Title	Meet requirements for Approved Handler Test Certificate for refrigerants		
Level	4	Credits	5

Purpose	This unit standard is for people working in the refrigeration an air conditioning industry with responsibility for handling refrigerants. It covers the knowledge and practical skills required to prepare candidates for an Approved Handler Test Certificate for Class 2 refrigerants as required by legislation.		
	People credited with this unit standard are able to demonstrate knowledge of: the HSNO Act relevant to an Approved Handler of refrigerants; handling of refrigerants; and emergency planning for refrigerant storage.		

Classification	Mechanical Engineering > Refrigeration and Air Conditioning
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Available grade	Achieved		
Recommended skills and knowledge	28950, Meet requirements for Approved Filler Test Certificate for refrigerants; National Certificate in Refrigeration and Air Conditioning (Level 4), or equivalent, or minimum of five years industry experience.		

Explanatory notes

1 Approved Handler certification

Personnel in the refrigeration and air conditioning industry with responsibility for the handling of refrigerants must hold an Approved Handler Test Certificate, issued by a Test Certifier who has been approved by the Environmental Protection Authority (EPA) for this purpose. *Handling* includes handling and storing, transportation, packaging and identification, disposal, tracking, and emergency management of the specified hazardous substances. The Test Certificate covers handling of refrigerants classified as Classes 2.1.1 A and B (flammable gases); it specifically excludes ammonia refrigerant.

Section 82 of the Hazardous Substance and New Organisms Act 1996 covers the issue of Test Certificates by Test Certifiers. Section 5 of the Hazardous Substances and New Organisms (Personnel Qualifications) Regulations 2001 describes the knowledge and skills required to satisfy the Test Certifier, and this unit standard closely reflects these requirements relevant to the refrigeration and air conditioning industry. Achievement of this unit standard may therefore be used as evidence towards Approved Handler Test Certification, but by itself does not replace the need for an Approved Handler Test Certificate.

2 References

Guide to Gas Cylinders. Environmental Protection Authority October 2013. Available from <u>http://www.business.govt.nz/worksafe/notifications-forms/hsno-activities-</u> <u>certification-qualifications-licensing/certification-of-equipment-plants-buildings/gas-</u> <u>cylinders-fire-extinguishers</u>

Hazardous Substance and New Organisms Act 1996.
Health and Safety in Employment Act 1992.
Ozone Layer Protection Act 1996.
Resource Management Act 1991.
Hazardous Substances (Compressed Gases) Regulations 2004.
Hazardous Substances (Emergency Management) Regulations 2001.
Land Transport Rule: Dangerous Goods 2005.

Australia and New Zealand Refrigerant handling code of practice 2007, Parts 1 and 2. AIRAH and IRHACE. Available from <u>www.irhace.org.nz</u>.

HSNOCOP 2. Signage for premises storing hazardous substances and dangerous goods. New Zealand Chemical Industry Council Inc. September 2004. Available from Responsible Care New Zealand Incorporated, PO Box 5557, Wellington 6145. HSNOCOP 53. Compressed Gas Cylinder Fittings Standards,. Version 1.0. Environmental Protection Authority. August 2011. Available from http://www.epa.govt.nz/Publications/.

Performance Standard for Signage for Test Certifiers. Environmental Protection Authority. Updated July 2012. Available from

http://www.business.govt.nz/worksafe/information-guidance/all-guidanceitems/hsno/guidance-docs-epa/peformance-standards-for-test-certifiers/performancestandard-for-test-certifiers-signage.pdf.

Safe use of hydrocarbon refrigerants – Factsheet. Department of Labour. July 2008.

3 Definitions

AIRAH – Australian Institute of Refrigeration and Air Conditioning and Heating. *Approved Handler* – a person who has been approved by a test certifier to handle specified hazardous substances, e.g. refrigerants.

EPA – Environmental Protection Authority of New Zealand.

Handling – the activities of an Approved Handler in relation to hazardous substances, e.g. refrigerants.

HSNO – Hazardous Substance and New Organisms Act 1996.

IRHACE – Institute of Refrigeration, Heating and Air Conditioning Engineers New Zealand.

Test Certifier – a person who has been authorised by the EPA to certify that the requirements of the HSNO Act have been met.

- 4 Assessment
 - a A current Approved Handler Test Certificate may be used as evidence for this unit standard.
 - b Assessments are "open book".

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of the HSNO Act as it applies to an Approved Handler of refrigerants.

Evidence requirements

- 1.1 The obligations of an Approved Handler under the Act are explained.
- 1.2 The purpose and principles of the Act are explained.
- 1.3 The offence and defence provisions of the Act are stated.
- 1.4 The penalties and liabilities imposed by the Act are stated.
- 1.5 The effect of a compliance order issued under the Act is explained.

Outcome 2

Demonstrate knowledge of handling refrigerants.

Evidence requirements

- 2.1 The HSNO hazard classifications relevant to refrigerants are identified.
- 2.2 The potential hazards associated with refrigerants are identified, and the precautions required to prevent harm to people and environment are explained.
- 2.3 Conditions and limitations relevant to Approved Handler certification for refrigerants are stated.
- 2.4 Controls under the HSNO act relevant to refrigerants are identified.
 - Range controls relating to release of gas, personal protective equipment, signage, storage, transport, disposal.
- 2.5 Regulations and codes of practice are identified and applied in response to given refrigerant handling scenarios.

Outcome 3

Demonstrate knowledge of emergency planning for refrigerant storage.

Evidence requirements

- 3.1 Regulations covering emergency management of hazardous substances are identified, and where they may be obtained is stated.
- 3.2 The level of required emergency planning for a given scenario of refrigerant storage is determined from the regulations.

3.3 The frequency of testing emergency procedures for a given scenario of refrigerant storage is determined from the regulations.

Planned review date	31 December 2020

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2015	N/A

Consent and Moderation Requirements (CMR) reference				0013		
			10			

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

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz at <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.