



Australasian Institute of Dangerous Goods Consultants

WHAT'S HAPPENING?

September 2009

Welcome to
our New
Associate
Members

Allan Murray
NSW

Chiv. Tang
NSW

Keith Sharp
Queensland

John
Duckworth
NSW

Petrol Stations in the News.....



Picture David Chan - News.com.au

**AIDGC
DIARY
DATES
FOR 2009**

**Mixed
Class
Dangerous
Goods**

**Sydney
October 29**

**Ryde-
Eastwood
Leagues
Club
Ryedale
Road
West Ryde**

**Brisbane
October 27
October
AECOM
Conference
Room**

Narwee Petrol Station Fire

A WOMAN filling a petrol can so she could mow her lawn almost blew up a suburban Sydney service station with a freak electrical spark. If not for quick-thinking staff hitting an emergency kill-switch, the fire could have ignited the 150,000-litre underground fuel storage tanks and blown up, not just the station, but an entire city block. The woman was filling a 5-litre can for a lawn mower - a total of \$5.93 at 118.8c a litre - about 10am (AEST) yesterday when a static electrical charge built up from the petrol entering the can. The fumes ignited because Rose was holding the jerry can in the air, instead of having it earthed on the ground as instructed by safety signs. As petrol spilled the fire spread to the bowser before engulfing her silver Toyota Corolla. "I dropped the jerry can and the fire spread, I thought the whole petrol station would have went up," a shaken Rose said yesterday. The fire came within moments of turning into an explosion that would have destroyed the entire structure, if not for petrol station worker Mohammad Sheerez who hit the emergency stop - a big red button - that stopped the flow of petrol to the bowsers and isolated the pumps from the storage tanks below. Petrol station owner Phil Costa said the underground storage tanks would have been about half-full at the time of the fire. "If he Mr Sheerez didn't isolate the tanks the whole block could have gone up so we are very proud of our staff and how quickly they reacted," Mr Costa said. NSW Fire Brigade station officer Glen Groves said that had the jerry can been earthed, simply by being placed on The ground, the fire may never have happened. Rose, who did not want to use her surname, said she wouldn't be mowing her lawn any time soon.

<http://www.dailytelegraph.com.au/news/gallery/gallery-e6frewxi-1225762925529?page=1>

Close call for Muswellbrook Man and Little Girl

21/09/2009 - TheHerald.com.au - MICHELLE HARRIS AND JACQUI JONES

A MAN and his toddler daughter had lucky escapes from serious injury after jerrycans the man was filling exploded at a Morisset petrol station at the weekend. Robert Lloyd of Muswellbrook urged others to heed safety warnings about filling the cans following the incident, which is the second involving an electrical spark at a petrol station in a week. Mr. Lloyd sustained burns to his left arm, which caught fire, while his daughter Summah, 2, received superficial burns to her ankle and had her hair singed. Mr Lloyd said he was filling two five-litre cans at the Caltex station off the Gateway Boulevard on Saturday. The cans were on his Mitsubishi Triton's tailgate. He had filled one and was filling the second when a spark ignited the fuel. "The first can being filled burst into flames and the second one exploded," Mr Lloyd said. Mr Lloyd said a mechanic from the service station's workshop came to his aid.

Ambulance and NSW Fire Brigades representatives were called - the fire was put out with an extinguisher before firefighters arrived. The area was evacuated until a cooling agent was sprayed on the bowser and a Caltex representative inspected the pump. Police said static electricity was thought to have ignited vapours. WorkCover had been told of the incident and was expected to investigate.

**Fire
Videos
Film and
Discussion
Evening**

**November
26
Ryedale
Room
Ryde
Eastwood
Leagues
Club
West Ryde
Sydney**

Firefighters Battle Gas Explosion Threat

FIREFIGHTERS have evacuated a service station in Canley Vale with a car fire threatening to cause a major gas explosion. Three fire crews were called out to the Canley Vale Rd service station just before 5pm after a car caught fire. Making matters worse, the fire is directly next to the station's LPG tank which has the potential to cause a massive explosion. Fire crews are trying to put out the blaze as well as cool down the volatile gas. A spokesman for the NSW Fire Service said the fire is a high risk situation right near the LPG tank at the petrol station which is a potentially dangerous situation," the spokesman said.



Fairfield City Champion - Picture: Joseph Adams

\$150 Million Verdict in EXXON Spill Case

Six months after a Baltimore County jury awarded the neighbours of a Jacksonville service station more than \$150 million to compensate for damages arising from a leaking underground pipe, a Circuit Court judge has affirmed the jury's decision. But the judge, Maurice W. Baldwin Jr., who presided over a five-month trial in the residents' suit against the station's owner, Exxon Mobil gave the oil company a small reprieve: he reduced the damages by between \$3 million and \$4 million, partly by taking into account the money received by four families who were able to sell their properties, and partly by adhering to a cap set by state law for such compensatory damages. "It's well short of what we asked for," Exxon's lead attorney in the case, said. The company still has the option of appealing the entire verdict.

This month my
thanks go to
Terry Grainger
Don Johnston
for their
contributions

Corporate Members

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

AECOM
Tim Dean
(07) 3858 6700
M +61 421 407 633

AJM
Environmental
Adrian Minshull
02) 9542 2366

Store-Safe Pty
Ltd Grant Breeze
02) 9569 2122

Vanguard
Solutions
Tony Davies
08) 9420 5322

In March, the jury directed the oil giant to compensate 89 families for the value that was lost from their properties after more than 26,000 gallons of gasoline seeped into the groundwater from a leaking pipe in 2006. The equivalent of four tanker loads spread through the ground for more than five weeks before the leak was discovered. The jury also ordered Exxon to pay for cancer screenings for the residents, and acknowledged the upheaval caused by the spill by awarding millions of dollars for emotional distress. The plaintiffs' attorney, Stephen L. Snyder, was pleased with Baldwin's rulings on post-trial motions this week. "It is our hope," he said, "that Exxon, which certainly has the wherewithal to pay this verdict with little or no effect on its bottom line, will do so, and bring closure to these families."

<http://www.baltimoresun.com/news/maryland/baltimore-county/bal-exxon0915,0,5111006.story>

Oil Trader Agrees to Toxic Dump Payout

A British oil trading giant has agreed to a multimillion-pound payout to settle a huge damages claim from thousands of Africans who fell ill from tonnes of toxic waste dumped illegally in one of the worst pollution incidents in decades.

Trafigura said it was in talks to reach a "global settlement" to the claim by 30,000 people from Ivory Coast, who brought Britain's largest-ever lawsuit after contaminated sludge from a tanker ship was fly-tipped under cover of darkness in August 2006.

The incident caused at least 100,000 residents from the west African country's most populous city, Abidjan, to flood into hospitals and clinics complaining of breathing difficulties and sickness. Investigations by the Ivorian authorities suggested that the deaths of at least 10 people were linked to the waste. Trafigura has always insisted the foul-smelling slurry, dumped without its knowledge by a sub-contractor, could not have caused serious injury or illness. Under the deal, thousands of Ivorians who suffered short-term illnesses, including vomiting, diarrhoea and breathing difficulties, receive a payout understood to be set at several hundred pounds.

The settlement is likely to be confirmed by the end of this month. Trafigura, a privately-owned multinational which has 1900 staff working in 42 offices around the world, last year claimed a turnover of US\$73 billion (\$102 billion).

INDEPENDENT NZ Herald

2009 HazMat Europe CBRNE & Responder's Conference

The full program for the HazMat 2009 conference is now available on the conference website at www.hazmatconference.com

The conference will be taking place 13-14 October 2009 at the Hilton London Stansted, United Kingdom. This is the 5th annual event and has an exciting Range of conference topics and workshops over the course of the two days. There is also a pre-conference workshop on FTIR and Raman Spectroscopy.

CSB RELEASES FINAL REPORT ON T2 LABORATORIES EXPLOSION

Watch the Video:

http://www.firstcoastnews.com/video/default.aspx?maven_playerId=immersiveplayer&maven_referralPlaylistId=eba00a87d996b4b3a0f46791cbef43367513e061&maven_referralObject=1254507720

The massive December 2007 explosion and fire at T2 Laboratories in Jacksonville, Florida, was caused by a runaway chemical reaction that likely resulted from an inadequate reactor cooling system, investigators from the U.S. Chemical Safety Board (CSB) said in a final draft report released on September 15. The board is to vote on the report findings and recommendations at a public meeting in Jacksonville on Tuesday evening, September 15. Concluding that T2 did not recognize all of the potential hazards of the process for making a gasoline additive, the report calls for improving the education of chemical engineering students on reactive chemical hazards. The explosion and fire on December 19, 2007, killed four T2 employees and injured four others. In addition, 28 people working at nearby businesses were injured when building walls and windows blew in. The blast sent debris up to a mile away and damaged buildings within a quarter-mile of the facility. This is one of the largest reactive chemical accidents the CSB has investigated, □ said chairman John Bresland. We hope our findings once again call attention to the need for companies to be aware of how to control reactive chemical hazards.

In 2002 the CSB completed a study of reactive chemical hazards, which identified 167 accidents over a two-decade period and made recommendations to

improve reactive chemical safety. The draft report on the T2 Laboratories explosion calls on the American Institute of Chemical Engineers (AIChE) and the Accreditation Board for Engineering and Technology (ABET) to work together to include reactive chemical education in baccalaureate chemical engineering curricula across the country. The CSB found that although the two owners of the company had undergraduate degrees in chemistry and chemical engineering, they were nonetheless likely unaware of the potential or the consequences of a runaway chemical reaction. The CSB noted that most baccalaureate chemical engineering curricula in the U.S. do not specifically address reactive hazard recognition or management.

Chairman Bresland said, It's important that chemical engineers recognize and are aware of the proper management of reactive hazards. Investigation supervisor Robert Hall, PE, said, "Our recommendations aim to address the gap in the chemical engineering curriculum. If future chemical engineers are given the proper educational tools, they will be able to more fully comprehend the hazards that exist during a chemical manufacturing process"

The draft report and safety recommendations will be considered for approval by the board at a public meeting on September 15 in Jacksonville. All findings, causes, and recommendations remain preliminary pending approval by the board. The CSB also on September 15 released a 3-D computer animation depicting the events that led to the accident. Following approval of the report, the CSB plans to release a new nine-minute safety video,

—Runaway: Explosion at T2 Laboratories, containing the 3-D computer animation and a description of the causes, consequences, lessons, and recommendations resulting from the accident.

The accident occurred during T2's production of MCMT, a gasoline additive, which the company manufactured in batches using a 2500-gallon reactor. On the day of the accident, T2 was producing its 175th batch of the chemical when operators reported a cooling problem. Hall said, "despite a number of near-misses during earlier production efforts, T2 failed to recognize the underlying runaway reaction hazard associated with its manufacturing process". Chemical testing by the CSB found that the recipe used by T2 created two exothermic, or heat-producing, reactions; the first was an intended part of producing MCMT but the second, undesired reaction occurred if the temperature went above 390 degrees Fahrenheit, slightly higher than the normal production temperature. The cooling system likely malfunctioned due to a blockage in the water supply piping or a valve failure. The temperature and pressure inside the reactor began to rise uncontrollably in a runaway chemical reaction. At 1:33 pm, approximately ten minutes after the initial cooling problem was reported, the reactor burst and its contents exploded. The CSB is an independent federal agency charged with investigating industrial chemical accidents. The agency's board members are appointed by the president and confirmed by the Senate. CSB investigations look into all aspects of chemical accidents, including physical causes such as equipment failure as well as inadequacies in regulations, industry standards, and safety management systems. The board does not issue citations or fines but does make safety recommendations to companies, industry organizations, labor groups and regulatory agencies such as OSHA and EPA.

For more information, visit

www.csb.gov.

<http://www.reliableplant.com/article.aspx?articleid=20022&pagetitle=CSB+releases+final+report+on+T2+Laboratories+explosion>

CSB Releases New Safety Video,

"Runaway: Explosion at T2 Laboratories" Depicting Reactive Chemical Accident that Killed Four and Injured 32

Washington, DC, September 22, 2009 – The U.S. Chemical Safety Board (CSB) today released a new nine-minute computer animated safety video depicting a tragic reactive chemical accident that devastated T2 Laboratories in Jacksonville, Florida.

The video details the December 19, 2007, accident involving a thermal runaway chemical reaction at a small chemical manufacturer. The video includes a 3-D computer animation of the sequence of events leading to the runaway reaction and resulting explosion and fire.

The video is available for viewing and downloading on the [CSB's website](http://www.csb.gov) as well as the agency's [YouTube channel](https://www.youtube.com/channel/UC8vK1p1p1p1p1p1p1p1p1p1).



NICNAS Matters and NICNAS e-Newsletter

The latest Edition is now available:

[http://www.nicnas.gov.au/Publications/NICNAS Matters/Nicnas Matters SEP09 PDF.pdf](http://www.nicnas.gov.au/Publications/NICNAS_Matters/Nicnas_Matters_SEP09_PDF.pdf)

EPA Investigates 10 Leaking Mines

Following on from the announcement that Ranger Uranium Mine was leaking 100,000 L of water per day, MINING DAILY can confirm that the Environmental Protection Agency (EPA) is currently investigating a further 10 mines that have had potentially toxic water flow off-site. Some of north-west Queensland's biggest mines are amongst those being investigated by the EPA after on-site water overflowed.

Of greatest concern is the Lady Annie mine, north-west of Mount Isa, where two waterways - contaminated with heavy metals - do not even meet the Australian Water Quality Guidelines for stock watering. The EPA has said the mine will be required to manage the welfare of affected cattle.

Others being investigated include Xstrata's Mount Isa Mines, Mount Oxide - north-west of Mount Isa - and Oz Minerals' Century Mine in the Gulf of Carpentaria.

Australian Mining - Jessica Darnbrough

New Guide Puts the Safety into Design

WorkCover NSW today released a new guide to help industry incorporate occupational health and safety principles in the design phase of buildings and structures used as workplaces. Acting WorkCover NSW CEO Rob Thomson said the guide provides practical advice on incorporating safety fundamentals, such as risk management, consultation and reporting, into the design process.

"The design of a building or structure has a significant impact on safety across its lifecycle, and removing risks at their source is a cost-effective way to reduce workplace injuries," Mr Thomson said.

"The guide aims to reduce the incidence of workplace injuries by considering occupational health and safety hazards and risks as early as possible during the design stage," he said. The guide targets people involved in the design process for buildings and structures, including architects, engineers, trades people and those associated with technical design.

"Key parties involved in the design process have an important role to play in identifying and controlling any occupational health and safety risks that may exist during the life of a structure," Mr Thomson said.

The guide outlines a design approach that considers the health and safety of those who construct, maintain, clean, repair and demolish a building or structure, as well as those who work in it, and considers workplace safety risks such as:

- Ergonomics and manual handling
- Fire and explosions
- Slips, trips and falls
- Emergency procedures
- Violence and robberies

The 44-page guide includes a recommended safe design process and a risk solution register tool. The WorkCover NSW guide was developed in consultation with the Safe Design Advisory Group working party, which included representation from the Association of Consulting Engineers of Australia, Safety Science Associates and the Royal Australian Institute of Architects.

“The guide is another example of how WorkCover NSW is working in partnership with industry to reduce workplace injuries and develop safety solutions,” Mr Thomson said. “With workplace injuries and fatalities in New South Wales at their lowest levels in more than two decades, WorkCover NSW will continue to work closely with employers and workers to maintain safety standards,” he said.

The Safe Design Guide is available from the WorkCover [website](#) or by calling 13 10 50.

Styrene Road Tanker Explosion

Go to

http://www.youtube.com/results?search_query=chemical+tanker+blast&search_type=&aq=f

Under “chemical tanker blast” select “chemical tanker explosion (1:42)”

There are also some other interesting videos.

Standards Australia

Remember that as a Member you are able to receive a discount from SAI Global. Go to the Members’ Only Pages for further information.

Draft – revision of AS 4360 Risk Management

DR 09063 CP, released 7 Sep, comment closes 5 Oct

- Risk is now to be defined in terms of the effect of uncertainty on objectives.
- The principles that organizations must follow to achieve effective risk management are to be made explicit.
- Greater emphasis and guidance on how risk management should be implemented and integrated into organizations through creation and continuous improvement of a framework.
- 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 unchanged

Download draft for comment from <http://www.saiglobal.com>

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.

Visit Your Website

<http://www.aidgc.com> and check out the Members’ Only pages.