and describe the actions to be taken to minimise any damage.
3.3 Explain the installation requirements for manual and electrically operated emergency isolation valves and their associated labels and notices.
3.4 Describe the requirements for flexible connections connecting catering appliances to the installation pipework.
3.5 Describe the purpose and operation of a gas proving system fitted to installation pipework.
3.6 State the tightness testing and purging procedures which should be applied for the following pipework installations;
- up to 0.35m^3
- greater than 0.35m^3 but less than 1m^3
- greater than 1 m^3

Natural Gas pipework installations
- up to 0.35m^3
- greater than 0.35m^3

3.7 Describe the safety precautions to be in place when carrying out tightness testing, strength testing & purging of installation pipework in kitchens.
3.8 Outline the considerations to take where additional pipework and appliances are to be added to an existing installation.
3.9 Describe the effects on the operation of appliances where the installation pipework is undersized.

Learning Outcome 04: The learner will understand the requirements of appliance installation, commissioning and maintenance.
The learner can:

4.1 Describe the types of gas appliances fitted in kitchens and outline their designed use.
4.2 Describe the requirements for installing new and previously used appliances.
4.3 Develop a method statement for the installation of replacement appliances in an operational kitchen.
4.4 Outline the documentation and information required to be handed over to the owner on completion of the installation of a new kitchen.
4.5 Outline the key information to consider when the advising users on the safe and correct use of appliances.
4.6 Compare the advantages and disadvantages of adopting a planned schedule of maintenance for kitchen installations.

5 National Occupational Standard:

The Units used in this qualification have a direct relationship with the National Occupational Standards for the areas of work contained within.

6 RQF Descriptor Level 4.

Knowledge descriptor: *(the holder can)*

Has practical, theoretical or technical knowledge and understanding of a subject or field of work to address problems that are well defined but complex and non-routine.
Can analyse, interpret and evaluate relevant information and ideas.
Is aware of the nature of approximate scope of the area of study or work.
Has an informed awareness of different perspectives or approaches within the area of study or work.

7 Prior qualifications, knowledge, skill or understanding which the learner is required to have before taking this qualification. (Pre-requisites)

None prescribed.

8 Units which a learner must have completed before the qualification will be awarded and any optional routes.

Learners must complete the 4 mandatory units before the qualification will be awarded. See Section 4.0 above.

9 Other requirements which a learner must have satisfied before the learner will be assessed or before the qualification will be awarded.

None

10 The design and delivery of the examination associated with these units are based on the following documents;

- **EUSICG4. Pre-commission and Commission New and Existing Gas Systems, Installations and Components to Industry Standards.**
- **EUSICG5. Maintain Commercial Gas Systems, Installations and Components to Industry Standards**
- **EUSLPG4. Install gas systems and components**
- **EUSLPG5a. Commission systems and components**
- **EUSLPG6. Service and maintain gas systems and components**
- **EUSLPG15. in complex systems and components**
- **EUSDSG3.16. Dealing with reported gas downstream emergencies**

11 The criteria against which learners' level of attainment will be measured.

The Learning Outcomes and Assessment Criteria against which learners' level of attainment will be measured are detailed in Section 4 of this specification.

12 Planned exemptions

None

13 Specimen assessment materials.

None

14 Specified levels of attainment

Learners must pass all the mandatory units for the qualification to be awarded.

15 Other information

Where the qualification(s) is awarded in the various devolved regions of the UK i.e. England, Scotland, Northern Ireland and Wales, the examination questions and learner responses to those questions are set and responded to in the context of the legislation, normative standards and guidance applicable in that region. Assessors will mark examinations in accordance with the generic model answers and rationales provided by LCL Awards taking into account any variations applicable to that region.

SSAs: 5.2 Construction **Review Date:** Dec 2023