Australasian Institute of Dangerous Goods Consultants

WHAT'S HAPPENING?

December 2008

DIARY DATES FOR 2009

HAZMAT

Thursday 29th and Friday 30th April

Sydney

AIDGC ANNUAL CONFERENCE

Friday 18th September

Sydney

Happy Christmas and a Really Excellent 2009
The Board of AIDGC wishes to extend to all our Members the Seasons Greetings and our wishes for a prosperous and happy New Year.

SAFETY IS NO ACCIDENT

Storage of Large Quantities of Fireworks in NSW

As a result of the fireworks explosions at Wallerawang NSW in December 2007 and a similar incident at Mt Carmel in Western Australia in 2002, WorkCover has released a discussion paper outlining proposed reforms for fireworks storage and handling in NSW.

http://www.workcover.nsw.gov.au/Documents/Publications/AlertsGuidesHazards/DangerousGoodsExplosivesFireworksPyrotechnics/storage_large_quantities_fireworks_position_paper_5708.pdf

Water Your Christmas Tree

A test reportedly by the U.S. National Fire Protection Association and Underwriters Laboratories shows how much faster a dry Christmas tree burns compared to one that is watered regularly.

http://www2.worksafebc.com/enews/081202/081202.htm

http://www.youtube.com/watch?v=RNjO3wZDVIA

Corporate Members

Our Corporate Members provide a range of products and services to the Dangerous Goods Industry. Their contact details are:

AJM Environmental – Adrian Minshull
02) 9542 2366

Basset Consulting Engineers –
Tim Dean
(07) 3510 4000 or
0439 371 063

Store-Safe Pty Ltd –
Grant Breeze
02) 9569 2122

Vanguard Solutions
Tony Davies
08) 9420 5322

IN THE NEWS

Mobil Convicted of Environmental Damage

The Company has been convicted of causing an environmental hazard and ordered to pay $350,000 toward environmental projects. The verdict was handed down in the Melbourne Magistrates Court on Wednesday, after Mobil admitted part of a Melbourne suburban steel pipeline from an oil refinery to a terminal had corroded and leaked unleaded petrol over a two-year period.

EPA investigations revealed the leak could have started in December 2004 and remained undetected until December 2006, when residents became aware of a strong petrol odour.

An EPA spokesman said it was expected the cost of Mobil's clean-up of the site to exceed $13 million and to continue for at least the next four years.

The EPA also has been awarded $160,000 in costs.

http://www.industrysearch.com.au:80/News/Environmental_damage_-global_oil_giant_Mobil_convicted-36148

NICNAS Matters – December 2008 Newsletter

http://www.nicnas.gov.au/Publications/NICNAS_Matters/NICNAS_Matters_DEC08_PDF.pdf

Workplace Death
Company and Director Fined $200 000

This occurrence is reported to be the first time a company director has been sentenced for a workplace fatality under the Victorian Occupational Health and Safety Act 2004.

http://www.industrysearch.com.au:80/News/Company_director_fined_200000_on_workplace_death-36094

Buncefield Blast Update
Total Faces Criminal Charges

Total, the French oil giant, and four other companies are facing criminal prosecution over Britain's biggest peacetime explosion.

Total is facing three charges — failing to ensure the health, safety and welfare of its employees; failing to protect persons not in their employment and causing pollution to ground water in the vicinity of the plant.

Hertfordshire Oil Storage Limited (HSOL) is facing two charges - failing to prevent a major accident and limit its consequences to persons and the environment and polluting ground water.

An engineering services provider, the manufacturer of an allegedly defective safety switch and the manufacturer of the related monitoring systems are also facing charges.

Total and HOSL are also facing a separate civil lawsuit over the Buncefield explosion in which hundreds of businesses, insurance companies and local residents are claiming around £700 million in damages.

http://business.timesonline.co.uk/tol/business/law/article5268763.ece

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This month, my thanks go to John Baker, Rick Hall and Peter Hunt for their contributions.

Injury in Blast at Ethanol Plant

One person has been injured in an explosion at the ethanol distillery at Nowra, New South Wales.

Up to nine fire trucks from the NSW FB and the RFS rushed to the Manildra Ethanol plant as a precaution.

http://www.abc.net.au:80/news/stories/2008/12/10/2442299.htm

Sulphuric Acid Spills - Bruce Highway, Queensland

- **A highly corrosive chemical which spilt on the Bruce Highway in southern Queensland could damage cars and anyone who has come into contact with it must wash themselves thoroughly, authorities say. A Queensland Fire and Rescue Service spokesman said the chemical, which contained sulphuric and phosphoric acids "appears to be eating up the bitumen".**

- **A tanker truck carrying sulphuric acid has rolled off the Bruce Highway in central Queensland forcing emergency crews to impose a 250m exclusion zone to contain leaking acid. It is understood both tanks on the B-double tanker were leaking and that the truck came to rest beside the road in long grass.**

http://www.theaustralian.news.com.au/story/0,25197,19054692-421,00.html

http://au.news.yahoo.com/a/-/latest/5195546/sulphuric-acid-tanker-rolls-qld/

http://www.reuters.com/article/healthNews/idUSTRE4AH85R20081118

RESOURCES

Stainless Steels
Design Guidelines for their Selection and Use

http://www.nickelinstitute.org/index.cfm/ci_id/3102/la_id/1/document/1/re_id/0

Expert Opinion – Dealing with Differences

http://www.hse.gov.uk/foi/internalops/hid/spc/spctg20.pdf

Vapour Cloud Explosions (VCE)

http://www.hse.gov.uk/foi/internalops/hid/spc/spctld05.pdf

Explosion Hazard Assessment: A Study of the Feasibility and Benefits of Extending Current HSE Methodology to Take Account of Blast Sheltering HSL/2001/04

http://www.hse.gov.uk/research/hsl_pdf/2001/hsl01-04.pdf

REFRESHER CORNER

3 Examples of "Reacts Dangerously" in "Underwater Fireworks" Experiment

(Involves reactions between DGs of Divisions 2.1, 2.3, 4.3, 5.1 and DG Class 8).

1. Potassium permanganate is reacted with 6M (21.9 g/L) hydrochloric acid to form chlorine gas:

   $KMnO_4\,(s) + 16\ HCl\ (l) \quad == \quad 2\ MnCl_2\,(l) + 2\ KCl\ (l) + 8\ H2O\ (l) + 5\ Cl_2\,(g)$

2. Calcium carbide is added to a water column to create calcium hydroxide and acetylene gas:

   $CaC_2\,(s) + 2\ H_2O\ (l) \quad == \quad Ca(OH)_2\,(s) + C_2H_2\,(g)$

3. The chlorine gas reacts violently with the acetylene gas as it is produced in the water column to yield carbon (which floats) and hydrochloric acid gas (which dissolves in the water column).

   $Cl_2\,(g) + C_2H_2\,(g) \quad == \quad 2\ HCl\ (g) + 2\ C\ (s)$

'Reacts dangerously' = chemical reaction that is either violent and/or explosive and/or generates fire, and/or excessive heat, and/or a flammable, toxic or asphyxiant gas.

(s) = solid phase
(l) = liquid (aqueous) phase
(g) = gaseous phase

An illustrative video is available for demonstration purposes.

http://jumpcut.com/view/?id=A517DF8EC69E11DC98EE000423CF3686

Saying it 'Correctly'

The meanings of the terms "fusible," "frangible," "friable," and "fissile" are explained.

http://www.usfa.dhs.gov/downloads/pdf/coffee-break/cb_2008_48.pdf

New Pocket-Sized Dangerous Goods Card

AIDGC is proposing to have cards printed for members to give to clients or potential clients. It has been suggested that these would incorporate the Class/Division labels and HAZCHEM codes as in ADG7 and include the AIDGC logo and website details.

Members are invited to submit comments, suggestions, complete design details, examples of similar cards or any other relevant information to Robyn for consideration by the Board – robynhogan@unwired.com.au

ADG7 – New Terminology or Meanings: No 7

ADG7 Concessions for Transport for Small Quantities and Tools of Trade

These concessions will not be found in ADG7 – they will be in the various state and territory regulations based on the "Model Subordinate Law".(e.g. in SA the "Dangerous Substances (Dangerous Goods Transport) Regulations 2008").

The Model Act and Subordinate Law can be found in the Commonwealth "National Transport Commission (Model Legislation — Transport of Dangerous Goods by Road or Rail) Regulations 2007". This can be found at http://www.comlaw.gov.au/ - click on "Legislative Instruments – Compilations Current", then click on "N-Na", then scroll to the bottom and click on page 3, then scroll down to the correct title (as above) and click on it, and now (finally) you can read it on line or download it (283 pages, 960 KB .pdf or a 236 KB zip file).

Small Quantities

ADG6 Road Regulations (yellow pages) and corresponding state and territory regulations provided that the Regulations did not apply to the transport of packaged dangerous goods (excluding designated dangerous goods [i.e. dangerous goods of Class 1 (except of Class 1.4S), Class 6.2 or Class 7]) where the aggregate quantity of the dangerous goods in the load is less than 25% of a placard load and the goods are not being transported by the person in the course of a business of transporting goods by road. The Rail Rules (green pages) had similar provisions

Clause 1.1.6 of the Model Subordinate Law provides a similar exemption (but in one place as road and rail are now combined) if:

(a) the load does not contain dangerous goods in a receptacle with a capacity of more than 500 litres or kilograms; and

(b) the goods are not, and do not include, designated dangerous goods; and

(c) the aggregate quantity of the dangerous goods in the load is less than 25% of a placard load; and

(d) the goods are not being transported by the person in course of a business of transporting goods by road; and

(e) in relation to transport by rail — the goods are not being transported by the person on a passenger train.

Tools of Trade

There is a new provision (Clause 1.1.8 of the Model Subordinate Law) which allows larger quantities of dangerous goods to be transported by a person intending to use them (such as plumbers, electricians and pest control persons) or when the goods are to be used for a commercial purpose (such as samples transported by sales/marketing personnel).

Provided there is no Division 2.3 (Toxic Gas), Division 2.1 (Flammable Gas –other than Aerosols) or Packing Group I:
up to an aggregate of 500 kg(L) is permitted.

Provided the aggregate of Division 2.3 plus PGI is less than 100 kg(L):
up to an aggregate of 250 kg(L) is permitted

These are both subject to all of the following:

(i) Packages being safely loaded, secured, segregated, transported and unloaded;
(ii) Dangerous goods being packed and labeled in accordance with the Code with the packaging remaining fit for purpose;
(iii) More than 250 kg(L) of fire risk or toxic dangerous goods (Classes 3, 4, 5, 6) must not be transported in a passenger compartment or enclosed space not separated from the passenger compartment;
(iv) More than 50 kg(L) of Divisions 2.1 and 2.3 plus Packing Group I must not be transported in the passenger compartment or any other enclosed space on the vehicle.

Extract from the Hazardous Cargo Bulletin

"The state of Victoria has signed off on the necessary regulations to implement the 7th edition of the Australian Dangerous Goods Code (ADG7) on January 1, 2009. Similar regulations are already in place in Western Australia, South Australia and Queensland. ADG7 takes effect on January 1 with a transitional period to December 31, 2009.

A copy of ADG7 will be available to download free of charge at www.ntc.gov.au from the start of the year."

Hazmat 2009 Sydney: 29-30th April 2009

Hazmat 2009 will be held in Sydney next year and a Hazmat 2009 Conference exhibitor's/sponsor brochure is available at www.fpaa.com.au/events/index.php?events=index#HMat.

The program is nearly finalised and will be available electronically next year - in late January, the hardcopy in early February.

Contact Chris Dayson, Events Manager, FPAA, ph: 03-9890-1544
Email: ChrisDayson@fpaa.com.au.

Keep In Touch

If you have any suggestions or queries, please do not hesitate to contact the AIDGC Executive Officer, Robyn Hogan robynhogan@unwired.com.au or leave a message with the AIDGC Paging Service on 02) 9430 6739 and I will return your call.