

<b>Title</b>	<b>Demonstrate knowledge of managing hazardous atmosphere zones for flammable gases and aerosols</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>4</b>

<b>Purpose</b>	<p>This unit standard is intended for people who are the certified handlers in their workplace, under the Health and Safety at Work (Hazardous Substances) Regulations 2017, and who are involved in the manufacture and use of hazardous substances.</p> <p>People credited with this unit standard are able to demonstrate knowledge of managing hazardous atmosphere zones for flammable gases and aerosols.</p>
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<b>Classification</b>	Occupational Health and Safety > Hazardous Substances and Materials
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<b>Available grade</b>	Achieved
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## Guidance Information

### 1 References

Legislative requirements applicable to this unit standard include – Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous Substances) Regulations 2017, Hazardous Substances and New Organisms Act 1996, AS/NZS 60079.10.1:2009 *Explosive atmospheres – Classification of areas – Explosive gas atmospheres*, AS/NZS 4745:2012 *Code of practice for handling combustible dusts*, AS/NZS 1596:2014 *The storage and handling of LP Gas*, AS/NZS 61241.0:2005 *Electrical apparatus for use in the presence of combustible dust – General requirements*, available at <http://www.standards.co.nz>.

### 2 Definitions

*Certified handler* – a person who is qualified to handle very hazardous substances. A certified handler may also provide guidance and assistance to other people handling the substances.

*Hazardous atmosphere zones* – an area surrounding a flammable substance location that identifies the extent of any source (or potential source) of release of gas or vapour. Within the zone there must be controls on ignition sources to prevent unintended ignition. The extent of the zone depends on the nature of the operation and quality of ventilation. The types of hazardous zones are identified as:

Zone 0 – Extreme risk

Zone 1 – High risk

Zone 2 – Low risk.

*Hazardous substance* – any substance that has one or more of the following properties (explosive, flammable, tendency to oxidize, corrosive, toxic, eco-toxic)

when above specified levels. A hazardous substance can have more than one hazardous property such as petrol which is flammable and toxic.

*Organisational requirements* – instructions to staff on policies and procedures which are documented in memo or manual format. These requirements include but are not limited to – site-specific requirements and any company quality management requirements.

*Standards and codes of practice* – refer to AS/NZS 60079.10.1:2009.

- 3 Certified handlers are not responsible for classifying hazardous substances and it is not their responsibility or duty to draw/mark a hazardous zone on a site plan.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of managing hazardous atmosphere zones for flammable gases and aerosols.

#### Performance criteria

- 1.1 Different types of hazardous atmosphere zones generated as a result of handling, storing, and using flammable gases and aerosols are identified and described in accordance with legislative requirements.
- 1.2 Standards and codes of practice that apply to hazardous atmosphere zones for flammable gases and aerosols are described in terms of their key requirements.
- 1.3 The process for marking a scaled hazardous atmosphere zone on a site plan and/or drawing is described in accordance with legislative and organisational requirements.
- 1.4 The process for managing hazardous atmosphere zones to avoid unintended ignition for flammable gases and aerosols is described in accordance with legislative and organisational requirements.

<b>Planned review date</b>	31 December 2020
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 July 2011	N/A
Rollover and Revision	2	22 May 2014	N/A
Rollover and Revision	3	8 December 2016	N/A
Rollover and Revision	4	22 August 2019	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0121
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact The Skills Organisation [reviewcomments@skills.org.nz](mailto:reviewcomments@skills.org.nz) if you wish to suggest changes to the content of this unit standard.