



WHAT'S HAPPENING?

February 2015



USCSB – Anhydrous Ammonia Incident Five Key Lessons to Prevent Hydraulic Shock

The U.S. Chemical Safety Board has released a safety bulletin intended to inform industries that utilize anhydrous ammonia in bulk refrigeration operations on how to avoid a hazard referred to as hydraulic shock. The safety lessons were derived from an investigation into a 2010 anhydrous ammonia release that occurred at Millard Refrigerated Services Inc., located in Theodore, Alabama.



The accident occurred as two international ships were being loaded and the facility's refrigeration system experienced "hydraulic shock" which is defined as a sudden, localized pressure surge in piping or equipment resulting from a rapid change in the velocity of a flowing liquid. The highest pressures often occur when vapor and liquid ammonia are present in a single line and are disturbed by a sudden change in volume.



This abnormal transient condition results in a sharp pressure rise with the potential to cause catastrophic failure of piping, valves, and other components – often prior to a hydraulic shock incident there is an audible "hammering" in refrigeration piping. The incident at Millard caused a roof-mounted 12-inch suction pipe to catastrophically fail, resulting in the release of more than 32,000 pounds of anhydrous ammonia.

One Millard employee sustaining injuries when he fell while attempting to escape from a crane was after it became engulfed in the traveling ammonia cloud. The large cloud traveled toward an area where 800 contractors were working outdoors at a clean-up site for the Deepwater Horizon oil spill. A total of 152 offsite workers and ship crew members reported symptomatic illnesses from ammonia exposure. Thirty two of the offsite workers required hospitalization, four of them in an intensive care unit.

["Key Lessons for Preventing Hydraulic Shock in Industrial Refrigeration Systems"](#)

N.B.!!

**AIDGC 2015
CONFERENCE**

**September 4
"Safety in
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Train Safety Focus after U.S. Derailment

Fires burned for hours after a train carrying 109 tankers of crude oil derailed in a snowstorm alongside a West Virginia creek, sending fireballs into the sky and threatening the nearby water supply. Hundreds of families were evacuated and two water treatment plants were shut down after dozens of the cars left the tracks and 19 caught fire, creating shuddering explosions and intense heat. Part of the formation hit and set fire to a house, and one person was treated for smoke inhalation, but no other injuries were reported, according to a statement from the train company, CSX.

Fire crews had little choice but to let the tanks — each carrying up to 30,000 gallons of crude — burn themselves out.

The train was carrying volatile Bakken crude from North Dakota's shale fields to an oil shipping depot in Yorktown, Virginia, using model 1232 tank cars, which include safety upgrades voluntarily adopted by the industry four years ago, the Federal Railroad Administration confirmed.

However, a series of ruptures and fires in recent derailments involving model 1232s has the National Transportation Safety Board questioning their safety as well, and the Department of Transportation has drafted new standards being reviewed by the White House budget office. Appalachian Power crews were cleared to repair a line and restore electricity to about 900 customers. The West Virginia National Guard was taking water samples to determine whether oil seeped into Armstrong Creek, a tributary of the Kanawha River. CSX contractors also were monitoring the air for pollution linked to the fires, and federal railroad and hazardous materials officials were probing the accident.

West Virginia American Water shut down a water treatment plant about 3 miles downstream, another water plant downstream in the town of Cedar Grove also closed its intake.

The U.S. Transportation Department has advocated tougher safety regulations for rail shipments of crude after a series of fiery train crashes, including one in Lynchburg, Virginia. If approved, they would phase out tens of thousands of the older tank cars increasingly carrying highly flammable liquids along waterways and through towns. Source: FuelFix

The failure of regulators, operators and manufacturers to agree higher safety standards for railcars carrying dangerous materials poses long-term risks to safety, the acting head of the US's main transport safety investigator has warned. Christopher Hart, acting chairman of the National Transportation Safety Board, [has written on the Board's Website....](#)



Derailed oil tanker train cars burn near Mount Carbon, W.Va., Monday, Feb. 16, 2015. A CSX train carrying more than 100 tankers of crude oil derailed in a snowstorm, sending a fireball into the sky and threatening the water supply of nearby residents, authorities and residents. (AP Photo/The Daily Mail, Marcus Constantino)



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**AIDGC and its Members have a large presence at this
Conference - if you would like to assist contact
President, Len Gawecki - 0403.266.840**

...also a SafeWork Seminar in Sydney

Work Health and Safety Update

**On March 22 at the UNSW CBD Campus, leaders in WHS law will
update you on the critical issues in your WHS practice, including
contractor management, mental health, serious incident responses
and safety as an IR issue. For more information**

**Major engineering societies are collaborating on an
Engineering and Technology History Wiki, where
engineers from all disciplines are invited to document
their fields, and where the general public can learn
the ways technology has shaped modern life.
Engineers from all sectors and experience levels are
asked to take part in developing the wiki by posting
their perspectives, proposing milestones, or taking
part in discussions.**

[Engineering and Technology History Wiki](#)



Information, understanding, safety: Creating a safer chemical management industry by ensuring necessary information is accurate, appropriate and accessible

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Environmental Progress & Sustainable Energy - free online for a short period

The first 2015 issue of AIChE's Environmental Progress & Sustainable Energy, which is increasing its publication frequency from four to six times a year, is now online and the entire issue is open to all readers. Normally available only to members of AIChE's Environmental Division and institutional subscribers, for a limited time anyone can sample the more than 40 articles, book reviews, and updates. Subjects range from biodegradation of tylosin residue in pharmaceutical waste, to the use of swine manure char as an adsorbent, to green synthesis of gold nanoparticles, to the economics of using LEDs to cultivate green microalgae. [Read more.](#)

U.S. EPA Seeks Budget Increase for Chemical Safety Programs

The Environmental Protection Agency has asked Congress to increase its budget for chemical safety and pollution programs by \$47.4 million in 2016, to \$667.9 million. Allocating \$56.3 million to the Toxic Substances Control Act's chemical risk review and reduction program would allow the EPA to "sustain its efforts to assess the potential risks from existing chemicals in commerce and review and manage those of new chemicals entering commerce".

Source: Chemical Watch

NSW EPA - Blast Fume Licence Change

The NSW Environment Protection Authority (EPA) is amending all Environment Protection Licences held by open cut coal mines in NSW to include a new condition prohibiting the emission of blast fumes that are likely to cause offence to members of the public. NSW EPA Chief Environmental Regulator Mark Gifford said "Blast fumes occur when small variations in blast conditions, blasting products and geological factors combine to cause incomplete combustion and produce gases including nitrogen oxides which often have a distinctive orange colour."

The EPA will progressively add the condition to all open cut coal mine licences by July 2015. All environment protection licences and the conditions these include are available on the public register on the EPA website; www.epa.nsw.gov.au

[Laboratory Safety Videos](#)



Coroner: Threat from Toxic Plane Fumes

Frequent fliers and aircrew are risking their health by breathing in toxic fumes inside aircraft cabins, according to coroner probing the death of an Edinburgh pilot.

Mr. Payne, who is looking into the death of Richard Westgate, a 43-year-old British Airways pilot from Edinburgh, called on BA and the Civil Aviation Authority (CAA) to take "urgent action to prevent future deaths".

Mr. Westgate suffered years of ill health including severe headaches, mental confusion, sight problems and insomnia before he died in December 2012, blaming exposure to toxic fumes on the flight deck.

The coroner's report is the first official UK recognition of so-called "aerotoxic syndrome", a phenomenon long denied by airlines but which is blamed by some for the deaths of at least two pilots and numerous other incidents where pilots have passed out in flight.

Co-pilots can normally take over, but campaigners claim the syndrome is a suspected cause of some mid-air disasters.

Commercial passenger planes have a system which compresses air from the engines and uses it to pressurize the cabin. However, this can malfunction and lead to excess oil particles entering the air supply. In a confined space, with the air recirculated, the cumulative effect on frequent fliers, especially aircrew, can be harmful, the coroner said. In his "prevention of future deaths report", Mr. Payne said examinations of Mr. Westgate's body "disclosed symptoms consistent with exposure to organophosphate compounds in aircraft cabin air".

The coroner demands that BA and the CAA respond to the report within eight weeks, setting out the action they propose to take.

Source: Herald Scotland, Helen McArdle

Chemical Spill - Mine Reopens

Ravensthorpe nickel mine in Western Australia is set to reopen after a chemical spill closed the site in December. On December 15th 2014, First Quantum Minerals advised a structural failure to the atmospheric leach tank at the Ravensthorpe site.

The tank contained acid-leaching nickel in slurry and the company said the spill had been contained within the plant's protective

bunded area. Source: Australian Mining



When Chemicals Became Weapons of War

100 Years of Chemical Weapons



Light the Blue Touch Paper

Revision has been completed to the Model Regulations with a lengthy list of topics, headed not for the first time by matters relating to the transport of explosives and lithium batteries. Changes, due to be adopted in December 2014, will appear in the 19th revised edition of the UN Recommendations on the transport of dangerous goods – the ‘Model Regulations’ or ‘Orange Book’. Those amendments will then feed through into the various international modal, regional and national regulations to enter into force in 2017. [More Information from HCB live](#)

EPA Fines Bluescope Steel over Pollution

NSW Environment Protection Authority (EPA) has issued a penalty notice of \$1,500 to BlueScope Steel over a spill containing cyanide that entered a drain at the Port Kembla Steel Works. In addition, the EPA ordered the company to undertake two Pollution Reduction Programs because of the incident which breached the conditions of its Environment Protection Licence (EPL). EPA’s Manager of Illawarra region, Mr. Peter Bloem said in a statement that the incident took place on July 1, 2014. Coke ovens gas condensate, containing cyanide at levels that breached BlueScope’s EPL limit, discharged into a drain and killed fish. “BlueScope reported the incident immediately and investigations showed that the discharge was caused by a blockage in a condensate collection system, resulting in 3,000-5,000 litres of condensate entering into the drain,” said Mr. Bloem.

Source: Matt McDonald, Manufacturers’ Monthly

RACI W.A. Seminar – March 2015

Basic Principles in Occupational Hygiene

An introductory course based on the internationally approved OHTA W201 Foundation Level basic Principles in Occupational Hygiene course (www.ohlearning.com) outlining the broad principles of Occupational Hygiene as the basis for anticipation, recognition, evaluation and control of hazards that can be encountered in the workplace. [MORE INFORMATION](#)

[The NICNAS Bulletin - February 2015](#)

[Chemical Gazette – February 2015](#)



Phosphine Detected in Apartment

An eight-month-old baby has died and four other children are in the hospital in what could be a case of accidental poisoning.

Emergency officials say phosphine, a poisonous substance usually used as an insecticide, was detected in the Canadian apartment from which five children were taken to hospital.

Source: globalnews.ca

5 Things for a Safe, Secure Industrial Facility

Health and safety at an industrial facility is often regarded as an afterthought, an add-on that's important, but not something to think about on a daily basis. After all, how often do accidents happen in the workplace?

The reality is, however, that accidents and mishaps occur more often than is assumed and unfortunately, many of them can be prevented had the proper measures been taken. To ensure you have the proper safeguards in place, keep the following 5 tips in mind.

Health and Safety Policy

Running an industrial facility without a proper health and safety policy is a dangerous game to play. It's essential that you not only plan your procedure meticulously, but that you set it all out in small print as well. It may seem a little tedious and long-winded, but it's important for the long-term safety of your facility.

Correct Equipment and Well-Planned Facility

From a dependable industrial safety gate to personal equipment to clear signs throughout your facility, it's important that you ensure the equipment used is fit for purpose and that your facility is planned and designed with your processes in mind. When it comes to safety and security, don't skimp on the equipment used and make sure you invest in adequate sign all around.

Before you make your purchases, ensure the equipment adheres to government regulations. If you need a full installation to go alongside what you've bought, it's best to buy from a single supplier – this ensures you get correct fitting 100% of the time. If you have any doubts, give your chosen supplier a ring and don't be afraid to ask questions.

Assign Duties

As a manager or owner of an industrial facility, it is your role to delegate tasks to other members of staff. As such, you should also ensure you spread responsibilities accordingly. Assess your colleagues according to their skills, knowledge, experience, and willingness to get involved in health and safety.

It may also be a good idea to bring in external help every once in a while – hiring a contractor with a solid track record won't just ensure you're ticking all the boxes, but will also help your staff widen their knowledge base.

Staff Training

If you want a secure and safe work environment, then you need to ensure every member of staff is trained accordingly. They must have the adequate information to work in your facility without endangering their health and those of others. Should a hazardous situation come into play, a plan of action is *essential*.

Training isn't just limited to the initial course and that's that. You should also allow for refresher courses, additional help to individuals who need it, as well as a standardised methodology that everyone is aware of. We advise hiring reputable companies that are certified – adhering to government regulations needs to be at the top of *any* course's priority list.

Insurance

No matter how many precautions you take, how good your equipment is, how well-planned your facility is, or how well trained your staff; the reality is that *accidents happen*. With that in mind, you must have the right insurance in place to cover any potential costs, such as medical fees, litigation, or any other form of compensation. Be sure you're fully covered for all eventualities, as accidents in the workplace can otherwise get you in a tricky situation.

The key to a safe and secure industrial facility is essentially in the *planning*. Cover every base, tick *all* the boxes, and leave no stone unturned – you get the idea. Be meticulous in your paperwork and don't leave anything to chance and you can rest assured you've taken every necessary precaution. Source: safetowork

White Paper - How Compliant is Your Emergency Shower and Eyewash?

Up to 50,000 eye injuries occur in Australia every year, with a large percentage of these occurring in the industrial and mining sectors. Australian Standards dictate employer responsibilities for providing emergency showers and eye washers to assist in avoiding serious injury to employees, but still many companies are unaware of minimum requirements for compliance. Source: safetowork

[This free white paper examines the WHS requirements, the consequences of non-compliance, and measures that can be taken to ensure a safer working environment.](#)

BP Loses latest bid on Gulf Oil Spill Payout

On February 19 a US judge rejected BP Plc's attempt to reduce the maximum civil fine it could face for its role in the 2010 Gulf of Mexico oil spill, leaving it potentially liable to pay \$13.7 billion under the federal Clean Water Act. US District Judge Carl Barbier in New Orleans agreed with the federal government that the maximum civil penalty that BP could face is \$4,300 per barrel spilled, whereas BP had sought a \$3,000 per barrel maximum.

Source: HazardEx





[The Australian Standards® Catalogue 2015](#) contains a complete list of Standards, Handbooks and other publications in numerical order.

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- click on the synopsis to go straight to the Product Details page on our InfoStore where you can learn even more about the Standard.

Don't be Blasé about Toxic Fumes and Confined Spaces – New Zealand

Waterproofing company Gunac Hawke's Bay Limited has been fined \$33,750 and ordered to pay reparation of \$2,500 after one of its employees was overcome by toxic fumes.

The worker was applying a bitumen-based product called Novaglass rapid primer to the inside of a grain silo at an egg farm near Hastings at the time of the incident in April 2014. He was wearing a respirator, but did not have a solvent filter available and so used a dust filter. That meant he was exposed to the toxic solvent fumes.

[REAL ALL](#)

Port Kembla Copper: Selenium Discharge

The NSW Environment Protection Authority (EPA) has issued a penalty notice of \$15,000 to Port Kembla Copper (PKC) after the company reported seven instances in November and December 2014 where selenium concentrations discharged from its wastewater treatment plant exceeded its licence limits. **[READ MORE](#)**

SCHC/OSHA has posted four new fact sheets on its

[OSHA Alliance web page](#)

The four new sheets cover

[Corrosive to Metal](#)

[Gases Under Pressure](#)

[Flammable Solid](#)

[Flammable Gases](#)



An oil workers union says another two bodies were found inside an oil ship that exploded off Brazil's coast, increasing the death toll to five. Rescue teams are searching for four workers who remain missing. The Oil Workers Union of the state of Espirito Santo said Thursday on its Facebook page that the bodies were found inside the engine room of the vessel. It is one of many floating oil production, storage and offloading units that Petrobras employs in developing Brazil's massive offshore oil fields.

The ship was leased by Petrobras from Norway-based BW Offshore.

Source: ChemInfo

Brazil Offshore Explosion Kills Five

An explosion on an offshore oil and gas production and storage vessel (FPSO) operated by Brazil's Petrobras has killed at least five workers and injured ten. The state-run group said 74 workers were on board the FPSO at the time and four of them remain missing. Brazil's oil industry regulator ANP said that a fire caused by the blast has been contained and the situation has been stabilised. ANP also said that no oil leaked from the FPSO, which is located off the coast of Espirito Santo state.

According to the BBC, an official from the union representing workers on the vessel said that a gas leak caused the February 11 explosion.

The incident occurred on the FPSO Cidade de Sao Mateus - owned by Norwegian firm BW Offshore and leased by Petrobras - about 120 kilometres off the coast of the state of Espirito Santo. BW Offshore declined to comment on the incident.

The FPSO had a daily average production of 2.25 million cubic metres of natural gas and 2,200 barrels of oil in December, according to ANP, and has been operating at that site since 2009. Petrobras is currently embroiled in a corruption scandal involving kickbacks to politicians that led to the resignation of its board of directors last week.

Aldemir Bendine took over as chief executive from Graca Foster, who stepped down in the face of mounting market and political pressure.

Investigators have said Petrobras executives colluded with construction firms to steal \$5 billion from the company's financial reserves over the course of a decade, with some of the cash being paid out in bribes to politicians, including members of president Dilma Rousseff's coalition.

Petrobras has also been hit hard by sliding oil prices, which fell 60% between June and January. It has also been hit by a string of recent accidents at refineries and rigs.

Last month, an explosion at a refinery in the north-eastern state of Bahia with three people injured. In December 2013, a fire forced Petrobras to shut down production at an oil rig after two workers were injured. A week later, a refinery fire in Rio de Janeiro forced the company to temporarily close a production unit.

Source: Hazardex

Update: On February 13, Reuters said ANP had ordered Petrobras to study ways to boost output on the Cidade de Sao Mateus shortly before the explosion. This was a condition for approval of Petrobras' development plan for the Camarupim and Camarupim Norte natural gas fields.



N.Z. Health and Safety Reform Bill

Working Safer: a blueprint for health and safety at work reforms New Zealand's health and safety system following the recommendations of the Independent Taskforce on Workplace Health and Safety and the Royal Commission on the Pike River Coal Mine Tragedy.

When the new Health and Safety at Work Act comes into force, it will replace the Health and Safety in Employment Act 1992 and the Machinery Act 1950.

It's useful to read these updates alongside the relevant sections of the Bill and the proposals for supporting regulations developed by the Ministry of Business, Innovation & Employment (MBIE).

[Discussion Document](#)

[Health and Safety Reform Bill](#)

Source: <http://www.business.govt.nz/worksafe/about/reform>

Illegal Pollution from 5 Coal Ash Dumps

Federal prosecutors filed multiple criminal charges against Duke Energy on Friday over years of illegal pollution leaking from coal ash dumps at five North Carolina power plants.

The investigation into Duke began last February after a pipe collapsed under a coal ash dump at the Eden plant, coating 70 miles of the Dan River in gray sludge. However, prosecutors allege in court filings that Duke's illegal dumping had been going back for years, to at least 2010.

Duke said Friday in statements and court filings that it has already negotiated a plea agreement under which it will admit guilt and pay \$102 million in fines, restitution and community service. The company said the costs of the settlement will be borne by its shareholders, not passed on to its electricity customers.

Source: Michael Biesecker and Mitch Weiss, Fox Carolina

Chemical Spill at Sydney University

Emergency services were called to the Australian Catholic University on Edward Street, North Sydney, with reports of a hazardous material spill.

Fire and Rescue NSW Superintendant Ian Krimmer said the acid-based spill happened in a student lab on campus and teachers enacted emergency procedures.

He said 'a couple of hundred' students had been evacuated as a precaution with fire crews devising a way to best contain the spill. One crew from Neutral Bay is being assisted by two specialist HAZMAT units from Alexandria. Source: Daily Telegraph



Hazmat Crews at the spill site. Photo: Elenor Tedenborg

The dust residents described falling from the sky after an explosion at the Exxon Mobile refinery in Torrance on Wednesday is not hazardous but could be an irritant, according to the company.

In a statement shared with KPCC early Friday, Exxon Mobil described the material as a catalyst that is primarily composed of metal oxides and amorphous silica and said that it could cause irritation to the skin, eyes and throat.

It said the results of its testing of the material were consistent with those of an independent test requested by the Torrance Fire Department.

Source: 893.3 KPCC

Exxon Mobile Refinery Explosion

An explosion at the Exxon Mobil refinery caused structural damage and was felt for miles around Torrance, L.A., but there were no major injuries.

The blast happened in a processing unit at the refinery. The explosion was followed by a ground fire, which was quickly knocked down.

The explosion was so strong that it registered as a 1.7-magnitude earthquake on a nearby seismometer operated by Caltech and USGS.

When the explosion happened, the system went into an immediate burn off, shooting flames 200 to 300 feet into the air and putting out extremely black smoke.

A fire official said the product involved in the explosion was gasoline. The cause of the blast was not known.

Source: ABC7, Los Angeles

[WATCH VIDEOS](#)

[House EXPLODES Sky High Leaving Gas Workers Battling for Life](#)

Death from Exposure to Toxic Gases

A Dorset farm owner and his two businesses have been fined for serious safety failings after a 29 year-old worker died following exposure to toxic gases.

Dorchester Crown Court heard that Matthew Pitt and David Bartlett were working at Lowbrook Farm, owned by Clifford Owen Yeatman, in Bechalwell, Blandford Forum.

They were exposed to toxic gases during maintenance of an anaerobic digestion (AD) plant at the farm. The plant was developed by Biogas Nord UK, of which Mr. Yeatman was sole director.

On 24 June 2009, Mr. Pitt and Mr. Bartlett, both from Sturminster Newton, were tasked with opening the roof of the digester tank to free a stirring mechanism which had stopped moving due to a crust forming in the tank. As they did so, they were engulfed by toxic hydrogen sulphide gas.

[READ ALL](#)



Photo: Twitter/@InfoEmerg
@344Cat

Toxic Cloud in Catalan Spain

Catalonia's Civil Protection authorities ordered people in the town of Igualada and its surrounding areas to stay indoors after an explosion caused a fire in a local chemical factory.

The explosion and fire happened at Simar, a chemical distribution company and could have been caused by nitrous gases.

The explosion was reportedly caused by the loads of two trucks being mixed as they were unloaded, causing a fire. Three people were injured in the fire, a worker and two drivers, suffering minor burns but are now "out of danger" confirmed Ramon Espadaler, from the Catalan interior ministry. Source: The Local es

WATCH EXPLOSION ON VIDEO

Neglecting Chemical Safety in Essex

An Essex firm has been fined for neglecting chemical safety after a fire involving a brazier and a drum of thinners led to safety breaches being uncovered at its Rainham site.

CLB Refrigeration Ltd, which cleans and refurbishes industrial-size refrigeration containers, was prosecuted by the Health and Safety Executive (HSE) at Southwark Crown Court after its investigation.

The court heard that a 25-litre drum of paint thinners was involved in an incident in October 2012 where a fireball erupted in a brazier at the company's site in Ferry Lane.

HSE told the court that CLB Refrigeration Ltd failed in its duties to assess and control the use of paint thinners – the company was not aware how workers were using the dangerous substance and were also unaware that a brazier was being used to burn rubbish.

The investigation identified that thinners was being used to clean marks off the containers that were being refurbished and that when the skips were full the employees would sometimes burn material they had removed from the refrigeration containers in the brazier.

Source: <http://press.hse.gov.uk/2015/court-for-essex-firm/>

Service Rig Tank Flash Fire- Canada

A crew was conducting well kill operations on a sweet oil well. A worker was monitoring the return flow to the service rig through from on top of the rig tank. When the returns became gassier, the return flow was opened to the degasser section of the rig tank and the trough flow was pinched in slightly. The rig manager proceeded to the top of the rig tank stairs where his personal gas monitor immediately began to alarm on high LEL (lower explosive limit). The rig manager looked up to observe both the rig tank and the worker on the rig tank being engulfed in flames. [Safety Alert from Enform](#)

Mainfreight: Dangerous Goods Breach

Mainfreight Distribution Pty Ltd has been fined \$56,000 and ordered to pay \$32,500 in legal costs in the N.S.W. Land and Environment Court this week after pleading guilty last year to failing to ensure that dangerous goods were transported in a safe manner.

The breaches were identified during a joint Environment Protection Authority (EPA), Roads and Maritime Services and NSW Police heavy vehicle compliance operation near Lithgow NSW, in November 2011. EPA officers inspected a truck carrying approximately 3900kgs of mixed classes of dangerous goods travelling from Sydney to Bathurst and Orange and found a number of non-compliances. These included incompatible dangerous goods, unrestrained dangerous goods (including 18 200L drums of flammable liquids), a failure to placard the load and a failure to have the necessary personal protection equipment and prescribed fire extinguisher.

[READ ALL](#)

N.T. Rollout of Non-Sniffable Fuel

A key piece of infrastructure in the rollout of low-aromatic fuel designed to combat petrol sniffing in the Northern Territory has been launched in Darwin, with the repurposing of a bulk storage tank.

Federal Indigenous Affairs Minister Nigel Scullion said the eight-million-litre tank at East Arm meant a regular supply of low-aromatic fuel was now available to communities across the Top End ahead of the fuel being rolled out to several towns and communities in the near future.

For the first time, the NT has its own supply of the fuel, which is a central part of a national strategy to combat petrol sniffing. Petrol sniffing dropped by up to 94 per cent in areas where low-aromatic fuel was available.

Explosion in Cement Plant U.S.A.

Three people were injured following an explosion at a Northeast Side cement plant.

San Antonio Fire Department Spokeswoman Deborah Foster said the blast happened in a coal mill at Capitol Aggregates at 11551 Nacogdoches Road.

Fire crews were initially called to the scene but by the time they arrived the company's carbon dioxide suppressant system had already put out the fire. Three employees suffered burns to their face and preliminary details indicated at least one was transported to an area hospital. Source: mySA

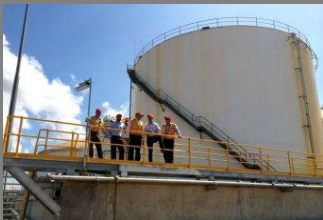


Photo and story source:
Ruby Jones, ABC News



Photo By John
Davenport/San Antonio
Express-News

Explosion at Indian Pharma Unit

Three persons were killed and one was injured in blast after fire at a pharmaceutical plant in Padra taluka.

The blast occurred at Shiv Pharmachem Ltd's plant in Luna village where acids and various other chemicals are manufactured, they said.

"Three bodies have been recovered from the mishap site and one injured person is admitted to nearby hospital for treatment. We have registered a case against the company. The postmortem of the bodies is being carried out today," Padra town police station inspector Mansukh Gurjar said.

Six persons were working at the plant when the blast occurred. Two of them managed to come out unhurt, he said.

At least five fire tenders of Vadodara Municipal Corporation, Gujarat Refinery and GSFC were pressed into service to control the blaze, VMC's chief fire brigade officer H J Tapariya said.

The cause of the fire and the subsequent explosion was yet to be ascertained; Gurjar said adding that a probe was on into the incident.

Source: Times of India

Lithium Fire at Alcoa in Louisiana

Lafayette fire-fighters reported to a fire inside Alcoa on Lafayette's southeast side Tuesday afternoon.

The fire, which was reported around 4:15 p.m., was believed to have ignited lithium, which cannot be extinguished with water.

The fire was caused by a leak into the lithium furnace, Alcoa spokeswoman Pam Whitten said. Three employees were taken to the hospital as a precaution over concerns of smoke inhalation, she confirmed. They were treated and later released from the hospital. Christa Bowers, Alcoa communications director, said, the fire was contained within the equipment, and the Alcoa emergency responders on site are trained to manage site-specific safety issues. Bowers said, "We can confirm there was a small fire in the aluminium-lithium cast house at our Lafayette Operations facility. "The fire has been put out," she said. "There were no injuries, however as a precautionary measure, three employees were transported to the hospital for possible smoke inhalation.

"The fire was put out with dry carbon dioxide and a graphite-based fire extinguisher," Bowers said.

"There was no impact on production," Bowers said.

Alcoa operates the world's largest aluminium-lithium plant here, [according to its website](#).

Source: Lafayette Journal and Courier



(Photo: John Terhune/Journal & Courier)

Blast at Oil plant in Hyderabad

A powerful blast at a Gulf Oil Corporation plant in Hyderabad on Monday evening left at least two workers dead and 10 injured, Hyderabad police said. Four others were still missing. The blast in a unit of the lubrication and industrial explosive manufacturing company resulted in a huge fire and fire tenders were trying to put it out.

Relief and rescue Police said 16 people were working in the unit at the time of the accident. They expressed fears that the toll might go up as the condition of six injured was critical.

No statement had been issued by the company's management on the cause of the blast and its impact. Security personnel were not allowing anybody to enter the premises.

The same plant has seen seven accidents in the past. The company is owned by Hinduja Group and produces lubricants and industrial explosives.

Police said that the explosion took place in detonator manufacturing unit of IDL Chemicals, a part of Gulf Oil Corporation.

Gulf Oil Corporation was formed by merging Gulf India Ltd, with IDL Industries in January 2002. Source: gulfnews.com

Chemical Fire in Alabama

Montgomery Fire Department battled a chemical fire for over an hour at a manufacturing company in Gunter Industrial Park.

About 11 MFD units responded, including Hazmat and heavy rescue units.

There they found heavy smoke coming from the back corner of the Thermalex Inc. plant.

The chemical fire is said to involve zinc and magnesium used by the company which specializes in aluminum alloy for air conditioning and heating units.

Barry Andrews, vice president of marketing and public relations at Thermalex, said the smoke coming from the building made the situation look worse than it was. "We were doing a zinc application like we usually do in production when a spark ignited the zinc.

Apparently, when zinc smolders, it causes smoke which is difficult to extinguish. Using water would only magnify the situation.

Safety officers with Thermalex advised firefighters to use foam and dry powder extinguishers instead.

The zinc is used in the tubes for air conditioning units and heating exchangers as protection against corrosion.

Source: Montgomery Advertiser



(Photo: Rebecca Burylo/Advertiser)

The United Nations (UN) Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCETDG) is responsible for the [UN Recommendations on the Transport of Dangerous Goods—Model Regulations](#).

The UN Recommendations are internationally accepted as the principal technical standards underpinning the air and sea dangerous goods codes, and are also used by many countries as the basis for their road and rail dangerous goods transport codes.

Australia is a voting member of the UN Committee.

[READ MORE](#)



(Photo: Morristown Fire Department)

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

The UNECE Secretariat has published a summary of changes to the 5th revised edition of the Purple Book. The 6th revised edition of the Purple Book is expected to be published sometime in 2015 and will include these changes. The summary document is [available here](#).

Ukrainian Chemical Plant Explosion

A powerful explosion that set a chemical plant on fire in eastern Ukraine was blamed on a careless "dropped cigarette butt" by Kiev officials, but pro-Russian rebels say they were attacked by the Ukrainian military.

The plant is in the separatist stronghold of Donetsk near where Malaysian Airlines flight MH17 was shot down last year.

Footage shows a fireball shooting into the sky above the plant after the explosion was triggered.

A spokesman for Kiev's Anti-Terrorist Operation said the explosion was the fault of the rebels because of poor safety procedures. "This was caused by a dropped cigarette butt. Accidents often happen in factories where no one is responsible for fire safety. Well, it's chaos, and they are barbarians," the spokesman said.

Officials from the Donetsk People's Republic, who control the area where the incident occurred, said they were attacked and said it was most likely a high-calibre artillery shell.

There were no reported casualties or injuries. Source: tvnz

[WATCH VIDEO](#)

Blaze Damages Containment System

Filters in a dust containment system caught fire, sending firefighters to a blaze at the Kawasaki Tennessee Inc. plant in Morristown, Tennessee.

According to Lt. Tim Carpenter of the Morristown Fire Department, damage to the containment system itself appears fairly substantial. Metalized dust can be volatile. The dust Wednesday came from zinc pellets, which are being used to make aluminum surfaces smoother in the manufacturing process.

A suppression system activated when the fire broke out, and an alarm sent everyone out. Source: wbir.com

Liquid Nitrogen Cocktail

A wine bar is being prosecuted under Health and Safety laws after an 18-year-old woman who drank a cocktail containing liquid nitrogen needed to have her stomach removed.

Gaby Scanlon, from Heysham, Lancashire was celebrating her birthday at Oscar's Wine Bar in Lancaster in October 2012.

After drinking two Nitro Jagermeisters, she said her stomach started to expand.

Ms Scanlon was taken to Lancaster Royal Infirmary where a scan revealed it had a large perforation.

Source: BBC News Lancashire

Worker Safety Plan: Deadly Sawmill Explosions in British Columbia

Sawmill operators in B.C. have committed to a safety plan since two separate explosions that killed four workers and injured 40 others in 2012, says a special adviser appointed by the government.

Gord Macatee took on the task last July to review safety operations at the province's sawmills. His mission also involved overhauling investigation and inspection methods at WorkSafeBC after flawed techniques were cited by the Crown for its decision not to lay criminal charges in both cases.

The threat of combustible sawdust at mills was highlighted as a safety issue that required constant vigilance. "I see evidence of a serious commitment to managing this risk on an ongoing basis," Macatee said. He said sawmills have committed to a daily inspection routine reporting weekly to WorkSafeBC, which would also conduct regular on-site inspections.

"It's an example of where the industry has really taken responsibility for getting on top of this risk and ensuring that not only are they compliant on a day the inspector shows up, but that they are compliant every day," Macatee said. Macatee's report made 43 recommendations, which the government said it would implement.

The Workers Compensation Amendment Act proposes immediate and stiff penalties for safety violations and comes with powers to shut down operations.

"We've certainly seen major progress made by WorkSafeBC, and Mr. Macatee continues to oversee the progress that's being made," said Labour Minister Shirley Bond, who appointed the special adviser. Macatee recommended WorkSafeBC adopt a new investigation model based on a dual system that preserves the ability to conduct investigations for both cause and prosecutions at the scene of accidents or incidents. He said the prosecution team will be called in by a WorkSafeBC gatekeeper who will ensure evidence is protected and admissible to the courts.

Source: Dirk Meissner, The Canadian Press

Mount Blanc Tunnel Fire - Technically not dangerous goods, but tunnel authorities wish to include such goods as margarine, butter and flour.

Chemical Plant Blast in Indiana

The fire caused an explosion, which ruptured tanks containing potentially hazardous chemicals, at the Warsaw Chemical Company. The cause of the fire is unknown at this time.

Eight people, including some firemen, were treated for injuries suffered in the blaze at Kosciusko Community Hospital for chemical inhalation and skin irritation.

One plant employee was treated for burns to his hands.

"An unknown quantity of chemicals, mostly methanol, made its way into the storm drains and into Winona Lake turning the lake and snow blue and green from the dyes in the chemicals. It is believed to possibly be in the thousands of gallons of chemical and water mix that found its way into the lake," Indiana Conservation Officer Jerry Hoerdts stated in a press release.

According to the report, Environmental Remediation Services of Ft. Wayne will be utilizing large, portable air compressors to introduce mass amounts of oxygen into the lake to evaporate the contaminants and aid the fish and wildlife in the lake.

Indiana Conservation Officers are advising fisherman not to venture out on the ice or eat any fish from the lake until further notice.

The ice on Winona Lake was significantly thinned by the methanol run off.

Source: examiner.com

Lightning Storms and Dangerous Goods

The recent thunderstorm activity in Perth was a potent reminder of the power of nature. However, lightning has the potential to light up more than just the sky.

Severe lightning storms present considerable risks to operators of flammable dangerous goods and explosives.

Principal Dangerous Goods Officer Peter Xanthis said lightning is a potential ignition source for flammable dangerous goods and explosives.

"With all the thunderstorm activity over the past week, it is timely to remind operators about the risks associated with lightning when loading and unloading flammable dangerous goods," Mr. Xanthis said.

"This is why the Department of Mines and Petroleum recommends operators suspend loading and unloading of flammable dangerous goods (for example petrol) when severe lightning storms are in the vicinity. "It is also recommended that all tank openings are closed during a lightning storm if it is safe to do so."

Source: Dept Mines and Petroleum W.A.



Several injured and unknown effects of environmental damage in Warsaw Chemical Plant Explosion today. (Indiana DNR)



Severe lightning storms present considerable risks to operators of flammable dangerous goods and explosives.



Fatal Blast at Fireworks Storage

Two Lone Star Management LLC employees were directed to use a gas-powered forklift to move pallets of fireworks and cardboard out of an explosives storage facility in Pittsburg when the gas ignited, which caused an explosion and fire. Within seconds, the trapped employees became engulfed in flames. The inferno took the life of one 28-year-old worker and left a 43-year-old co-worker to suffer with burns over 80 percent of his body and the possibility of never working again.

“Poor housekeeping, combined with using a forklift not approved for flammable environments, proved to be a deadly combination,” said Judy Freeman, OSHA’s area director in Wichita. “Fireworks are meant to be fun, but by their nature, are highly explosive. This employer knew the hazards and how to protect staff. The families of these workers should not suffer because a company did not show a commitment to worker safety.”

OSHA’s investigation found that the company failed to paint explosive storage containers red with appropriate warnings and stored unauthorized materials, including cardboard, in the explosives’ containers.

Lone Star Management also failed to develop, implement and maintain a written hazard communication program to train workers about hazardous workplace materials and provide necessary handling safety precautions.

Additionally, fire extinguishers were not mounted and accessible and employees were not trained to use them. The company also failed to have a competent person on-site to enforce safety standards for magazine storage.

Source: <http://www.advancedsafetyhealth.com/newsletter-blog>

3 Workers Die in Gas Plant Explosion

Macedonian authorities say an explosion in a gas plant near the border with Greece has killed at least three workers and injured two others.

Nadica V'ckova, spokeswoman for the national center for crisis management, said the explosion occurred in a department where gas cylinders were being filled in the plant in the southern town of Bogdanci.

Firefighters were trying to contain the blaze that broke out after the explosion.

Police and public prosecutors were investigating what caused the blast.

Source: Fire Engineering

Ammonia Leak in N.Z. Storage Plant

Fire services evacuated several people at a Christchurch storage company after an ammonia leak in the plant room. The leak happened at CSN Cold Storage on Watts Rd in Upper Riccarton. Fire senior station officer Stephen Butler said no-one was injured and the leak was contained. Three men wearing protective gear took 45 minutes to isolate the leak and "vent" the affected building, he said. Neighbouring businesses had been told to stay inside while fire services attended the leak.

Eight trucks, police and ambulance attended the scene.

Source: stuff.co.nz [WATCH THE VIDEO](#)

Bangladesh Plastics Factory Fire Kills 13

At least 13 people have died and dozens have been injured in a fire at a plastics factory in Bangladesh's capital Dhaka.

The cause of the blaze in the multi-storey Nasim Plastic building is still unclear, but it may have triggered by a faulty gas cylinder or boiler.

The fire was later brought under control. Fire-fighters are now searching through the rubble.

Factory fires are common in Bangladesh, where safety conditions are often poor. In 2012, 112 workers died in a fire in the factory just outside the capital.

The country suffered an even greater tragedy in 2013 when the Rana Plaza garment factory complex collapsed on the outskirts of Dhaka, killing 1,135 people.

Source: BBC News Asia



Q'ld - LPG Decanting & Static Electricity

Queensland's Department of Natural Resources and Mines recently issued a safety alert following an incident in which a fire broke out at a business while LPG cylinders were being filled using decanting equipment.

The source of ignition may have been from a static discharge between the worker's hand and the LPG cylinder, and the alert noted that even a small static discharge when touching an LPG cylinder can be enough to ignite LPG vapour.

As a result of the incident, the employee suffered injuries and significant damage was caused to the workplace, while a serious threat was also posed to other workers, members of the public and surrounding residential and commercial premises.

The alert noted that common issues associated with LPG cylinders being filled by decanting equipment include:

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

- Operators not properly trained to use decanting equipment to fill LPG cylinders.
- Operators not following recommended decanting procedures to discharge any static energy from cylinders prior to filling.
- Synthetic clothing, such as nylon, increases the risk of static discharge.
- Certain environmental conditions can increase the effect of static discharge, e.g. dry weather with low humidity and lack of or incorrect use of appropriate personnel protective equipment (PPE).
- Awareness of hazardous zones around decanting areas when filling LPG cylinders.

As a result, it said operators and workers undertaking decant filling of LPG cylinders should ensure that:

1. The recommended decanting procedure is adopted, either from the suppliers training document or, as a minimum, from AS/NZS 1596:2014 The storage and handling of LP Gas, appendix J - Decanting Procedure.
2. Operators and workers understand the nature of static electricity and the recommended discharge of static energy.
3. Workers are able to demonstrate competency in decanting equipment to fill LPG cylinders procedures. This includes using PPE appropriate for the task and responding to LPG emergencies.
4. No ignition sources are introduced into a hazardous area where decanting equipment to fill LPG cylinders is being used. This includes customers who may accidentally bring a source of ignition into the hazardous zone.
5. Decanting equipment is in a serviceable condition. Operators and workers are competent to identify worn or damaged decanting equipment.
6. Cotton or anti-static clothing is worn where possible.
7. The deadman's handle is operable allowing filling only with the worker attendance

[In early February, OSHA released a document titled Enforcement Guidance for the Hazard Communication Standard's \(HCS\) June 1, 2015 Effective Date. Although this document is intended for OSHA's Regional Administrators, it has been released to various trade associations as it contains useful information for Hazard Communicators.](#)



Highly Flammable Liquids Explode at Auschem, Wetherill Park N.S.W.

Emergency services carefully removed drums of ethanol and methanol from beneath a wall that fell over during an explosion at a chemical plant at Wetherill Park.

Inspector Kernin Lambert — the chief firefighter at the site explained what happened. “At this stage we’re treating this incident as accidental,” Insp Lambert said. “Employees at the plant were refilling containers with flammable liquids when the fire broke out. “The explosion has actually torn one of the containers apart, a large amount of flammable liquid has then spilt from the area and when firecrews arrived the refilling area was completely involved.

“The flames were 20 metres high. “The force of the explosion was so severe that it caused cracking of a six metre high, fireproof wall that is now in danger of major collapse,” Insp Lambert said.

Insp. Lambert also said the situation was deeply concerning, as in storage tanks underneath the plant 700,000 litres of ethanol, methanol and about 50 other highly flammable liquids are stored in underground tanks.

He said the Urban Fire and Rescue Unit had reinforced the wall and carefully removing the drums stored behind it. “There are also another 200,000 litres of similar liquids in a nearby warehouse,” he said.

Insp Lambert said but for the determined efforts of fire-fighters and a number of employees who helped out the situation, this could have been much worse.

“We’re monitored the air for flammable vapours and stayed here for some hours as the clean up continued,” he said.

Source and Photos: News Local

Improving Truck Safety

The N.S.W. Government has announced another positive reform in heavy vehicle safety with a proposal to introduce mandatory electronic stability control (ESC) for older trucks carrying dangerous goods on N.S.W. roads.

This is part of a five year phase allowing tanker companies, equipment suppliers and installers to schedule work so all of the fleet would be compliant by 2019.

Tanker companies will be required to provide annual progress reports and these will be made available to the public on the EPA website.

Source: MTA JOURNAL AND SSA MAGAZINE, Issue 4 2014

The toxic waste, in the story below, contains polycyclic aromatic hydrocarbons (PAHs), which are particularly harmful to unborn babies as they are unable to process the poisons. Tests have linked the same poisons to foetal abnormalities and under-development in children. In adults, the same neurotoxic poisons are linked to cancers and serious cognitive disorders.



Source and photo: Belfast Telegraph.co.uk

Transpacific Flushed Fracking Water into Sewage before Tests – Newcastle

A coal seam gas company did not test polluted water for toxic chemicals before it was flushed directly into the sewage network, N.S.W. state agency Hunter Water said.

Transpacific Industries discharged the so-called flowback water from AGL's four test wells in its Waukivory pilot project late last year into Hunter Water's sewers despite AGL and Transpacific being warned not to dispose of the waste water through the agency's network.

The Baird government and the Environment Protection Authority ordered AGL last week to suspend its CSG operations near Gloucester and began separate investigations, after the energy company disclosed it had detected BTEX chemicals in some of its flowback water.

The BTEX group – benzene, toluene, ethylbenzene and xylenes – are banned in NSW in hydraulic fracturing operations. The chemicals occur naturally in coal and gas deposits and AGL said it did not use them in its fracking.

Hunter Water said Transpacific tested only for chemical oxygen demand (COD), biological oxygen demand (BOD), total petroleum hydrocarbons (TPH), total suspended solids (TSS) and acidity before discharging the water into the sewer.

Source: Sydney Morning Herald Environment, Peter Hannam

IRA Fuel Smugglers Poison Drinking Water by Dumping Lethal Toxic Waste

Four 1,000-litre cubes of deadly poison were dumped into a drain that feeds directly into Lough Ross, which supplies all the drinking water to Dundalk in Co Louth and to the republican heartland of Crossmaglen in south Armagh.

The launderers left the lids off two of the upturned containers, allowing the toxic sludge to flow into the drain at a point just 100 metres from the shores of the reservoir.

Volunteer firemen from Co Monaghan had to don bio-hazard suits because of the threat to their health from the sludge, the by-product of using sulphuric acid and other unknown chemicals to 'wash' the green or red dye out of agricultural and domestic heating oil.

Since the start of the year, the Castleblayney fire brigade have been called to deal with 25 of the 1,000 litre, one-ton 'cubes' used to dump the waste on roadsides. In eight instances, the lids had been left off, allowing the waste to spill on to farmland and into streams.

US CSB – DuPont La Porte Texas Preliminary Investigation Report



Four workers were killed during the release of what DuPont estimates were more than 23,000 pounds of methyl mercaptan, a highly toxic, flammable, and volatile liquid.

Our investigators have already identified four design issues in this accident.

- First: The process included several interconnections between the methyl mercaptan supply line and a chemical vent system, which allowed a toxic leak into an unexpected location, where workers were exposed with fatal consequences.**
- Second: The chemical vent system - which was intended to safely remove harmful vapor from process vessels – had a design shortcoming that allowed liquid to accumulate inside. This liquid regularly caused pressure buildups in the vent. The liquid needed to be manually drained by operators to prevent safety issues from interconnected equipment, such as reactors.**
- Third: The vent drain that operators had to use was open to the atmosphere, meaning that workers were exposed to whatever chemicals were drained from the vent system.**
- Fourth: The building was designed in such a way that even had ventilation fans been working on the day of the accident, it would likely not have effectively protected workers from chemical exposure. And we found that those ventilation fans were not, in fact, working at the time of the accident.**

[READ FULL STATEMENT](#)

Chemical Contained following Small Formaldehyde Leak at DuPont Belle Plant

The West Virginia Department of Environmental Protection responded to a small formaldehyde leak at the DuPont plant in Belle on Feb. 11.

The leak was caused by an equipment failure in the plant's glycolic unit, DuPont Spokesman Robin Ollis Stemple said in a statement. The unit was quickly shut down following the incident, allowing only about 10 pounds of formaldehyde to vaporize as it was released. The plant staff immediately sprayed the vapor cloud with water and the chemical was contained, said Kelley Gillenwater, a spokeswoman for DEP

Source: Sarah Tincher, .21wowk.tv.com



W.A. Department of Mines & Petroleum

Dangerous Goods Safety

☐ One stop shops

Finding it difficult to find information specific to your needs? Our One stop shops pages provide fast access to dangerous goods and explosives guidance for: licensed companies and businesses; licensed individuals; unlicensed companies; and homeowners.

☐ Toolbox presentations

Provides toolbox presentations on dangerous goods safety and security that are available for non-commercial use (e.g. toolbox meetings, information sessions).

☐ Dangerous goods and explosives FAQs

Frequently asked questions related to dangerous goods safety and security, and Major Hazard Facilities (MHFs).

☐ Storage and Handling

Guidance material, publications, forms and templates related to storage and handling of dangerous goods. This section also contains guidance applicable to major hazard facilities (MHFs).

☐ Major Hazard Facilities

Guidance material related to major hazard facilities (MHFs) such as oil refineries, chemical plants and large fuel and chemical storage sites that have the potential to cause major accidents.

☐ Transport

Guidance material related to transporting of dangerous goods including an overview of transport regulations, guidance notes, approved dangerous goods transport training providers, approved responders to dangerous goods emergencies, and templates.

☐ Dangerous Goods in Ports

Guidance material related to dangerous goods in ports, including guidance notes and templates with respect to special berths.

☐ Explosives and Fireworks

Guidance material related to explosives and fireworks including codes of practice, guidelines, schedule of fireworks events and registration of explosives magazines.

☐ Security Risk Substances

Guidance material related to security risk substances including guidance on ammonium nitrate; and security risk assessment and security plan



Renewal of Consultant Accreditation to Access and Endorse Dangerous Goods Storage and Handling Proposals – W.A.

Document Renewal Application for Consultant Accreditation to Access & Endorse Dangerous Goods Storage & Handling Proposals
http://www.dmp.wa.gov.au/documents/Forms/DGS_F_RenewalOfConsultantAccreditationDGS.pdf

Changes to N.S.W. Work Health and Safety Regulations

For those operating in the downstream petroleum industry the changes to the definition of 'hazardous area' while relevant, will have little impact on operations. Fuel Industry Safety Forum Chair and Manager of Association Business, Elisha Radwanowski, explains "while the definition within the Regulation has changed the change is primarily a clarification. However what is more important to note is that the definition of 'hazardous area' in the Regulation does not align with the definition of hazardous area in the Dangerous Goods Code. That is to say that a 'hazardous area' under the DG Code is a very specific radius around certain products and equipment." ACAPMA cautions Members to ensure that they are complying with both definition of 'hazardous area' and controlling ignition and other safety risks in these areas. <http://goo.gl/DO6wYh>

[Inspector Cook said for every kilogram of ice produced, there was 10 kilograms of toxic waste. \(ABC News\)](#)



Makeshift Labs leaving a Toxic Legacy

Australia is in the grip of an ice epidemic and hundreds of clandestine drug labs are springing up around the country each year, in suburban homes, motels and even in car boots and trucks. Authorities warn the labs are leaving a toxic legacy, with meth cooks contaminating properties with a cocktail of deadly chemicals and dumping the waste in national parks and waterways.

Just last year police across the nation raided nearly 750 meth labs and they predict this figure will increase dramatically in 2015. Detective Inspector Michael Cook, head of the chemical operations team for the NSW Police Drug Squad, said labs were often found in rural areas, but they had also been discovered in motel rooms, shipping containers, boots of cars and on the back of trucks. "Over the past six years we have seen a doubling in the number of clandestine laboratories in NSW and the size of the labs are getting much larger," Inspector Cook said.



[Four Corners](#)
[investigates the rising](#)
[use of the drug ice in](#)
[rural areas of](#)
[Australia.](#)

"We are seeing larger and larger enterprises with tens of kilos of drugs being able to be produced at any one time.

"There's been an increase because the profits are just so great in the sale of these drugs in comparison to the costs involved in creating the drugs."

While the devastating effects of ice on users are well known, police are also concerned about the toxic legacy of meth labs on residents and the environment.

"One of my people was severely injured as a result of the work undertaken in a lab where their tear ducts in their eyes were burnt," Inspector Cook said.

"The young police officer had to resign from the police as a result of her injuries."

Inspector Cook said that for every kilogram of ice produced, there was 10 kilograms of toxic waste.

Meth cooks dumping waste in national parks and waterways

Meth cooks are not only contaminating properties - police have also caught them dumping the chemical waste in national parks and waterways.

"Many drug manufacturers hang on to that waste. They accumulate it and sometime later they will dump that into some bushland or they will put it in drums and dump the drums on the side of the road," Inspector Cook said.

"We've had many instances of drums located containing meth waste on the side of the road. There was incident about four years ago now in south-western Sydney where a large truck carrying tens of thousands of clan lab [clandestine laboratory] waste emptied the contents overnight into a local creek."

The manufacturing of the drug is so toxic that houses used as meth labs cannot be occupied until the property is professionally cleaned. Some houses are so contaminated they have to be bulldozed.

"We would maybe see six to 10 properties per year demolished," Inspector Cook said.

It is a booming business for cleaners who specialise in remediating meth labs.

Ahmad Merhi is head technician at the Sydney-based cleaning company Living Fresh.

"Originally when we did meth labs say three years ago we probably did about 20 in our first year," Mr. Merhi said.

"Last year we probably did about 50. This year we're expecting about 200, maybe even more. We are being called on a weekly basis to clean up a house where there was a meth lab."

Under Australian Government guidelines, after police have raided a meth lab, they must report the property to the local council.

A council environmental officer will then issue the owner with a "pollution control" order, requiring them to engage an occupational hygienist to assess the level of contamination.

A cleaner is then hired to remediate the property and this can cost anywhere between \$25,000 and \$150,000.

Mr. Merhi uses a product called Crystal Clean, a decontamination foam developed in the United States more than 10 years ago to kill anthrax which was found in an envelope mailed to Senate Majority Leader Tom Daschle in 2001.

Several suites in the Hart Senate Office Building were contaminated by the anthrax powder and hundreds of Senate staff evacuated the building. It was months before they returned to their suites.

Source: By the National Reporting Team's [Lorna Knowles](#) and Alison McClymont

U.S. Chemical Safety Board Seeks Better Process Safety Management Requirements

Within the US, most chemical safety requirements are imposed by OSHA and the EPA. For example, OSHA (or delegated state agencies) administers a Process Safety Management (PSM) Standard, while EPA (or delegated state agencies) administers the Accidental Release Prevention (ARP) regulation. In addition to these sets of regulators, however, Congress has created a national agency to conduct independent investigations of major chemical accidents, and to issue accident-specific findings and specific or general recommendations for improved chemical handling and regulation. This agency's formal name is the Chemical Safety and Hazard Investigation Board—which usually refers to itself as the Chemical Safety Board or CSB.

Since the 1990s, CSB has offered repeated recommendations for changes to PSM and ARP, seeking clearer regulatory requirements that facility operators enhance their hazard evaluation and management efforts. Neither OSHA nor EPA have adopted many of these recommendations, although both agencies are now reviewing their regulations in response to an Executive Order (I've written about EPA's efforts [here](#), and about OSHA's efforts [here](#)). CSB has now weighed in again, compiling recommendations for PSM and ARP "modernization."

What Enhancements to PSM Does CSB Recommend?

CSB recommends that OSHA adopt the following revisions to the PSM Standard:



Jon Elliott
President, Touchstone
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[Jon Elliott](#) is President of [Touchstone Environmental](#) and has been a major contributor to STP's product range for over 25 years. He was involved in developing [16 existing products](#), including [Environmental Compliance: A Simplified National Guide](#) and [The Complete Guide to Environmental Law](#).

This article was republished with permission from Specialty Technical Publishers, which provides a variety of single-law and multi-law services, intended to facilitate clients' understanding of and compliance with requirements. These include: Federal Toxics Program Commentary; Environmental Compliance: A Simplified National Guide; A range of Air Quality MACT Standards Guides; Environmental Auditing: Federal Compliance Guide; The Complete Guide to Hazardous Materials Enforcement and Liability: California.

- **Expand attention to reactive hazards, including:**
 - **Criteria such as industry sector (e.g., as indicated by the North American Industry Classification System (NAICS)), a reactive hazard classification system (e.g., based on heat of reaction or toxic gas evolution), incident history, or catastrophic potential.**
 - **More extensive reviews of technical literature, reports and guidance by facilities.**
 - **Explicit review of reactive hazards, such as rates of heat or gas generation, thermal stability of reactants, and incident progressions (e.g., runaway reactions).**
- **Management of change (MOC) review for organizational changes that may impact process safety.**
- **Comprehensive process hazard analysis written by the facility that includes:**
 - **Systematic analysis and documentation of all major hazards and safeguards, using the hierarchy of controls to reduce those risks to as low as reasonably practicable (ALARP).**
 - **Documented use of recognized methodologies, rationales and conclusions to support claims that safeguards intended to control hazards will be effective.**
 - **Documented damage mechanism hazard review conducted by a diverse team of qualified personnel.**
 - **Documented use of inherently safer systems analysis and the hierarchy of controls to the greatest extent feasible in establishing safeguards for identified process hazards, to drive the risk of major accidents to As Low As Reasonably Practicable (ALARP).**
- **Assurance that the regulator (OSHA or state) is technically competent with adequate resources, conducts ongoing monitoring of regulated facilities and industries (including leading and lagging indicators of safety risks) to support continuous improvement in PSM activities, and conducts appropriate audits and inspections.**
- **Establish a “model where the regulator, the company, and workers and their representatives play an equal and essential role in the direction of preventing major accidents.”**
- **Require reporting of information to the public to the “greatest extent feasible.**

What Enhancements to ARP Does CSB Recommend?

CSB recommends that EPA adopt the following revisions to the ARP regulation:

- **Add explicit coverage of catastrophic reactive hazards (i.e., in addition to toxic and flammable hazards).**
- **Require inherently safer systems analysis and a hierarchy of controls when facilities establish safeguards for identified process hazards.**

What Coordination Between Occupational Safety and Environmental Protection Regulators Does CSB Recommend?

CSB has recommended that EPA and OSHA, and their state counterparts, coordinate PSM and ARP regulatory activities to maximize the benefits of both. Readers should note that President Obama's Executive Order and subsequent federal activities include these efforts.

I've written about the Executive Order [here](#), and about a report by an interagency task force coordinating these responses [here](#).

Self-Assessment Checklist

Do any of my organization's facilities manage chemicals subject to PSM or ARP?

- **Does any facility manage reactive chemicals that pose analogous accident hazards?**
- **If so, does any facility comply with:**
 - **One of those programs?**
 - **Both of those programs?**
- **Has the organization developed organizational-level and/or facility-level programs for chemical risk assessment and handling consistent with requirements of PSM and/or ARP requirements?**
- **Is the organization participating in review and reform activities being undertaken by the implementing agency (or at least tracking them)?**

Where Can I Go For More Information?

- **[CSB website](#)**
 - **[Recommendations for PSM modernization](#)**
- **[EPA ARP webpage](#)**
- **[OSHA PSM webpage](#)**

Read more: <http://www.environmentalleader.com/2015/01/27/chemical-safety-board-seeks-better-process-safety-management-requirements/#ixzz3QiBKWas4>

Drones May Change Search Process for Gas Field Hazards

A helicopter equipped with magnetic sensors flew over three plots of Pennsylvania state lands hunting for signs of forgotten oil and gas wells last summer at a cost of about \$2,000 an hour.

When the technology catches up, drones equipped with advanced sensors might change the costly and onerous project of searching by air for abandoned gas field hazards into a routine part of business.

Oil and gas companies generally use people on the ground or planes and helicopters in the air to perform frequent surveys and safety checks. Unmanned aerial vehicles or UAVs, as drones are also known, promise a bird's-eye view and agile data collection at high speeds with lower cost and risk.

Right now, most drones employed in the oil and gas sector are valued for what they can see — they are deployed for visual surveys, high-resolution image collection, 3-D models and mapping.

At least four dead after gas explosion outside Mexico City hospital
A huge gas explosion has ripped through a children's hospital in Mexico City leaving 3 people dead and at least 54 others injured. At least four people have been killed and dozens injured, including 22 children, after a gas tank truck blew up outside a children's hospital in Mexico City.

Some reports claimed four babies and three adults had died, but city and federal officials put the death toll at four people so far.

ENERGY NEWS. IN CONTEXT.

Source: **Pittsburgh Post-Gazette**

Gas Explosion outside Mexico City Children's Hospital

A huge gas explosion has ripped through a children's hospital in Mexico City leaving 3 people dead and at least 54 others injured. At least four people have been killed and dozens injured, including 22 children, after a gas tank truck blew up outside a children's hospital in Mexico City.

Mayor Miguel Angel Mancera said 58 people were transferred to other hospitals, many for cuts due to shattered glass. The Red Cross said nine babies were taken to three hospitals in the capital.

Around 40 percent of the hospital was destroyed after an apparent gas leak, officials said. The newborn emergency care area was among those hit.



Rescue workers sift through the rubble at the Mexico City hospital. (AAP)

**My apologies for
this late
Newsletter – but
was still on the
job!
Transport of
dangerous goods
in India
(tried for the
camel, but missed
it).**



Mayor Mancera told MVS Radio that the zone was evacuated "for safety because a lot of the people are babies in the crib area." A fire was still going hours later but firefighters had it under control, he said.

The disaster happened when a gas tanker truck blew up outside the building at around 7:00 am (12am AEDT), officials said.

Mancera said the explosion took place after workers were unable to control a pipe leak, but officials said the cause was still under investigation.

"The truck driver has been detained by police. He is injured and is being care for by rescuers, but he is stable," a Mexico City public security official said on condition of anonymity.

Mexico has been hit by other gas explosion tragedies in recent years.

In February 2013, 37 people died in the headquarters of the state energy firm Pemex in Mexico City following a gas build-up in the skyscraper's basement.

In May 2013, 25 people died when a gas tanker's container came loose on a highway north of Mexico City, setting nearby homes and cars on fire.

Last year, three people died in the northeastern state of Tamaulipas when a gas leak caused an explosion in a shopping centre.

Source: © ninemsn 2015

Disposal Experts Discover Man with a Cache of Hazardous Chemicals

'The ex-husband of decorated U.S. Olympic gymnast Shannon Miller has been charged over an investigation into hazardous chemicals in Nova Scotia.

Police allege Christopher Burton Phillips, 42, possessed a chemical called osmium tetroxide for a dangerous purpose. He is a former American biochemical weapons expert.

The discovery of hazardous chemicals prompted the evacuation of two neighbourhoods in Halifax this week and an Ottawa hotel where Phillips was. The hunt for Phillips began Tuesday after police found large quantities of dangerous chemicals at two Nova Scotia homes connected to his family.

Police believed Phillips was carrying the chemicals osmium and osmium tetroxide in his van. The lab chemicals are highly dangerous and can easily penetrate the skin. About a decade ago, the chemicals were feared as a possible terrorist weapon. [READ MORE](#)