Title	**Demonstrate knowledge of odorisation in a gas network**		
Level	**3**	**Credits**	**3**

Purpose	People credited with this unit standard are able to: identify the main requirements of gas odorisation in a gas network; and identify equipment for the safe storage, handling, monitoring, and injection of odorants in a gas system.

Classification	Gas Industry > Gas Network Operations

Available grade	Achieved

Guidance Information

1 This unit standard is intended for, but is not limited to, workplace assessment. The range statements relate to enterprise specific equipment, procedures, and processes.

2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's specifications, company procedures and legislative requirements.

3 Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015;
Gas (Safety and Measurement) Regulations 2010.

4 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

5 Definition
Company procedures mean the documented methods for performing work activities, and include health and safety, operational, environmental, and quality management requirements. They may refer to legislation, regulations, guidelines, standard operating procedures, manuals, codes of practice, or policy statements.

Outcomes and performance criteria

Outcome 1

Identify the main requirements of gas odorisation in a gas network.

Performance criteria

1.1 The reasons for odorising gas are explained.

1.2 The attributes that gas odorant must possess are explained.

1.3 Gas odorisation is described in terms of chemical and physical properties.

Range types, limits, concentrations, in-line reactions, masking, fading.

1.4 Methods of testing and monitoring odorant concentrations and odour levels are explained.

1.5 Methods of recording odorant concentrations and odour levels are described.

1.6 The methods used for the safe handling, storage, and injection of odorants are described.

Outcome 2

Identify equipment for the safe storage, handling, monitoring, and injection of odorants in a gas system.

Performance criteria

2.1 Odorant injection, storage, handling and transportation equipment is described and component parts are identified.

Range metering devices, control valves, flares, relief valves, injection, bypass odoriser, vessels, tanks, cylinders, drums.

2.2 Equipment for measuring odorant concentrations and odour levels is described.

Range senses, sample vessels, sample lines, odour level testers, odour concentration testers.

2.3 Methods of setting up and injecting odorants are described.

2.4 Methods of dealing with odorant spillages are described.

2.5 Methods of keeping required records and documentation are described.

Planned review date	31 December 2022

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 November 1997	31 December 2018
Revision	2	3 August 2000	31 December 2018
Review	3	22 October 2002	31 December 2018
Review	4	20 November 2006	31 December 2018
Review	5	17 August 2017	N/A

Consent and Moderation Requirements (CMR) reference	0014

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.