AIDGC Australasian Institute of Dangerous Goods Consultants

WHAT'S HAPPENING?

November 2009

Welcome to our New Associate Member

Jim Borle
Victoria

Total not Responsible for Factory Explosion

A French court ruled that oil giant Total could not be held responsible for the 2001 explosion that destroyed its AZF chemical fertiliser subsidiary, near the southern French city of Toulouse. Former Total CEO Thierry Desmarest is also cleared of responsibility, as are the plant's former manager Serge Biechelin and subsidary owner Grande Paroisse. Both Grande Paroisse and Biechelin had been charged with involuntary homicide, causing injury and destruction of property. The court declared that the former manager's direct responsibility in the blast could not be proved beyond reasonable doubt, and dismissed the summons against Total and Desmarest issued by victims because neither had been put under formal investigation by magistrates. Investigators found an abnormally large quantity of volatile ammonium nitrate in the factory that may have caused the blast, and victims accused Grande Paroisse and Total of negligence in stocking the highly flammable substance. However, the court ruled that it was impossible to prove with certainty that this was actually the reason behind the explosion. The company has already paid some two billion euros (2.6 billion dollars) in compensation to the victims but it said this did not constitute an acknowledgement of any criminal responsibility. "The judges said that there was plenty of evidence of negligence at many levels, but none pinpointing one person in particular, so no-one can be punished. This has obviously left the victims confused and angry, many in tears. I don't think this is a verdict which pleases anyone, really", reported FRANCE 24 correspondent Christopher Bockman from the Toulouse courthouse. The blast killed 31 people, injured at least 3,000 and damaged around 30,000 homes and hundreds of businesses in a radius of up to six kilometres (3.7 miles) around the plant. It was initially believed to have been caused by a terrorist attack: the September 11 attacks in New York had occurred just two weeks before, and

AIDGC DIARY DATES FOR 2009

Mixed Class Dangerous Goods

Melbourne
November 26
October
MFB Burnley Complex
Lecture Theatre
Richmond

Fire Videos Film and Discussion Evening

November 26
Denistone Room
Ryde Eastwood Leagues Club
West Ryde
Sydney

were fresh in people's minds. Judges ruled today that there was no proof of a deliberate terrorist plot and an accident was the most likely cause of the explosion. However, an eight-year-long multi-million euro investigation failed to shed light on exactly what caused the tragedy, leaving victims and their families helpless and still in the dark.

Watch the Video:
http://www.france24.com/en/20091119-toulouse-court-clears-total-reponsibility-azf-factory-explosion-desmarest-france?autoplay=
Watch the Video
http://www.euronews.net/2009/11/19/oil-giant-total-cleared-over-factory-blast/

Report on Dallas Gas Explosions

The National Transportation Safety Board released its final report Tuesday on the cause of a series of massive explosions that rocked downtown Dallas more than two years ago. The Southwestern Industrial Gases storage facility in the middle of the downtown Mixmaster was destroyed by the explosions and fire on July 25, 2007. Three people were seriously injured. The NTSB report blamed the disaster on the improper unloading of acetylene, a highly flammable gas used for welding. The safety agency said a truck operator for the Western Industrial Gas and Cylinders failed to follow proper procedures for unloading 225 cylinders of acetylene, setting the stage for the for series of explosions that sent a dark cloud over Dallas and paralyzed traffic for hours. The truck operator suffered severe back injuries; the Plant Manager and General Manager suffered severe burns. Emergency responders were amazed that the injuries were limited to those three. The NTSB concluded that the accident in Dallas (and a similar incident in The Woodlands, Texas) was the result of the truck operator's failure to follow his company's standard operating procedures. "The accidents in Dallas and The Woodlands demonstrate the catastrophic results that can occur when the unloading procedures are not followed exactly," the NTSB report stated. "Because of the instability of acetylene, the current acetylene unloading procedures by themselves are not adequate to ensure safety." The agency also noted that there was no sprinkler system at the Dallas facility to quickly douse any fire that erupted.
As a result of its study, the NTSB made the following recommendations:
• "Require fail-safe equipment that ensures that operators of mobile

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AECOM
Tim Dean
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M +61 421 407 633

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02) 9542 2366

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Grant Breeze
02) 9569 2122

Vanguard Solutions
Tony Davies
08) 9420 5322

acetylene trailers can perform unloading procedures only correctly and in sequence."

• "Require automated water deluge systems at all mobile acetylene trailer loading and unloading locations to control the spread of fire to other cylinders on a trailer and to nearby mobile acetylene trailers."

Western Industrial Gas and Cylinders now mandates that all operators stay in contact with the company by phone, step-by-step, during transfer operations. The Southwestern Industrial Gases facility was destroyed in the fire, which resulted in an estimated US$5 million in damages. A spokesperson for the company — once a major player in supplying the region with welding gases — is now in the process of being dissolved.

Source: http://www.WFAA.com Cynthia Vega

Dust from Industrial Processes Can Fuel Devastating Explosions – 4 incident reports from CSB

Imperial Sugar Refinery

On February 7, 2008, a huge explosion and fire occurred at the Imperial Sugar refinery northwest of Savannah, Georgia, causing 14 deaths and injuring 38 others, including 14 with serious and life-threatening burns. The explosion was fueled by massive accumulations of combustible sugar dust throughout the packaging building.

Watch the Video:
http:\\www.csb.gov/investigations/detail.aspx?SID=6

Hayes Lemmerz Dust Explosions and Fire

On the evening of October 29, 2003, a series of explosions severely burned two workers, injured a third, and caused property damage to the Hayes Lemmerz manufacturing plant in Huntington, Indiana. One of the severely burned men subsequently died. The Hayes Lemmerz plant manufactures cast aluminum automotive wheels, and the explosions were fueled by accumulated aluminum dust, a flammable byproduct of the wheel production process.

Watch the Video:
http:\\www.csb.gov/investigations/detail.aspx?SID=33

This month my thanks go to

Don Johnston and

Rick Hall

for their contributions

CTA Acoustics Dust Explosion and Fire

On February 20, 2003, an explosion and fire damaged the CTA Acoustics manufacturing plant in Corbin, Kentucky, fatally injuring seven workers. The facility produced fiberglass insulation for the automotive industry. CSB investigators have found that the explosion was fueled by resin dust accumulated in a production area, likely ignited by flames from a malfunctioning oven. The resin involved was a phenolic binder used in producing fiberglass mats.

Watch the Video:
http://www.chemsafety.gov/investigations/detail.aspx?SID=35

West Pharmaceutical Services Dust Explosion and Fire

On January 29, 2003, an explosion and fire destroyed the West Pharmaceutical Services plant in Kinston, North Carolina, causing six deaths, dozens of injuries, and hundreds of job losses. The facility produced rubber stoppers and other products for medical use. The fuel for the explosion was a fine plastic powder, which accumulated above a suspended ceiling over a manufacturing area at the plant and ignited.

Watch the Video:
http://www.chemsafety.gov/investigations/detail.aspx?SID=36

Oxygen Bottle Blast Problem Not Systemic

There is no evidence of systemic safety problems with aircraft oxygen bottles, according to an interim report on the explosion of an oxygen bottle on a Melbourne-bound Qantas flight in July last year. The explosion ripped a huge hole in the side of a Qantas Boeing 747 which was flying from Hong Kong to Melbourne causing a sudden loss of air pressure in the cabin.

The second interim report by the Australian Transport Safety Bureau (ATSB) released on Tuesday indicates there is no evidence of systemic safety problems with oxygen bottles of the type involved in the accident. It said various tests have not been able to replicate the cylinder failure that occurred on board the jet.

It said all pressure tests of the cylinders met or exceeded the relevant safety specifications, with recorded rupture pressures being over twice the maximum working pressure of the cylinders. Other work is being carried out to determine the minimum size of mechanical flaws that could result in cylinder failure in service.

The flight, which originated in London and was carrying 365 passengers and crew, plunged 6,000 metres before stabilising, then made an emergency landing in the Philippines capital Manila.

The ATSB expects to conclude its investigation in early 2010.

Australian/New Zealand Standard™
AS/NZS ISO 31000:2009
Risk Management
Principles and Guidelines

This Standard was prepared by Joint Standards Australia/Standards New Zealand Committee OB-007, Risk Management to supersede AS/NZS 4360:2004, Risk management.

When AS/NZS 4360:1999 was revised in 2004 (as part of a routine five yearly revision), it was decided by the Joint Australian/New Zealand Committee OB-007 that rather than undertake a similar revision in 2009, Standards Australia and Standards New Zealand would promote the development of an international standard on risk management which would then be adopted.
In 2005 the International Organization for Standardization (ISO) established a working group to develop the first international risk management standard using AS/NZS 4360:2004 as the first draft. The standard development process included extensive public consultation in Australia and New Zealand and resulted in the publication of ISO 31000:2009.
The main variations to AS/NZS 4360:2004, as outlined in the Introduction, are as follows:

(a) Risk is now defined in terms of the effect of uncertainty on objectives.
(b) The principles that organizations must follow to achieve effective risk management have now been made explicit.
(c) There is much greater emphasis and guidance on how risk management should be implemented and integrated into organizations through the creation and continuous improvement of a framework.
(d) An informative Annex describes the attributes of enhanced risk management and recognizes that while all organizations manage risk in some way and to some extent this may not always be optimal.

The process described for managing risk is identical to that in AS/NZS 4360:2004. This Standard is identical with, and has been reproduced from ISO 31000:2009, Risk management—Principles and guidelines.

Minor changes have been made to the Introduction to address the application of the Standard in Australia and New Zealand.

As this Standard is reproduced from an International Standard, the following applies:

(i) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(ii) In the source text 'this International Standard' should read 'this Australian/New Zealand Standard'.

The term 'informative' is used to define the application of the annex to which it applies. An informative annex is only for information and guidance.

WORKCOVER NSW GUIDE: PROVISIONAL EMERGENCY ARRANGEMENTS FOR MAJOR HAZARD FACILITIES

Purpose:

This document provides a guide to operators of major hazard facilities (MHFs) on how to comply with their obligations under clauses 175P(1)(d) and 175P(1)(e) of the NSW *Occupational Health and Safety Regulation 2001* (OHS Regulation) which relate to the preparation and implementation of provisional emergency arrangements.

The requirements:

These clauses require the MHF operator to prepare and implement provisional emergency arrangements for the facility and submit details of these arrangements to WorkCover. The provisional emergency arrangements must comply with any requirements that are published in the NSW Government Gazette.

In preparing these arrangements the operator must provide details of these arrangements to the Commissioner of NSW Fire Brigades and take account of any written advice received from the Commissioner. In addition, MHFs within a rural fire district must also provide details of these arrangements to the NSW Rural Fire Service.

The requirements for provisional emergency arrangements were published in the NSW Government Gazette No. 82 on 4 July 2008 and are also published in the WorkCover publication *Major Hazard Facilities: Conditions and Requirements of Provisional Registration and of Registration* (Catalogue no. WC05528 available from www.workcover.nsw.gov.au).

(continued on next page)

Extract from *Conditions and Requirements* document:

A3 PROVISIONAL EMERGENCY ARRANGEMENTS

A3.1 The requirements for provisional emergency arrangements referred to in clause 175P(1)(d) of the OHS Regulation are as follows:

A3.2 The operator of the major hazard facility must describe and explain in writing how the following requirements are met:

a. all emergency planning provisions under the *Explosives Act 2003* or the *Explosives Regulation 2005* that apply to the amounts of Schedule 8 materials present or likely to be present at the facility

b. all emergency planning provisions under Chapter 6A of the OHS Regulation that apply to the amounts of Schedule 8 materials present or likely to be present at the facility. This includes, but is not limited to, the provisions in clauses 174ZB, 174ZC, 174ZD, 174ZJ, and 174ZN.

How to use this Guide:

This guide includes a table that MHF operators may use to provide information as required by clauses 175P(1)(d) and 175P(1)(e).

The second and third columns of the table list each of the relevant clauses in the OHS Regulation and Explosives Regulation related to emergency planning.

The fourth column suggests the kind of information that could be used to describe and explain how the requirement is met. These suggestions are not exhaustive, and other information could be provided either in addition or as alternative.

The fifth column provides space for the operator of a MHF to provide the relevant information for that MHF.

MHFs which are not covered by Chapter 6A of the OHS Regulation (that is, MHFs with explosives but not dangerous goods of other classes) need to complete only the provisions identified as being covered by the Explosives Regulation. However, the other provisions should generally be regarded as good practice.

Buying Your Standards as an AIDGC Member

The AIDGC is a member of Standards Australia. Members can buy Australian Standards from their web site www.saiglobal.com/shop at discount prices by using the AIDGC's Membership Code and Online Access Code, provided that:

*** Purchases are made over the internet**

*** Purchases are made using a credit card**

To purchase standards, you must be registered on the SAI website and will be asked to log on.

To be able to purchase standards at a discount you must list the following details on the "Memberships" tab of your "My User" profile.

*** On the "Add/Authenticate a Membership" pane of this tab, in the "organization" field select "SAI Global: Buyer Advantage Program".**

*** Enter SP012765 in the Member ID field (that's SPzero, not SPO)**

*** Enter 5449 in the PIN field**

Once you have done this, the discount will be applied whenever you log on to purchase standards.

Once you have selected your Standard(s), and are processing your order, you must:

*** Purchase by credit card, not the member account**

*** Complete the remaining fields using your personal details, NOT those of the AIDGC**

Visit Your Website

http://www.aidgc.com and check out the Members' Only pages.

Keep in Touch

If you have any suggestions or queries, please do not hesitate to contact the AIDGC Executive Officer, Robyn Hogan at: robhogan@tpg.com.au or via the AIDGC Paging Service on 02) 9430 6739 and I will return your call.