

# WHAT'S HAPPENING?

October 2014



Welcome to  
our new  
Members

Steve Robins

N.S.W.

William  
Danaher

Queensland



## **BREAKING NEWS! Bluescope Steel in Wollongong – fire in smokestack....**

### **National Online Safety Seminars October**

The Australian WHS Strategy Virtual Seminar Series is a free online event running throughout this October. The Virtual Seminar Series showcases some of the latest WHS thinking, developments, innovations and research.

You can catch live interactive panels and video presentations by WHS regulators, experts, business leaders and academics. The themes for the Virtual Seminar Series are:

- leadership and culture
- responsive and effective regulation
- agriculture and road freight transport industries
- small business.

For information on this free online event (including the program and speakers): register at Safe Work Australia's website at

<http://www.swa.gov.au> OR

download the Safe Work Australia Safety Month smart phone app from the Apple App store or through Google Play by searching for 'Safe Work Australia Safety Month'.

## **Gas Explosion at Newcastle Bowling Club**

A man is believed to have had part of his hand blown off in a gas explosion at a bowling club in Newcastle. More than 40 people had to be evacuated after the explosion in the cellar.

Late last night the bowling club was still a crime scene and WorkCover NSW had taken over the investigation.

Source: The Daily Telegraph



## More Red Tape when Delivering Fuel

All fuel, oil and gas deliveries and transport operations will be subjected to more red tape and paperwork if a Draft Order in front of the Road Safety Remuneration Tribunal is accepted.

A Draft Order has recently been submitted, to the Road Safety Remuneration Tribunal, to apply to the transport and distribution of any oil, fuel, gas petroleum products. Copies of this application can be downloaded through the [Tribunal website](#) or by clicking [here](#).

This Draft Order is submitted in the context of an industry characterised by employee drivers and an already heavily regulated by the National Heavy Vehicle Regulator and the Dangerous Goods Code which place incredibly strict parameters around the safety requirements and documentation in place in order to transport petroleum based products. This is in addition to operators' current obligations to adhere to various federal and state legislative instruments governing workplace health and safety, OH&S, chain of responsibility, as well as heavy vehicle and road transport regulations.

This news report is from ACAPMA – they can be contacted on 1300 160 270 or via email at [assist@acapma.com.au](mailto:assist@acapma.com.au)

## Central China Chemical Plant Fire

Five people were confirmed dead and one was seriously injured in a fire that broke out at a barium nitrate plant in central China's Hunan. The fire happened at Xinhuang Luxiang Barium Industry Co., Ltd, in Fangjiatun township of Huaihua City. Preliminary investigations showed the fire was ignited when factory workers were repairing a machine, which seriously injured six workers. Five died after medical treatment failed. Doctors are still treating the remaining one who was also severely injured. Source: China Daily



## Welding Fire at Fertilizer Plant

A welding accident evidently sparked a fire inside a chemical mixing machine at the Florikan fertilizer plant in Sarasota. Maintenance supervisor Mike Cruz said he and two other workers on duty escaped without harm. Billows of smoke emitted from the building and limited visibility in the interior. Firefighters got on the roof to open mechanical hatches to let more smoke out.

Sarasota County Interim Fire Chief Michael Regnier said hazardous materials units worked the scene as a precaution.

A chemical fire at the same plant in April 2009 also caused an evacuation and road closures in the industry. Source: Herald-Tribune



Sarasota County fire-fighters at the scene of the chemical fire. Photo: Dale White



Three employees of TAMS were injured and taken to hospital after an explosion at a northside waste disposal facility in 2009...  
Photo: Karleen Minney

Static electricity, lack of fire-retardant clothing to blame in fatal gas field blast

[READ MORE](#)

## Explosion Victims Win Large Settlement from Revlon and A.C.T. Government

Three men who took cosmetics giant Revlon to court over injuries received in an explosion at a Canberra factory in 2009 have won A\$6.6 million from the company and the Australian Capital Territory (ACT) government. The explosion occurred after a box of deodorant cans was placed in a shredding machine at the SteriHealth medical waste disposal facility in Mitchell, north of Canberra.

The three victims, electrical contractors installing cabling at the site, suffered major external and internal burns when they inhaled the combusting material from the explosion. The men and their mothers launched a legal action in the ACT Supreme Court over the incident on the grounds of physical and psychiatric damage which caused a loss of income and economic capacity, and the need for past and future care. They have now instead accepted the settlement, which includes six-figure payouts for the mothers as carers.

Lawyers alleged Revlon did not tell SteriHealth that cosmetic waste in the bins collected on the day of the incident included pressurized aerosol cans and that SteriHealth failed to take practical steps to ensure that the cans were not shredded. A company owned by the ACT government was also involved, and will therefore be paying a share of the final amount.

Read more: <http://www.canberratimes.com.au/act-news/injuries-caused-by-explosion-cost-revlon-and-act-government-about-8-million-20141002-10p7zh.html#ixzz3Fp0VER00>

## Flash Fire, Death - Cleaning Storage Tank

One of four workers hurt in a storage tank fire at an [EOG Resources Inc natural gas](#) production facility in Wyoming has died.

The man who died was one of two contract workers who, with two EOG employees, were cleaning the tank when the fire ignited said Houston-based EOG Resources spokeswoman K Leonard. "The tank stores [natural gas](#), and was undergoing cleaning when the explosion occurred," the Lincoln County Homeland Security & Emergency Management said in a statement.

Leonard said the site south of La Barge, Wyoming, contains one well and two small liquids storage tanks. She said the fire was extinguished and the well was shut in. It was a "flash fire," Leonard said. "We would not describe it as an explosion."

EOG Resources is among the top independent [crude oil](#) and natural gas producers in the United States.

Source: Reuters

## Corporate Members

Our Corporate Members provide a range of products and services to the Dangerous Goods industry.

Contact them:

**AECOM**

Kevin Blackie

61 7 3553 3449

Kevin.Blackie@aecom.com

**RGM ENLOG**

Grant Curran

+61 2 9669 4811

**Store-Safe**

Grant Breeze

02) 9569 2122

**VOPAK Terminals**

Sydney Pty. Ltd.

Nathan Barnes

02 9666 4455

## USCSB: Hot Work on Tanks Containing Biological or Organic Material

Earlier this month a team of CSB investigators were deployed to the Omega Protein facility in Moss Point, Mississippi, where a tank explosion on July 28, 2014, killed a contract worker and severely injured another. Our team, working alongside federal OSHA inspectors, found that the incident occurred during hot work on or near a tank containing eight inches of a slurry of water and fish matter known as “stickwater.”

The explosion blew the lid off the 30-foot-high tank, fatally injuring a contract worker who was on top of the tank. A second contract worker on the tank was severely injured. CSB investigators commissioned laboratory testing of the stickwater and found telltale signs of microbial activity in the samples, such as the presence of volatile fatty acids in the liquid samples and offgassing of flammable methane and hydrogen sulphide.

The stickwater inside of the storage tank had been thought to be nonhazardous. No combustible gas testing was done on the contents of the tank before the hot work commenced.

This tragedy underscores the extreme importance of careful hot work planning, hazard evaluation, and procedures for all storage tanks, whether or not flammable material is expected to be present. Hot work dangers are not limited to the oil, gas, and chemical sectors where flammability hazards are commonplace.

The CSB has now examined three serious hot work incidents—all with fatalities—involving hot work on tanks of biological or organic matter.

It is vital that companies, contract firms, and maintenance personnel recognize that in the confines of a storage tank, seemingly non-hazardous organic substances can release flammable gases at levels that cause the vapor space to exceed the lower flammability limit. Under those conditions, a simple spark or even conducted heat from hot work can prove disastrous.

Read More:

<http://www.csb.gov/e-i-dupont-de-nemours-co-fatal-hotwork-explosion/>

<http://www.csb.gov/packaging-corporation-storage-tank-explosion/>

<http://www.csb.gov/seven-key-lessons-to-prevent-worker-deaths-during-hot-work-in-and-around-tanks/>

<http://www.csb.gov/motiva-enterprises-sulfuric-acid-tank-explosion/>

<http://www.csb.gov/partridge-raleigh-oilfield-explosion-and-fire/>



## Terror Threat Prompts Orica Review

**THE** increased terror threat level has forced Orica Yarwun to review its security and safety procedures. The ammonium nitrate plant creates explosives used in the mining industry and has stringent security policies.

On September 15 the Department of Explosives Inspectorate issued a security alert to all operations using security-sensitive explosives. An Orica spokesperson said stringent measures had been reviewed following the recent announcement by the Australian Government, in which the national terrorism threat was increased from medium to high.

A Department of Natural Resources and Mines spokesperson said the alert included mine sites, manufacturers of explosives including ammonium nitrate, and other licensed operators that store, transport or use explosive materials. "Security risk assessments and security plans are required of all these licensed operators and these plans are regularly reviewed," the spokesperson said. "Security mitigations must be in place at all times."

Last month [ammonium nitrate trucked from the Orica Yarwun plant to South Australia caused an explosion near Charleville](#), which injured eight people and destroyed a section of highway and a rail bridge.

Source: The Observer



[Chlorine Leak Contained at Water Plant](#)

[Chlorine Leak Wastewater Treatment Plant](#)

## Industrial Wastewater: An Industry Guide to Responsible Monitoring & Control

Metals-related industries and manufacturing and industrial plants are the biggest users of water in Australia and are the largest contributors to hazardous wastewater.

In order to reduce the impact of our industries, stringent environmental protection laws must be followed and water management processes refined.

*This free guide examines the limitations of monitoring equipment used in hazardous industries, why this is of critical concern for industry and how you can overcome common wastewater challenges.*

[Download White Paper](#)

**N.B.** It is a requirement to give your name and contact details to the provider.

**W.A. WorkSafe  
GHS Workshop  
October 23 @  
Bentley W.A.**

This workshop will examine the GHS, the Safe Work Australia supporting documents, and how the GHS is being implemented nationally and within Western Australia. Requirements for chemical classification, labelling and Safety Data Sheets will be explained.

The workshop is suited to chemical importers, chemical manufacturers, and organisations where chemical management is a significant issue.

[\*\*REGISTER\*\*](#)



## **Flammable Liquid & a Flame, Reconsider. Flame tests? [Skip the flammable liquid](#)**

Chemical Safety & Hazard Investigation Board investigators spoke about what they've learned so far regarding an incident at a Denver high school that sent four students to hospital: The teacher lit a small pool of methanol to demonstrate its flame properties. When the flame didn't rise as high as desired, he added more methanol from a 4 L container. The fire flashed back into the container, then emerged as a "jet fire" that traveled 15 ft to hit a student in the chest. That student was wearing a synthetic shirt and was seriously injured, others sitting nearby were also hurt.

"Instructors and teachers are just not aware of the flashback hazard of methanol," CSB managing director Daniel Horowitz said.

"Methanol has a flash point that's pretty similar to gasoline. I think that if people knew that gallon containers of gasoline were being brought into classrooms right near flames, they would be horrified."

["After the Rainbow" is a US CSB video safety message focusing on preventing accidents in high school chemistry laboratories](#)

## **Toxic Waste Hazard from Fire at Plant**

Workers inside noticed smoke coming from a machine, pulled the fire alarm and attempted to contain it with an extinguisher. The fire continued to grow, and 12 workers evacuated.

By the time fire crews arrived, flames had fully engulfed the building.

More than 100 fire fighters fought the blaze.

The building houses two companies, Asko and Acu-Line. Asko provides metal finishing for the aerospace industry, and Acu-Line does metal etching. Both companies produce toxic waste. Both companies are considered a "large-quantity generator of hazardous waste," state Department of Ecology spokesman Larry Altose said. That means the company falls under the category of manufacturers that produce 2,200 pounds of hazardous waste a month.

Asko works with acids, base, heavy metals, cyanide, halogenated organics and flammable solvents on the site.

Acu-Line operates in the basement of the building, working with ferric chloride. Asko contracted a chemical-containment team, which is pumping the water runoff from the effort to put out the fire. "Fortunately, it's not raining, so it's possible to capture that water," Altose said.

Source: KOMOnews.com



## **W.A. - “Six Pillars” Campaign for Transport Safety**

Every day thousands of trucks take to Western Australian roads to transport important products to all corners of the State.

Some of these products are designated as dangerous goods and include chemicals, fuels, explosives and other products that can present a risk to road users if incorrectly transported or involved in an accident.

As the regulator of dangerous goods in Western Australia, the Department of Mines and Petroleum (DMP) regularly informs industry regarding its responsibilities and the inherent safety issues involved. It was with this in mind that the “Six Pillars of Dangerous Goods Transport” program was developed.

DMP Dangerous Goods and Petroleum Safety Director Ross Stidolph said the program included a series of industry information. “This campaign is aimed at providing important information around the “six pillars” of transporting dangerous goods – packaging, restraint, segregation, vehicle, placarding and documentation,” Mr. Stidolph said. “In the sessions, Dangerous Goods Officers will provide important information regarding these six pillars. “They will also look at the roles and responsibilities of the safety regulator and transporter.”

Mr. Stidolph said that anyone involved in transporting dangerous goods, particularly small transport and haulage companies would benefit from the information sessions.

Sessions will be held in Kwinana, Welshpool and Malaga during October.

### **Dates and venues**

- **Kwinana: Tuesday, 7 October 2014**  
**Ken Jackman Community Centre**  
**Darius Wells Library and Resource Centre**  
**Cnr Robbos Way and Chisham Avenue, Kwinana**
- **Welshpool: Wednesday, 15 October 2014**  
**Belmont Tavern**  
**174 Wright Street, Cloverdale**
- **Malaga: Thursday, 23 October 2014**  
**Wanneroo Library and Cultural Centre**  
**3 Rocca Way, Wanneroo**

More information, including how to register, is available [here](#).

**[N.S.W. EPA Highway Inspection Catches Guyra Fuel Tanker without Correct Safety Equipment, Shipping Documents and Dangerous Goods Licence](#)**

# Canada Wood Pellet Plant Explosion

An explosion at the Pinnacle Renewable Energy wood pellet plant near Burns Lake, British Columbia, resulted in three people receiving serious but non-life-threatening injuries, according to a RCMP spokesman. The plant was evacuated after the explosion and about 30 employees were taken to a safe area.

Firefighters from Burns Lake rushed to the plant but by the time they arrived the flames had been extinguished by its built-in suppression system. Leroy Reitsma, president of the Pinnacle plant, said the fire broke out inside equipment used to dry wood fibre and it caused an explosion. Reitsma said the explosion happened during a routine maintenance shutdown and the company is working with WorkSafeBC to investigate what happened. The plant's location is near Burns Lake, where a dust explosion at the Babine Forest Products sawmill in 2012 killed two and injured 19 others.

[According to a list of recent penalties on the WorkSafeBC website](#), the same firm was fined \$48,838.01 earlier this year after hazardous levels of dust were found in the main pellet plant building. The document states that the dust accumulations "were close to or in direct contact with potential ignition hazards." The firm's failure to control and remove hazardous accumulations of combustible dust that could cause a fire or explosion was a repeated and high-risk violation." Source: CBC News British Columbia



The Pinnacle wood pellet plant, near Burns Lake, B.C. (CBC)

# Toxic Release Inventory for Communities U.S. Environmental Protection Agency

The Toxics Release Inventory (TRI) is a starting point for American communities to learn about toxic chemicals that industrial facilities are using and releasing into the environment, and whether those facilities are doing anything to prevent pollution.

Click below to read more about the scheme....

It's your  
Right to Know  
about the  
**Toxic Chemicals**  
in your community

**On Site Releases of TRI Chemicals in North Birmingham, 2001-2012**

Facility Name	Releases (Pounds)
Champion Cellulose Corp.	1,400,000 lbs
Champion Cellulose Corp. - Mill	75,000 lbs
Champion Cellulose Corp. - Mill	4,000 lbs
Champion Cellulose Corp. - Mill	2,000 lbs
Champion Cellulose Corp. - Mill	1,000 lbs
Champion Cellulose Corp. - Mill	500 lbs
Champion Cellulose Corp. - Mill	200 lbs
Champion Cellulose Corp. - Mill	100 lbs
Champion Cellulose Corp. - Mill	50 lbs
Champion Cellulose Corp. - Mill	25 lbs
Champion Cellulose Corp. - Mill	10 lbs
Champion Cellulose Corp. - Mill	5 lbs
Champion Cellulose Corp. - Mill	2 lbs
Champion Cellulose Corp. - Mill	1 lb

**TRI Reporting Facilities in North Birmingham in 2012**

Facility Name	Releases (Pounds)
Champion Cellulose Corp.	1,400,000 lbs
Champion Cellulose Corp. - Mill	75,000 lbs
Champion Cellulose Corp. - Mill	4,000 lbs
Champion Cellulose Corp. - Mill	2,000 lbs
Champion Cellulose Corp. - Mill	1,000 lbs
Champion Cellulose Corp. - Mill	500 lbs
Champion Cellulose Corp. - Mill	200 lbs
Champion Cellulose Corp. - Mill	100 lbs
Champion Cellulose Corp. - Mill	50 lbs
Champion Cellulose Corp. - Mill	25 lbs
Champion Cellulose Corp. - Mill	10 lbs
Champion Cellulose Corp. - Mill	5 lbs
Champion Cellulose Corp. - Mill	2 lbs
Champion Cellulose Corp. - Mill	1 lb

# **RACI - 2014 HSE Group Chemical Liabilities Symposium**

The following presentations were made at this Event in September:

[Session 1 - Safety Case Guideline, 3rd Edition - How to engineer safety due diligence under the provisions of the model WHS Act, - implications for the Chemical Industry - Geoff Hurst, Risk Engineering Society, Vic Chapter and Principal @ ENGNEOHS.](#)

[Sessions 2 & 3 - Warning! Intellectual Property Hazards Ahead - Dr Milena Dryza, Freehills Patent Attorneys & Melanie Armsby, Herbert Smith Freehills.](#)

[Session 4 - Chemical Liabilities - Fire Service Perspective - Craig Tonks, Metropolitan Fire Brigade.](#)

[Session 5 - Liability Issues associated with Hazardous Chemical Classification, Safety Data Sheets \(SDS\) & Labels - Will Ray - P-E Handley-Walker Pty Ltd.](#)

[Session 6 - Make Mine Last - Managing Potential Liabilities from Mining - Jean Meaklim - Greencap NAA.](#)

## **Plant Worker in Fatal Chemical Accident**

One of four employees hurt in a chemical accident at the Axiall Corp. Natrium Plant in West Virginia has died. Thomas Zahnow was one of the two workers sent to the West Penn Burn Center after suffering chemical burns on his neck, arms, legs and torso. He had been hospitalized since the incident.

Axiall expects the other three employees to make full recoveries. Four Axiall workers were performing a maintenance operation when they were exposed to a caustic soda solution.

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**PPG Chlor-Alkali owns and operates plants in Lake Charles, LA; Natrium, WV; La Porte, TX; Longview, WA; Beauharnois, QB; and Taipei Taiwan. These technically advanced plants allow PPG to be one of the largest chlorine and liquid caustic soda producers worldwide.**



**RACI is holding their National Congress in Adelaide from 7 – 12 December, 2014.**

[For further details](#)



Photo from company website



**Huge Kingsbury  
Oil Terminal leak  
could have  
exploded, court  
told**

[Read News Report](#)

## **Major Petrol Escape at Fuel Site**

**A Staffordshire company which distributes fuel across a national network of pipelines has been fined after 35,000 litres of unleaded petrol erupted from pipework due to a joint failure.**

**The fuel, which escaped under high pressure and rained down on the site, owned by British Pipeline Agency Ltd near Tamworth, could have resulted in a major fire and possible explosion.**

**The leak at the Kingsbury fuel terminal operated by BPA led to a significant clean-up operation, including the specialist decontamination of land.**

**The court was told BPA co-ordinates the movement of fuel through underground high pressure pipelines to its customers. All types of petroleum based fuel are delivered through one of several pipelines which originate from oil refineries and fuel storage terminals around the country.**

**At midnight on 20 October 2010 the company started to pump petrol from the pipeline into a large storage tank on a neighbouring fuel storage site. About an hour and a half later alarms sounded and operatives who went to investigate found a fountain of fuel erupting from an overground section of pipe.**

**A secondary line feeding into the main pipework had broken loose and enough fuel to fill a road tanker was escaping under pressure, spraying into the air and running across the site.**

**HSE found that the pipework involved had been reconfigured and replaced as part of a major engineering project finished a week before. However, before being put to use the joints and fittings were not properly commissioned and tested.**

**British Pipeline Agency Ltd, of Alexandra Road, Hemel Hempstead, Hertfordshire, was fined £30,000 with costs of £58,606 after pleading guilty to breaching Section 2(1) of the Health and Safety at Work etc Act 1974.**

**After the hearing HSE inspector Alex Nayar said:**

**“This was a very serious incident with the potential to be extremely dangerous. It was also one that could have been avoided very simply.**

**“When plant is changed or modified it has to be tested and commissioned before being put into operation. That did not happen. If done properly it could have identified the fault.**

**“The leak posed two major hazards, a fire or a vapour cloud explosion. It is extremely fortunate that neither happened in this case as the outcome could have been much worse.”**

**Source: HSE**



HazMat worker decontaminates after the incident. Picture: Toby Zerna



Fire crews and Hazmat workers were sent to the chemical spill in Mosman. Picture: Toby Zerna



## Chemical Spill at Mosman NSW

**Four people have been taken to hospital after a chemical spill in a garbage truck at Mosman.**

**Garbage men were collecting rubbish as part of a council clean up when they picked up some bottles containing chemicals on Sirius Cove Road, which is close to Taronga Zoo and leads down to a beach and reserve.**

**When the chemicals were placed in the truck they were mixed together with the other rubbish and caused a spill.**

**Eight fire and rescue crews, including a Hazmat unit, and five ambulance vehicles rushed to the street and a 200-metre exclusion zone was set up.**

**Ambulance treated two people for mild eye irritation. The other two patients didn't present with any injuries but were taken to Royal North Shore Hospital (RNSH) for further assessment.**

**The garbage truck driver was one of two people decontaminated at the scene. The man, who is in his 60s, has been taken to RNSH alongside the other three people and is in a stable condition.**

**Emergency services believe containers broke inside the truck and the chemicals mixed together giving off a noxious smell.**

Source: Andrea McCullagh, Mosman Daily

## U.K. Explosives Regulations 2014

The new [Explosives Regulations 2014 \(ER 2014\)](#) came into force on 1 October 2014. HSE has worked with stakeholders since 2010 to review existing health and safety related explosives legislation. One of the key aims of that review was to consolidate, modernise, and, where practicable, simplify the legislative arrangements.

ER 2014 consolidates and therefore revokes a number of existing explosives regulations. It brings together the requirements of health and safety related explosives legislation into a framework based around common topics such as authorisation, safety, security and placing on the market. As a result of the consolidation the Approved Code of Practice to the Manufacture and Storage of Explosives Regulations 2005 (L139) has been withdrawn. Guidance relating to the security of explosives (HSE Circular 1/2005), and guidance on the placing of civil use explosives on the market (L66) have also been withdrawn.

To read the main changes to their regulatory framework goto:

<http://www.hse.gov.uk/explosives/new-regulations.htm>

## **Read the following articles in the October 2014 issue of Joiff Catalyst**



### **Emergency Responders – You are at risk of Cancer**

One of the biggest threats to Emergency Responders whose duties including firefighting is cancer. Studies have shown that fire fighters are more likely to develop cancer compared with the general population and cancer continues to take a devastating toll on fire fighters and their families. Fire fighters are put at very high risk for developing cancer due to exposures including inhalation, ingestion, and absorption of the by products of combustion. The carcinogenic and toxic substances released during fires, even fires involving ordinary household items, can make their way into the bloodstream and are transported and stored in fat cells and organs, where cell damage occurs that may lead to cancer.

### **Dutch Guideline for Storage of Flammable Liquids**

In 1985 the first Dutch Guideline for storage of liquid petroleum product was published. From the start this Guideline and later versions referred to international standards like API, IP publications from the Energy Institute, NFPA and others

### **Canadian train derails catches fire**

A freight train carrying dangerous goods has derailed in central Saskatchewan in Canada, with 26 of its 100 carriages falling off the tracks, many of them catching fire. Miraculously, its driver and conductor, the only people on the train, survived the accident. The Saskatchewan government said the derailment happened near the small community of Clair. About 50 people from the town were evacuated and a highway has been closed in the area.

Provincial officials said hazardous materials crews were en route. CN spokesman Jim Feeny said the train was made up of three locomotives pulling 100 cars, and 26 of them derailed. He added the fire is coming from petroleum distillate, which spilt from two of the derailed cars.

Petroleum distillates are often made into diesel, kerosene, heating oil and jet fuel.

He said 60 of the cars were empty and forty were carrying goods, including six cars carrying dangerous goods. Besides the two carrying petroleum distillate two were carrying hydrochloric acid and two were carrying caustic soda.

Source: [www.http:news.com.au](http://www.http:news.com.au)



Incredible aerial shots show the magnitude of a Canadian National Railway Company freight train crash. Picture: Liam Richards Source: AP

CN Rail says the tanker cars that derailed and caught fire this week near a small community in Saskatchewan are the same type as those involved in the Lac Megantic disaster last year.

## **N.S.W. EPA Directs Koppers to Complete Upgrades to Mayfield Site**

**The NSW Environment Protection Authority (EPA) has directed the chemical storage facility Koppers to complete a number of upgrades to its Mayfield site to improve environmental performance. The upgrades have been negotiated between the company and the EPA as part of a legally binding Pollution Reduction Program (PRP) which aims to reduce the impact of the site's activities on the surrounding environment and community, as well as improve air quality in the local area.**

**The details of this PRP and all other PRPs are publically available on the EPA website via the public register:**

**<http://www.epa.nsw.gov.au/prpoeoapp/>**

## **Woman Is Overcome By Fumes In Wine Cellar, Drowns In Giant Vat Of Wine**

**A wine specialist who was overcome by fumes at an industrial cellar died after losing her balance and falling into a vat of wine. Nerea Perez was watching the fermenting process at a cellar in the Spanish village of Salas de los Barrios when she was overcome by the fumes. The 25-year-old lost her balance and then fell into the giant vat.**

**According to Gimebra Peralta Colunga, a worker at the cellar, nothing like this has happened at the cellar before. However, winemakers have noted that accidents like Perez's are more common than everyone believes because of the strong fumes.**

**Sources: DailyMail, Mirror**



## **Explosion hits PKN Orlen's Olefins Plant**

**Polski Koncern Naftowy SA (PKN Orlen) confirmed a small explosion occurred early Oct. 1 at its 16.3 million-tonne/year refinery and petrochemical complex in Plock, Poland.**

**The incident, which occurred at an unidentified, remote installation of the olefins plant, injured six workers engaged in external renovation work at the site, PKN Orlen said.**

**PKN Orlen recently let a contract to CB&I, Houston, for the license and engineering design of a metathesis plant for the on-purpose production of propylene at the Plock complex.**

**Source: [OGJ Online, Aug. 21, 2014](#)**



**[For a more technical understanding of the plant's process](#)**



## **Smouldering Fire at Valero Ethanol Plant**

Homes were evacuated for a short time due to a fire at the Valero Renewables Plant in Bloomingburg, northeast of Washington Court House.

The fire in a silo broke out Monday afternoon and continued into the night. It was still smouldering on Tuesday.

The Washington Court House Fire Department evacuated a 1,500-foot area around the plant as a precaution, including several homes.

A special group that specializes in assessing these types of fires was flown in from Texas by the company.

Firefighters say they are still not sure what caused the Fayette County fire or how much damage it caused. They must wait until they know it is safe to go inside and check out the situation.

Source: WBNS10.TV

### **[WATCH VIDEO](#)**

## **Explosion at Stillwater Energy Plant**

Stillwater fire officials say four people were injured in an explosion at an energy company in Stillwater.

Training Chief Robert Black says the explosion occurred in a shop building at Horizon Energy Services. Black says one of the injured was flown to a hospital in Tulsa and another was flown to an Oklahoma City hospital, while the other two were taken to a hospital in Stillwater.

Black says the cause of the blast was not yet known, but that two of the injured employees were working on a tanker truck at the time of the explosion and that there was significant damage to the building.

Source: The Ada News



## **Firefighters Respond to Ammonia Leak**

Monett firefighters responded Wednesday to an anhydrous ammonia leak at EFCO Corporation in Missouri.

EFCO employees smelled an ammonia leak and called for help.

According to Captain Dewayne Irwin, nitrider equipment used to harden dyes on the extrusion line developed an anhydrous ammonia leak.

Firefighters responded with nine men, two engines and the hazmat truck and trailer. Firefighters Bill Mahl and Jeff Owens, in full hazmat gear, went in and turned off both the nitrider and the anhydrous ammonia source.

EFCO Safety Officer Brad Anderson said 13 pounds of anhydrous ammonia was expelled in the leak.

Source: Murray Bishoff times-news@monett-times.com



## **Gas Leak Brings Chaos to Norway Town**

**An ammonia leak at a dairy in South-West Norway led to nine people hospitalised and the town centre evacuated. The incident happened at the Tine dairy in Ålesund. Nine people were exposed to the potentially deadly gas and brought to a local hospital.**

**The leakage was discovered by dairy staff and emergency services quickly cleared several streets in the centre of Ålesund. The main road in to the city centre was also closed off. A sanitation tent was put up by the fire department to clean anybody exposed to the ammonia.**

**Several people were exposed to the gas leak that came from a compressor room after maintenance work. Two people were directly exposed to the gas in its liquid form, while seven others were exposed to the gas from the leakage.**

**Police chief Jon Kåre Flo said to NTB: “Those exposed to the gas were cleaned on site and are now being taken care of by health personnel.”**

**Tine dairy in Ålesund contains the dessert factory of Tine and is a special facility for ultra-pasteurised products such as creams, ice coffee and puddings. The facility processes 18.6 million litres milk per year, states the company’s website. Ammonia is normally used for cooling and freezing dairy products. Source: The Local**

## **Chlorine Gas Leak at HPC Mill**

**At least 30 people, including women and children, were hospitalised after chlorine gas leaked from Hindustan Paper Corporation (HPC) paper mill at Jagiroad in central Assam’s Morigaon district.**

**One of the chlorine pipes of the paper mill blasted yesterday polluting the air and water in and round Jagiroad causing 20 women and 10 children to be admitted in the HPC hospital, an official said.**

**Source: Press Trust of India**

## **‘Flash fire’ at EOG facility**

**A “flash fire” at an EOG Resources Inc. natural gas production facility south of La Barge in Wyoming killed one contract worker while injuring two employees and another contractor.**

**In a release from Lincoln County Homeland Security & Emergency Management, the accident was described as an explosion at a natural gas storage tank that the four workers were cleaning at the time.**

**An EOG spokesperson has since gone on record to say the incident would be better classified as a “flash fire.”**

**Source: Wyoming Business Report**

**WorkSafe W.A.**

[Organophosphates  
: Health Surveillance  
Guide for employers](#)



## **Levee Workers Sprayed with Pesticide**

**Officials are investigating a pesticide-spraying incident that sent 10 construction personnel working on the Feather River levees – in California - to seek treatment.**

**An apprentice pilot flying a helicopter applied pesticides Govern 4E and NU-Lure to a walnut orchard. The pilot made multiple passes over the levee where 12 construction personnel were working. Ten employees were taken to Yuba City Urgent Care and Rideout Emergency Hospital. All employees had to remove their clothing at the clinic, decontaminate with water and had blood drawn for testing.**

**There were several cases of chemical pneumonia, which is an inflammation of the lungs due to inhaling chemical fumes.**

**Source: Andrew Creasey [acreasey@appealdemocrat.com](mailto:acreasey@appealdemocrat.com)**

## **Dust Causes Pet Food Factory Explosion**

**According to a fire department official, four workers have suffered burns in an explosion at an Arizona pet food factory. Fire caught by grain dust became the reason of explosion.**

**Bill Morse from Flagstaff Fire Department said the incident took place at the Nestle Purina plant in Flagstaff when the workers were welding in a grain elevator. Suddenly grain dust caught fire, which further resulted in explosion.**

**A report stated that there were about a dozen other workers in the building at that time. Other parts of the factory are unaffected by the explosion.**

**Website of U. S. Occupational Safety and Health Administration say that the grain handling industry is possibly high-hazard industry because of the risk of explosions and fires from accumulation of grain dust that burns easily.**

**Nestle Purina's website shows that there are about 250 workers at the Flagstaff plant, which produce 1,000 tons of pet food a day.**

**Source: mainenewsonline.com**

## **Anhydrous Ammonia Tank with Parted Hose – Large NH3 Release from Nurse Tank**

**WARNING!!! Harsh language and using the Lord's name in vain. But a great visual aid of a large NH3 release.**



## **Viewpoints: California is Leading the Way on Oil Refinery Safety** By Rafael Moure-Eraso/USCSB

California is poised for a major breakthrough in making its oil refineries much safer for workers and the public. If these changes are adopted – which will require the ongoing commitment of the governor and state regulators – California will lead the nation in preventing tragic accidents that kill workers and endanger nearby residents.

As head of the U.S. Chemical Safety Board, the independent federal agency that investigates major chemical and refining accidents, I applaud the proposed regulations released Sept. 9 by the state Department of Industrial Relations. I was in California recently to attend a conference on the regulations, which promise to be a new way of conducting refinery operations and a national model. The proposed rules would completely revamp and modernize the code for what is called “process safety management” in refineries. They require employers to prevent and eliminate to the greatest extent feasible health and safety risks to employees. As our board has repeatedly noted, most of the current rules tend to encourage paperwork, but don’t actually reduce risk.

Read more here: <http://www.sacbee.com/2014/10/09/6770755/viewpoints-california-is-leading.html#storylink=cpy>

## **UK New Petroleum (Consolidation) Regulations 2014**

The UK’s new Petroleum (Consolidation) Regulations 2014 came into force on October 1. They apply to workplaces and private homes that store gasoline. The new Regulations consolidate a number of different provisions and set up a system of Petroleum Enforcement Authorities, to replace the Petroleum Licensing Authorities. The new Regulations also dovetail with the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR). HSE has more information on PCR and guidance for those in scope. [The Petroleum \(Consolidation\) Regulations 2014](#)

These Regulations consolidate and modernise the petrol storage legislative framework in England, Scotland and Wales.

[View on www.legislation.gov.uk](http://www.legislation.gov.uk)

## **CSB Recommends Safety Improvements to U.S. Department of Transportation Emergency Response Guidebook Widely Used by Firefighters**



The U.S. Chemical Safety Board (CSB) is recommending critical safety improvements to the widely-used Emergency Response Guidebook published by the U.S. Department of Transportation (DOT) for emergency responders to use when confronting chemical fires, explosions and releases of hazardous materials.

The CSB noted that while the manual is provided for responders to use in transportation incidents, CSB investigators have found over the years that the guidebook is often used by emergency responders – firefighters, medical technicians and police officers -- dealing with chemical accidents at fixed facilities. However, the CSB found some of the directions given in the manual are vague. The CSB document specifically cited guidebook changes needed for handling ammonium nitrate fires such as the one that led to a [massive explosion at a fertilizer storage facility in West, Texas](#) last year.



The CSB recommendations are contained [in a seven-page response to a formal Request for Information \(RFI\)](#) the transportation department issued as it seeks comment on a proposed revision issued on August 29, 2014, an edition scheduled for public release in 2016. The current guidebook was released in 2012. The guidebook – jointly produced with Canada and Mexico and in use in those countries as well – is used across the country by emergency responders who can quickly look up correct responses to a myriad of chemical accidents. The department’s website states that “DOT’s goal is to place an ERG in every emergency service vehicle nationwide.”

Read More: <http://www.csb.gov/csb-recommends-safety-improvements-to-us-department-of-transportation-emergency-response-guidebook-widely-used-by-firefighters/>

## **Remembering an Accident: Ajka Alumina Sludge Spill**

On October 4, 2010, toxic sludge leaked from a metal refinery in Hungary. Over 100 people were injured, many suffering burns, and at least ten deaths were attributed to the disaster. The company was fined \$647 million for environmental damage (Read article and view dramatic photos on [The Guardian](#))

Watch Video: [Ajka Alumina Sludge Spill](#)

## Hazardous Cargo Bulletin | HCB

The HCB app allows you to download the HCB magazine every month free of charge. Just download the app from iTunes or Google Play - as simple as that.

View on [www.hazardouscargo.com](http://www.hazardouscargo.com)

## Draytons Wines Fined for Ethanol Blast

Drayton's Family Wines has been fined more than \$200,000 over the explosion that claimed the lives of winemaker Trevor Drayton and welder Eddie Orgo. Workcover NSW prosecuted Drayton's, and Mr Orgo's employer, Perfab Engineering, in the District Court's criminal jurisdiction for two breaches each of the Occupational Health and Safety Act. The explosion blew the roof off the Pokolbin winery and was felt at various locations around the Hunter Valley on the morning of January 17, 2008. Mr. Orgo, 59, had been helping install an upgraded cooling system in the winery when he began welding on a stainless steel tank without knowing that it contained 9000 litres of ethanol known as SVR. Vapours in the tank ignited causing a series of explosions that instantly killed Mr. Orgo and Mr. Drayton, 52, while assistant winemaker William Rikard-Bell suffered serious burns. *Source: Newcastle Herald*



Photos: smh.com

## Children and Household Chemicals

They claim to remove tough stains and dispense with the mess of washing powder, but who would have thought children would find liquitabs good enough to eat?

Doctors in Britain have already warned that the squishy liquid pouches are a significant health issue, causing serious damage to the throats and airways of children duped by their attractive and sweet-like packaging.

In Britain, the fallout from swallowing the capsules included five cases in children aged between 10 months and two years who suffered serious damage to their throats.

Some needed mechanical help to breathe and one needed surgery after the corrosive chemicals caused extensive damage to the airway and throat.

There were also reports of surgeons carrying out transplants of the oesophagus, or food pipe in the throat, after extensive damage caused by swallowing liquitabs.

Last year, the poisons centre received about 9,500 queries in relation to accidental poisoning, the majority of which related to pharmaceuticals, followed by household products, particularly fabric care products and multi-surface cleaners. *Source: Irish Examiner*





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Explosions.  
Clean up  
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**Process**  
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## **W.A. Parkland Water Treatment**

Thanks to innovative engineering, the landmark lakes of Hyde Park in Highgate have a new lease of life, with fewer contaminants in the water and invasive shrubs and trees replaced with native plants. The \$3 million Hyde Park lakes restoration project won two categories at the recent 2014 WA Engineering Excellence Awards: the Environment award and the Small Company Projects award. The project was carried out by Advantesting Civil Engineers working to a design developed for them by GHD ecological consultants. The centrepiece of the project involved constructing an innovative biofiltration system which treats stormwater flowing into the lakes using a system of native plants, permeable rocks and soil filters to reduce the levels of pollutants, sediments, nutrients and heavy metal contamination. “The Hyde Park treatment train may be one of the largest bio-retention systems in Perth, but is the only one retro-fitted to an existing, well-established park,” says Cunningham. “The project has resulted in much higher quality stormwater being discharged into the lakes. As the lakes overflow into the Swan River at Claisebrook via Water Corporation main drains, the water in the river will also be improved.”

The water treatment train takes in stormwater from a 130 ha catchment of neighbouring streets and contains a gross pollutant trap to remove solid impurities.

The stormwater then progresses to the bio-remediation system excavated into a gently sloping hillside, flowing down three levels where nitrogen, phosphorus and heavy metals are removed by the treatment system.

The Engineering Excellence award judges noted that the lakes restoration project has resulted in a highly efficient water quality improvement system which has contributed to a healthier ecological system, better water quality, improved flood mitigation, and improved amenity of the park.

Source: Tony Malkovic, Engineers Australia

## **Acid in Pool at Turkish Hotel**

Seventeen people, including four tourists, grew sick after being poisoned by acid accidentally pumped into a swimming pool at a five-star hotel in the popular resort town of Beldibi in Antalya. Workers in charge of pool maintenance accidentally put acid in the pool instead of the chlorine used to keep the pool clean. The acid being pumped into the pool caused a poisonous gas to be released, the private Doğan news agency reported.

It did not specify what kind of acid had been used.

## **Thermal Performance-Based Analysis of Minimum Safe Distances between Fuel Storage Tanks Exposed to Fire**

This paper presents a numerical investigation aimed at assessing the safety of fuel storage tank farms subjected to elevated temperatures caused by fire conditions. In particular, the work addresses the ways of given pool-fire scenarios, occurring from the fuel ignition of pre-defined source tanks, are able to propagate to adjacent target tanks, i.e., examining the possibility of a domino effect.

### **Highlights**

- Safety assessment of cylindrical steel and concrete storage tanks exposed to external fire.
- Coupling semi-empirical modified solid flame and thermal FEM models.
- Methodology provides reliable analyses ensuring ultimate failure of storage tanks exposed to fire on the temperature domain.

[More info or to purchase paper online](#)

## **AS1940: Storage and Handling of Flammable and Combustible Liquids**

The Standards Development Committee approved AS1940: The Storage and Handling of Flammable and Combustible Liquids Project Proposal PP 896 to commence after August 2014 by Committee: ME-017.

### **Proponent:**

Workplace Health and Safety Queensland, Queensland Department of Justice and Attorney-General.

### **Scope:**

To update AS1940 in line with the Globally Harmonised System for the Classification and Labelling of Hazardous Chemicals (GHS), incorporate the Buncefield Fire Report Recommendations and revise or clarify various sections of the Standard as part of a 10 yearly review.

National Sector Manager: Jennifer Harwood, Email:

[Jennifer.Harwood@standards.org.au](mailto:Jennifer.Harwood@standards.org.au) From: June 2014 Approved Project Proposals - 8th Round.

[See: Approved Project Proposals at Standards Australia](#)

My thanks this month goes to Don Johnston.

If you have any interesting articles or pars. Please let me know – they are appreciated!

[robhogan@tpg.com.au](mailto:robhogan@tpg.com.au)

## **Significant and Controversial Changes to IEC Explosive Atmospheres Installation and Inspection Standards – read article**

### **Hazardex October Issue**

## **Huge Blaze at Sicilian Oil Refinery**

**A huge overnight fire at an oil refinery on the Italian island of Sicily sent hundreds of panicked residents fleeing the area, fearing the fire could spread to residential buildings. The fire was reportedly seen miles away.**

**The Milazzo oil refinery is near the northeast coast of Sicily. The flames were seen several kilometres around the facility. The fire started in a 5,000-litre tank at the refinery, which is jointly owned by Italy's energy giant Eni and Kuwait Petroleum. Though firefighters managed to bring the fire under control, the tank was still burning the next day. They said it would burn until the oil tank is empty.**

**Despite assurances from the emergency services that the fire won't spread to residential areas, hundreds of Milazzo residents fled the town in their cars, causing traffic jams.**

**No injuries were reported in the incident. Local media reported that when the refinery caught fire, there was maintenance work going on at the facility. Source: AFP**

**[WATCH VIDEO](#)**

**[WATCH VIDEO 2](#)**

## **West Virginia Tank Tally: New Law**

**State environmental officials had tallied more than 45,500 aboveground storage tanks as the deadline to register them approaches. Despite the deadline, the [Department of Environmental Protection](#) expects to register thousands more. It's the first major cut-off date in a new law aimed at pinpointing tanks, regulating them and protecting public water supplies.**

**A small portion of tanks - about 5.7 percent - are close enough to water sources to be considered a threat to water supplies, officials said. The state had estimated 50,000 to 80,000 tanks could match the registration requirements: hold at least 1,320 gallons, be at least 90 percent above ground and sit in a fixed spot for at least 60 days.**

**Read more: <http://www.washingtontimes.com/news/2014/oct/1/wva-hosting-meetings-this-week-on-tank-law/#ixzz3Fy9kVZeN>**



**Flames arise after a fire broke out at the Mediterranean Refinery of Milazzo, one of most important in southern Italy, in Milazzo, near Messina on Sicily Island (AFP Photo/Giovanni Isolino)**





## **SPAWAR Workers Relocated due to Fumes**

More than 150 employees of the Navy's SPAWAR facility in San Diego's Old Town have been moved to temporary offices elsewhere to avoid toxic vapours that are a vestige of the building's history as a missile and aircraft production plant.

[SPAWAR contamination memo and fact sheet Download .PDF](#)

The average vapour levels in the facility are considered safe by EPA standards, but one of the air samples detected toxic gas at a concentration slightly higher than the federal Environmental Protection Agency's recommended limits for exposure throughout the workday.

The soil and groundwater beneath the Naval site is contaminated with toxic by-products from World War II era missile and aircraft production. Those by-products include trichloroethylene, a volatile metal-cleaning agent that was detected at levels the EPA recently deemed an unacceptable risk to pregnant women in their first trimester.

The Navy has been removing toxic waste from the site for three years, and has significantly reduced TCE levels beneath the building. It plans to complete a full cleanup by 2018.

Source: U-T San Diego

## **Auditors Fault U.S. EPA for Lax Chemical Safeguards**

The Environmental Protection Agency (EPA) doesn't do enough to stop hundreds of hazardous chemicals from getting into waterways via sewage plants, a watchdog [report](#) found.

The EPA's Office of Inspector General (OIG) said the agency uses the Clean Water Act to regulate only 126 toxic chemicals that could flow to sewage plants, leaving about 300 chemicals that are considered hazardous under the Resource Conservation and Recovery Act.

"These regulations are not effective in controlling the discharge of hundreds of hazardous chemicals to surface waters such as lakes and streams," the OIG concluded.

The Clean Water Act gives the EPA the authority to regulate any pollutant, but it hasn't updated its list of chemicals to regulate in sewage plants since 1981. Source: The Hill [READ MORE](#)

**What's Happening for November 2014**  
**Will be sent to you during the last week in November**  
**– Regards, Robyn**