QQI AWARDS STANDARDS

For Fgas Handling in Large RACHPT&T Systems Category I

1. Introduction

This standard has been developed in compliance with current European Union (EU) and national regulations. This standard describes minimum expected learning outcomes for educational awards to be made following successful completion of a Fgas Handling in Large RACHPT&T Systems Category I Programme.

The purpose of this award is to equip the learner with the relevant knowledge, skill, and competence to carry out intrusive work on the following activities on stationary refrigeration, air-conditioning and heat pump systems and the refrigeration units of refrigerated trucks and trailers that use fluorinated greenhouse gases (F gases), in compliance with current European Union (EU) and national regulations without supervision:

- **Leakage checking** of equipment containing fluorinated greenhouse gases in quantities of 5 tonnes of CO2 equivalent or more and not contained in foams, unless such equipment is hermetically sealed, is labelled as such and contains fluorinated greenhouse gases in quantities of less than 10 tonnes of CO2 equivalent: and,
- **Recovery, installation, repair, maintenance, servicing and decommissioning** of equipment containing fluorinated greenhouse gases.

2. Minimum Expected Learning Outcomes

Fgas Handling in Large RACHPT&T Systems Category I

NFQ Level: Overall, the minimum expected learning outcomes as expressed are at NFQ Level 5. (see Appendix 1 – Guide to Level)

Award-class: Special Purpose Award

Minimum Expected Learning Outcomes: The minimum expected learning outcomes embedded for this award are those as stated in ANNEX 1, Category I, of Commission Implementing Regulation (EU) 2015/2067.

ANNEX1 expresses the minimum requirements as to skills and knowledge to be covered by an evaluation body (programme provider).

Award Title: Level 5 Special Purpose Certificate in Fgas Handling in Large RACHPT&T Systems Category I

Credit: To be determined at the programme development stage and confirmed by validation.

Assessment:

Skills Demonstration - The assessor will devise a skill demonstration / practical test meeting the requirements of ANNEX 1, as provided for under Category I of ANNEX 1 of Commission Implementing Regulation (EU) 2015/2067. The learner must complete tasks based on the learning outcomes.

The skills demonstration will be terminated if learner actions result in potentially unsafe practice. In this case the learner will fail to meet the standard.

This assessment must be passed for the learner to achieve the award.

Examination Theory - The assessor will devise a theory- based test meeting the requirements of ANNEX 1, as provided for under Category I of ANNEX 1 of Commission Implementing Regulation (EU) 2015/2067.

This assessment must be passed for the learner to achieve the award.

3. Special Validation Conditions

The provider must have all of the following in place to offer this award:

1. Necessary tools and equipment to include: working vapour compression refrigeration system, complete with thermostatic expansion valve and liquid receiver operating on an HFC refrigerant and including all relevant safety controls.

2. Leak detection tools and instruments to include electronic leak detection equipment suitable for both direct and indirect leak detection method.

3. Refrigerant recovery and charging equipment

4. Pipe jointing equipment and tools

5. Pressure testing equipment and tools

6. Major components for replacement

7. All necessary safety equipment

4. Supporting Documentation

1. Commission Regulation (EC) No 1005/2009

2. Commission Regulation (EU) No 517/2014

3. Commission Regulation (EC) No 1516/2007

4. Commission Implementing Regulation (EU) 2015/2067

Appendix 1

Guide to Level

Learning outcomes at this level include a broad range of skills that require some theoretical understanding. The outcomes may relate to engaging in a specific activity, with the capacity to use the instruments and techniques relating to an occupation. They are associated with work being undertaken independently, subject to general direction.

Strand	Sub-strand	Nature of learning
Knowledge	Breadth	Broad range of knowledge
	Kind	Some theoretical concepts and abstract thinking, with significant depth in some areas. Some underpinning theory
Know How & Skill	Range	Demonstrate a broad range of specialised skills and tools
	Selectivity	Evaluate and use information to plan and develop investigative strategies and to determine solutions to varied unfamiliar problems
Competence	Context	Act in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs; identify and apply skill and knowledge to a wide variety of contexts
	Role	Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups
	Learning to Learn	Learn to take responsibility for own learning within a managed environment
	Insight	Assume full responsibility for consistency of self- understanding and behaviour