



# HEALTH, SAFETY AND EMERGENCY MANAGEMENT

Promoting a safer place to work and study



Curtin University

## SAFETY BULLETIN

### Laboratory Gas Safety

#### Who needs to read this?

All staff who are responsible for the ordering and control of gases on campus.

#### Background Details

There were 819 gas related incidents in Western Australia in the period 2003/4 to 2012/13, with 44% (360) of these incidents occurring in the workplace. These incidents resulted in 1 fatality every 3 years. ([Gas incident safety report Western Australia 2012-13](#))

During this same period Curtin experienced 22 gas related incidents, ranging from incorrectly stored cylinders, unexpected gases released during chemical reactions through to gas pipework damaged during construction works. To date, no incidents at Curtin have resulted in injuries to staff, students or visitors, only costly clean-up and repair works.

#### Information

There are a range of processes in place at Curtin to assist staff in relation to gas safety. These include:

- Standard templates for: gas and chemical pre-purchase; chemical, plant and equipment risk assessments and safe work procedures available on the [HSEM webpage](#);
- Practical advice and support on all hazardous materials available through HSEM;
- The HAZMAT program and the Permit to Dig process through [Properties, Facilities and Development](#)
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#### Recommendations

Staff are required to be aware of their responsibilities in relation to the use and storage of gases on campus. These responsibilities include:

1. Adequate preparation of areas where gases are to be delivered, stored and used to ensure suitability. This includes for example, storage facilities for cylinders in use and empty cylinders, delivery areas, ventilation and monitoring systems and strategies to minimise the impact on

other building users and the environment.

2. Staff are required to follow the Dangerous Goods Code 7.3 and relevant Australian Standards that apply to the supply, use, storage and maintenance of gas equipment and cylinders in workplaces.
3. Preparation of risk assessments and/or HAZOP for the processes where gases will be used, and these made available to all staff/students who will use the gases or be involved in the processes where the gases are used.
4. The relevant Material Safety Data Sheet/s (MSDS) are to be made available to all who will use the gases. This includes storage of the MSDS on [ChemAlert](#).
5. Curtin staff are not permitted to transport bottled gases. Where transport of gases is required the preferred method of transportation is via the gas supplier, in line with the requirements of the [Department of Mines and Petroleum](#) and the [Dangerous Goods Code 7.3](#).

All gas related incidents are to be reported by an [On-line Incident Report](#). This allows the Director HSEM to report mandatory incidents as required under the relevant legislation to the gas supplier and the Director of Energy Safety [Details]

#### Who do we call with questions?

If you have any queries, please contact Health and Safety on 9266 4900 or email [healthandsafety@curtin.edu.au](mailto:healthandsafety@curtin.edu.au).

#### References

[Dangerous Goods Code 7.3](#) – Department of Infrastructure & Regional Development

[Guidelines for gas cylinder safety 2013](#) - BOC

[Gas incident safety report Western Australia 2012-13](#)- Energy Safety 2014

[SAI Global](#)- Standards via Curtin University library databases

[Guidelines for gas cylinder safety 2013](#)- BOC

[Handling of cryogenic liquefied gases](#)- Lynde Group Safety Advice 1

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