

## Dangerous Goods and Hazardous Substances in NSW – Where to Start?

### What is the difference between dangerous goods and hazardous substances?

Dangerous goods pose significant risks for the public. The storage and handling of dangerous goods is governed by considerable regulation – NSW WorkCover, Fire Brigades and the Environment Protection Authority each have a part to play in premises where such goods are kept. Premises need not be just workplaces – indeed many types of dangerous goods are encountered in retail shopping malls as well as the more traditional factory sites. Naturally, the quantities differ and the regulatory framework reflects this.

Hazardous substances, on the other hand, have a predominantly workplace focus. Health and welfare of employees, contractors and visitors is paramount. Exposure limits, monitoring, health surveillance and other controls are commonly used. Most dangerous goods will be hazardous substances.

### What are dangerous goods?

These are substances and articles prescribed as dangerous goods for the purpose of the OH&S Amendment (Dangerous Goods) Regulation 2005<sup>4</sup>. There is reference to the ADG Code<sup>1</sup> and transport regulations. Combustible liquids (as set out in AS 1940<sup>2</sup>) are also prescribed as dangerous goods.

Dangerous goods are broadly classified as follows:

- **Class 1** – Explosives, including fireworks
- **Class 2** – Flammable, non-flammable and toxic gases, e.g. acetylene, liquid nitrogen, chlorine
- **Class 3** – Flammable liquids, e.g. petrol, methylated spirits, acetone
- **Class 4** – Flammable solids and reactive substances, e.g. nitrocellulose, calcium carbide
- **Class 5** – Oxidizing agents and organic peroxides, e.g. ammonium chlorate, ammonium nitrate, dry pool chlorine
- **Class 6** – Toxic substances, e.g. sodium cyanide, some pesticides
- **Class 8** – Corrosive substances, e.g. acids, alkalis
- **Class 9** – Miscellaneous, e.g. elevated temperature liquids such as bitumen and molten metals, polyester beads, dry ice
- **Class C1 and C2** – Combustible liquids, e.g. diesel fuel, vegetable oils

### What are hazardous substances?

Technically, they are defined with reference to the National Occupational Health and Safety Commission (NOHSC) “List of Designated Hazardous Substances” and “Approved Criteria for Classifying Hazardous Substances”<sup>3</sup>. These are hazardous substances manufactured for use at work.

Manufacturers must determine whether substances are hazardous. Should they be manufactured outside NSW, the importer assumes the manufacturer’s obligations. In any case, the manufacturer must prepare a Material Safety Data Sheet (MSDS) and provide it to any person who supplies the hazardous substance for use at work.

## What are the obligations of occupiers of premises, employers and employees?

### *In relation to dangerous goods:*

- Record the materials, specifications and quantities kept at the premises in a manifest located near the site entrance, easily accessible to emergency services.
- Ensure that they are kept in accordance with the OH&S Amendment (Dangerous Goods) Regulation 2005.
- Notify WorkCover where quantities exceed “Manifest” levels.
- Recognise that dangerous goods should be kept in accordance with the Regulations and Australian Standards, whether or not the Manifest Quantity has been exceeded.
- Document risk assessments for the safe handling of dangerous goods on the site. Risk assessments are particularly essential for any non compliance with the relevant Australian Standard.
- Lodge copies of emergency plans with local NSW Fire Brigades.

### *In relation to hazardous substances:*

- Obtain MSDS for each substance before or upon supply.
- Make this information available to employees.
- Keep a register of hazardous substances.
- Ensure containers are labelled.
- Manage the use of hazardous substances in accordance with OH&S Regulation 2001<sup>4</sup>.

*Note: These are brief outlines only. They are not intended to be, and are not complete nor comprehensive descriptions of individual obligations. In all cases, relevant professional advice should be sought.*

## Further information

For further detail, please refer to the following Risk Aware issues:

- **Risk Aware 8** – “Proposed Changes to Dangerous Goods Regulation – What Does this Mean for Employers?”
- **Risk Aware 14** – “New Dangerous Goods Regulation Now in Force – What You Need to Know”
- **Risk Aware 15** – “Emergency Plan Requirements – What You Need to Know”

## References:

1. Australian Dangerous Goods Code
2. AS 1940: The storage and handling of flammable and combustible liquids
3. National Occupational Health and Safety Commission
4. Regulations under NSW Occupational Health and Safety Act 2000

## For more information, please contact:

Advitech Pty Limited  
1 Elizabeth Street  
Tighes Hill Newcastle NSW 2297

Tel 02 4961 6544  
[mail@advitech.com.au](mailto:mail@advitech.com.au)  
<http://www.advitech.com.au>



Copyright © 2007  
Advitech Pty Limited

The information in this document is of a general nature and is not intended to provide a complete and comprehensive discussion on every topic. While every precaution has been taken to ensure the accuracy of the information, Advitech Pty Limited accepts no responsibility for inadvertent errors or omissions. The information contained in this document is subject to change without notice.