



WHAT'S HAPPENING?

September 2014

Reminder!
AIDGC 2014
Conference
September 19
“Hazardous
Areas”
[AIDGC 2014](#)
[Conference](#)
[Program](#)



Photos: Queensland Police Service



Ammonium Nitrate Truck Explodes on Highway

A truck transporting ammonium nitrate has exploded in South West Queensland, destroying bridges, sections of the road, and two firefighting trucks. Ammonium nitrate is a key ingredient in creating explosives.

The vehicle was reportedly carrying more than 50 tonnes of AN when it rolled, just south of Charleville. The truck initially caught fire, and had firefighters attempting to extinguish the blaze, when it exploded, injuring eight people.

Luckily the driver was pulled from the truck immediately after the initial roll over occurred, with no one being injured in the subsequent blast. "As I understand the auxiliaries performed a snatch and grab (of the driver), they witnessed certain fire activities which gave the indication they needed to get out as soon as they could," chief superintendent for the south west region Lindsay Hackett explained.

It is understood that the blast itself was caused after fuel leaked into the ammonium nitrate load.

"We've had a primary and a secondary explosion out there - it's quite a devastating scene," assistant fire commissioner for the south west region Tom Dawson told the ABC.

Police are currently searching for remnants of the vehicle, however due to the size of the explosion they are finding the task difficult. Rollovers or incidents concerning ammonium nitrate trucks are relatively rare, with the incident outside Charleville the first recorded explosion for some time.

In 2012 [two drivers were injured after a collision](#) between two trucks, one carrying ammonium nitrate, occurred, which resulted in a spill of AN across the road.

In that same year another explosive truck rolled, [spilling approximately 200kg of AN across the road.](#)

GHS Chemical
Classification

DO NOT
FORGET

the Free Training
Seminars - still
time to attend at
these locations:

Newcastle,
Adelaide,
Melbourne,
Geelong, Perth,
Rockingham and
Launceston

Registration:
[GreencapNAA
booking page](#)



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

[For further
details](#)

Road Explosion No Reason to Change Truck Regulations, says Trucking Body

A major trucking body has said no changes to freight regulations are required after a shocking explosion injured eight people on an outback Queensland highway.

Ammonium nitrate is strictly regulated by the Department of Natural Resources and Mines but it is permitted for transportation by truck. Queensland Trucking Association Peter Garske said the tough controls already in place for transporting explosives don't need to be updated in the wake of the blast, the [Brisbane Times](#) has reported.

"It is highly regulated in terms of the routes they can carry, in terms of the standards of training and accreditation that the drivers must have and it is highly regulated in terms of the standards of the vehicles they must use," he said.

He said using rail lines would be too inefficient for useful transport of explosives, and it would cost too much to make trains a viable freight alternative to trucks.

[Video of Explosion Site](#)

Massive Explosion at Chemical Plant

A powerful explosion heard from kilometers away has rocked a chemical plant near Bremen, in northern Germany.

More than 300 firefighters have been called in to battle the explosion and massive fire at the Bergolin company plant in Ritterhude, a city north of Bremen with a population of 15,000.

The plant reportedly produces primarily industrial coatings.

The explosion was heard several kilometres away, a spokesperson for the local police department told the Bild newspaper. Several plant buildings were on fire and one factory employee has been reported missing from the scene of the accident.

Several surrounding homes were badly damaged by the blast, with some in danger of collapse, a police spokesman added. Locals were asked to stay indoors as black smoke was seen in the sky following the incident.

Authorities deployed 60 police officers in addition to some 300 firefighters. The railway line between Bremen and Bremerhaven was initially blocked after the accident.

[Watch the Video](#)

The plant is owned by Organo Fluid GmbH, which specializes in recovering valuable solvents from used mixtures.

Corporate Members

Our Corporate Members provide a range of products and services to the Dangerous Goods Industry. Contact them:

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Reforms Target Farm Chemicals

Changes aimed at simplifying the system which regulates thousands of chemicals and medicines used in primary industries have passed federal parliament.

The Agricultural and Veterinary Chemicals Legislation Amendment (Removing Re-approval and Re-registration) Bill 2014 aims to reduce the unnecessary regulatory burden on this industry resulting in reduced costs that will eventually flow on to benefit primary producers.

Around 11,700 separate agricultural chemicals and veterinary medicines are registered with the Australian Pesticide and Veterinary Medicines Authority (APVMA). A key part of the bill is an amendment to change the re-registration and renewal requirements of chemicals. In the same way a person obtains a car driver's licence that then is subject to periodic renewal, under the new legislation 'agvet' chemical registrations continue in force subject to periodic renewal.

"These amendments will allow longer timeframes for renewal. The regulations will set the period which could be up to seven years. Less frequent renewals will mean less red tape and less cost to business. "These reforms aim to reduce red tape for farmers and other businesses and encourage the development of new chemistry with a range of benefits for farmers and other users, the environment and the community."

Opposition agricultural spokesman Joel Fitzgibbon said the bill was extremely important. "It will affect Australia's multibillion-dollar plant sites and crop protection industry; it will have implications for our natural environment; and, most importantly, it is about the protection of human health," he said.

"These are all very important points but for the opposition the last point — that is, human health — is paramount."

Australia's agriculture sector is worth around \$48 billion.

[Further Information](#)

A 3 Step Guide to Specifying Static Grounding Equipment: Newson Gale

This 3 Step Guide poses the primary questions that should be addressed by engineers and QSHE professionals when tasked with implementing measures and precautions that reduce the risk of electrostatic sparks in EX areas. Factors ranging from the process ignition risk right through to the people using the equipment on a day-to-day basis are discussed in depth. [Download Here](#)



Workers Told Coal Ash was Non-Toxic

A lawsuit has been filed against an US power company that allegedly told workers coal ash was ‘safe enough to eat’. The suit alleges that American Electric Power’s Gavin Landfill site in Ohio exposed more than 77 people to toxic chemicals in coal ash, leading to deaths and illnesses.

The Gavin Landfill is used for collecting, dumping and transporting the 2.6 million cubic yards of coal combustion waste byproducts produced by the company every year.

Lawyers for the plaintiffs said the company told workers the waste was safe and non-hazardous, meaning they were not required to wear protective clothing. Plaintiffs claim they asked a supervisor about the dangers of working with the coal waste and he responded by “sticking his finger into the coal waste and then placing his fly-ash covered finger into his own mouth,” thereby implying that “that coal waste was ‘safe enough to eat’. Workers say they were told the coal waste was only a mixture of “water and lime,” and that it contained “such low levels of arsenic, it made no difference” to their health or safety.

Lawyers for the plaintiff’s said the coal waste contains several toxic elements which are dangerous to human health and can be transferred by skin contact, inhalation and ingestion. “These toxins have been shown to be directly related to incidences of cancer, respiratory disease, heart disease, chromosomal abnormalities and birth defects, among others,” lawyers said. Source: West Virginia Record

Cargo Smoke Event at Melbourne Airport

In April 2014, a passenger checked in four bags for a Fiji Airways flight from Melbourne, Victoria, to Nadi, Fiji. The passenger stated during check-in that there were no batteries in their checked bags. The aircraft was at Melbourne Airport and the passengers’ bags were being loaded. A ground engineer observed white billowing smoke emanating from the aft cargo hold.

The ARFF determined that the source of the smoke was a smouldering case. The ARFF and Australian Federal Police subsequently inspected all four of the bags checked in by the passenger and found 19 batteries intact and an additional 6-8 that were destroyed by the fire. Initial investigation revealed that an electrical short circuit involving lithium batteries caused the fire. Contained in the case were several batteries and an RPA controller. This incident highlights the hazards associated with transporting lithium batteries and the need to individually protect batteries to prevent short circuits and minimise the risk of overheating and fire.

[Aviation Short Investigations Bulletin - Issue 34](#)



Methylene Chloride in Paint Strippers

The primary ingredient in paint strippers—methylene chloride, also known as dichloromethane—poses a risk of cancer, as well as neurological and liver problems, in workers exposed to the chemical, the U.S. Environmental Protection Agency says in an [assessment released on Aug. 28](#). Consumers who use these products face short-term risks of neurological effects.

Methylene chloride is a volatile organic compound widely used as a solvent in numerous products, including adhesives, pharmaceuticals, metal degreasers, and aerosols, as well as paint strippers. EPA's assessment, however, focuses only on paint strippers. Exposure is expected to be low for other applications, EPA says.

The assessment is [one of dozens](#) expected to be released under an EPA effort to review the safety of 83 chemicals under the Toxic Substances Control Act. The results could lead EPA to ban, restrict, or require labelling of the chemicals or declare them safe for current uses. Source: Chemical and Engineering News

Ammonia Gas Leak at China Chemical Plant

At least 33 people fell sick after an ammonia gas leak at a chemical plant in northwest China. The accident took place in the Jiemeifengyou Chemical Plant in Ningdong Energy and Chemical production base located in Yichuan provincial capital of northwest China's Ningxia Hui Autonomous Region.

Four people who were seriously poisoned are out of danger. Witnesses say ammonia gas and highly concentrated ammonia liquids spurted out from a flare piping in the southeast corner of the plant. The company kept spraying water in the polluted areas to dilute the gas in the air. Currently, the air quality around the periphery of the plant has met the safety standards, the report said. Once inhaled by human beings, ammonia damages the oxygen carrying capacity of blood cells and causes sore throat, tear-shedding, coughs, chest distress, difficult breathing and even the life-threatening cardiac arrest. Source: Xinhua News Agency

Fire Blazes at Kugler Fertilizer Plant

Fire broke out at the Kugler Company and according to a report on KDVR, Sterling Fire Chief Kurt Vogel said the cause of the blaze was believed to be a welding accident. The Sterling facility is a production plant for the liquid fertilizer manufacturer and supplier based in McCook, Nebraska.

[LOCAL VIDEO AND NEWS REPORT](#)



Photo: Callie Jones /
Sterling Journal-Advocate



Praxair's Plant Damaged by Explosion

An explosion rocked Praxair's research and development complex near Buffalo N.Y., causing extensive damage to at least two buildings on the site.

Praxair, a Fortune 250 company based in Danbury, is the largest industrial gases company in North and South America. Capt. Joseph Carosi, a spokesman for the Town of Tonawanda, where the complex is located, said officials have given a preliminary estimate of at least \$250,000 in damage as a result of the blaze, which took several hours and fire crews from throughout the region to get under control.

Sue Nuemann, the vice president of communications for the company noted that damage to both structures were "significant." She declined to comment on what type of activities were held in the affected buildings, other than research and development, or how the incident could impact the company's operations.

Source: NewsTimes.com

Rozelle Explosion

What Caused the Deadly Blast?

Forensic scientist James Munday said Thursday's fire was too destructive to have been caused by a bomb: "In general terms, if you get a large explosion followed by a large fire the most common explanation is a vapour explosion, which often indicates the presence of flammable liquid."

He would not say if gas or some type of accelerant was used in the blaze.

"All we know is there has been some sort of significant explosion and it was a severe explosion due to the damage to the shops across the road and adjacent to the building," Fire and Rescue Superintendent Tom Cooper said.

However former fire investigator Ross Brogan said the massive blast, which shattered windows up to 100m away, had parallels with other explosions where petrol had been used as an accelerant.

"People do not know what power vapourised petrol can have," he said, adding it would need only a flick of a light switch to cause flammable liquid to explode.

New Evidence Emerges after Rozelle Blast

Chemical Exposure – Hydrogen Sulfide

Fire Rescue responded to an emergency call at Calumet Refinery after receiving reports that two employees had been injured. Firefighters determined that the employees injuries may have been caused by low-level chemical exposure to hydrogen sulfide. A Great Falls firefighter was possibly exposed to the chemical and was also taken to Benefis Hospital for assessment and treatment and is currently listed in stable condition.

Source: 3KRTV.com

The Occupational Health & Safety Administration says of hydrogen sulfide: Health effects vary with how long, and at what level, you are exposed.

Asthmatics may be at greater risk.

Low concentrations - irritation of eyes, nose, throat, or respiratory system; effects can be delayed.

Moderate concentrations - more severe eye and respiratory effects, headache, dizziness, nausea, coughing, vomiting and difficulty breathing.

High concentrations - shock, convulsions, unable to breathe, coma, death; effects can be extremely rapid (within a few breaths).

Natural Gas Explosion Blows Boiler Through Wall in Florida

A natural gas explosion sent a 60,000-pound boiler tank hurling through a wall and onto railroad tracks outside the Whitlock Packaging Corp. in Lakeland.

Christine Hobbs, who was driving past the packaging plant, said she heard a loud clanking noise, like someone was hitting a wrench on one of the pipes outside the building. The pipes started shaking and steam started squealing out, she said. And then it exploded.

"It was kind of like the movie 'Twister,'?" she said. "This thing shot out as us and the debris was everywhere — chunks flying through the air, hitting my car and I just screamed 'Jesus.'?"

Kevin Cook, spokesman for the city of Lakeland, said the explosion occurred in a boiler room that housed three of the 4,000-gallon tanks. Whitlock uses natural gas to heat the boilers, which produce steam to power the plant for bottling purposes, he said.

Bart Lewis, human resources manager for Whitlock, said the company bottles non-carbonated juices and teas at that location. Lakeland fire officials had all power and gas to the building shut off, and were taking precautions after noticing a second boiler still inside the building appeared to have structural damage.

Source: The Ledger



Photo:
RICK RUNION | THE
LEDGER





Photos: Dan Honda



Chemical Plant: Hazardous Vapour Release

Authorities lifted a shelter-in-place order after a hazardous materials release at a chemical company in California. The incident was reported at Contractors Chemical - the company is out of business but still stores chemicals at the site, including epoxies and catalysts that solidify concrete, said Don Nicholson, a spokesman with the Hayward Fire Department.

Two schools and a busy state route were closed after workers reported potentially noxious gases seeping into the air, authorities said.

Workers began mixing large amounts of chemicals in an attempt to turn them into solids, then dispose of them, according to Nicholson. But a reaction spread the vapours through the neighborhood and prompted a shelter-in-place alert.

Students and staff at Ochoa Middle School and Mount Eden High School as well as residents living within a 1-mile radius of the business were asked to stay indoors and close all doors and windows. Nearby residents and businesses were also asked to turn off heating, ventilation and air conditioning units.

Source: Karina Ioffe Bay Area News Group

McAleese Fined for Truck Breaches

Troubled transport group McAleese has been fined \$440,900 for registration and safety breaches by its fleet following a fatal tanker crash involving one of the company's vehicles.

The fine was handed down in the Sydney Magistrates Court after the company was charged with 255 offences by NSW Roads and Maritime Services.

Including court costs and a victim support levy, the company will pay \$525,000.

Source: The Australian



Chemical Reaction Causes Fire at Plant

A chemical reaction was the suspected cause of a structure fire at the Molded Fiber Glass (MFG) plant in Florida, resulting in \$250,000 in damages. The fire appeared to have started in a detached 20 by 20 foot storage building holding chemicals and fiberglass parts just outside the main plant.

According to Gainesville Fire and Rescue chief, the chemical reaction generated a lot of heat spreading to the fiberglass parts stored in the general area. The fire was within 30 feet of the plant and the scene could have been much worse he said.

Source: Cathy Mounce, Gainesville Daily Register





Judge: BP Oil Spill Grossly Negligent

A federal judge has ruled that BP's oil spill in the Gulf of Mexico four years ago was the result of gross negligence or wilful misconduct by the London oil company.

The decision could cost BP billions of dollars more in fines for fouling the ocean, though it could be years before legal battles over the spill are resolved, as BP plans to appeal.

[Source and Further Info.](#)

Halliburton: \$US1.1 Billion Settlement

The Houston firm that provided cement for BP's doomed Macondo well, has agreed to pay \$1.1 billion to settle a flurry of lawsuits filed in the wake of the 2010 Gulf of Mexico oil spill.

The deal, BP spokesman Geoff Morrell said, "underscores what every official investigation has found and what" evidence at court "has shown: that the fire and explosion aboard the Deepwater Horizon was an accident resulting from multiple causes, involving multiple parties."

[Source and Further Info.](#)

Explosion Occurred during 'Hot Work'

A fatal explosion at a fish processing plant on the Mississippi Coast happened when sparks ignited a volatile mixture in a tank, U.S.

Chemical Safety Board Chairman Rafael Moure-Eraso said in a news release. Inspectors found workers were performing "hot work" at or near the tank that exploded at the Omega Protein plant.

Hot work is defined as any burning, cutting, welding or other operation that is capable of initiating fires or explosions.

One worker was killed in the explosion and others were hurt.

Moure-Eraso said the tank contained about eight inches of a mixture of water and fish matter known as "stickwater." The explosion blew the lid off the 30-foot-high tank, killing a contract worker who was on top of it, the safety board said. A second contract worker on the tank was severely injured. "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," Moure-Eraso said.

Houston, Texas-based Omega produces fish oils and fish meal for human consumption and use in aquaculture, agriculture and industrial applications. The plant and its adjacent shipyard employ about 300 people, with employment peaking during Menhaden fishing season from mid-April until early November. The company has processing plants in four states. Source: gulflive.com



Photo: Lyle W. Ratliff

Big Fine for Perth Fireworks Company

“Incompatible substances and goods, such as loose black powder, nails, screws and aerosol cans containing flammable gases were stored incorrectly with the fireworks.”



A Western Australian fireworks company has been fined \$34,000 for the unsafe storage, supply and management of fireworks. Cardile International Fireworks Pty Ltd pleaded guilty to a string of charges in Perth Magistrate’s Court yesterday following an investigation by the Department of Mines and Petroleum’s (DMP) Resources Safety Division.

The investigation found the company had breached a number of safeguards relating to the storage and supply of dangerous goods. DMP’s Dangerous Goods and Petroleum Safety Director Ross Stidolph said officers from the department inspected the company’s storage area at the Baldivis Explosives Reserve in late 2012 and conducted a follow up inspection in early 2013. “The inspection uncovered some serious breaches,” Mr. Stidolph said.

“Incompatible substances and goods, such as loose black powder, nails, screws and aerosol cans containing flammable gases were stored incorrectly with the fireworks.”

Black powder is an explosive which is sensitive to friction, sparks and electrostatic discharge.

Mr. Stidolph said black powder and other incompatible goods stored with fireworks presents an increased risk of explosion. “In one box, black powder was loose amongst various items within the box,” he said. “The combination of the large exposed surface area of the black powder and objects such as a nail, electric matches used to ignite fireworks and a plastic cylinder created a significant hazard. “Sparks, friction and electrostatic discharge could easily have been produced and ignited the black powder. If the black powder had ignited, a mass explosion involving the entire contents of the magazine was a very real possibility.”

Over 25 kg of loose black powder was seized from two of the Cardile International Fireworks explosive storage buildings on the explosives reserve.

Mr. Stidolph said the court’s decision sent an important message to companies storing, handling and managing dangerous goods. “All companies working with dangerous goods need to take their responsibilities to safety seriously,” Mr. Stidolph said. “Notably, Cardile International Fireworks has now made significant improvements to its storage, handling and record keeping practices and is committed to achieving and maintaining regulatory compliance.” Source: http://www.dmp.wa.gov.au/7105_20779.aspx

Risk Management: Cybersecurity is Not Just an Information Technology Issue

Authors of new guidebook for company executives say that cybersecurity is a business imperative.

Cybersecurity, as defined by author Gregory J. Touhill, the current Deputy Assistant Secretary for Cybersecurity Operations and Programs at the U.S. Department of Homeland Security, “is the deliberate synergy of technologies, processes, and practices to protect information — and the networks, computer systems, and programs used to collect, process, store, and transport that information — from attack, damage, and unauthorized access.” Effective cybersecurity and information technology (IT) go hand-in-hand, yet corporate executives have tended to view this application of IT to company risk as the province of backroom computer wizards and technical geeks.

In this new book, “Cybersecurity for Executives: A Practical Guide,” published by AIChE (the American Institute of Chemical Engineers) in partnership with John Wiley & Sons, Gregory Touhill and co-author C. Joseph Touhill (an environmental engineer and corporate CEO) make the case for cybersecurity as a principal business concern. Cybersecurity directly impact a company’s bottom line, the authors contend, because it is about risk management and protection of assets, and because practically every business relies on information to maintain a competitive advantage. These factors mean that managers at all levels need to understand how investing in cybersecurity produces value for their companies.

The book explains in plain language how to recognize and act upon cybersecurity threats to protect oneself and one’s business, and gives executives crucial information about cybersecurity best practices and how to integrate those techniques into their companies.

The goal of the book, the authors say, is to make business leaders “Cyber-aware,” and thus prepared to make better business decisions and effectively manage the security risks inherent in the Cyber Age. Excerpts and more information about the book are available at the publisher’s website:

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118888146.html>.

[NICNAS Chemical Gazette September 2014](#)



Managing Radio-Active Waste Safely 2013 ANSTO Presentation

**Professor Bill Lee,
Director, Centre for Nuclear Engineering,
Imperial College London.
Deputy Chair, Committee on Radioactive
Waste Management (CoRWM).**

[Power Point Presentation](#)

Saudi Gas Tank Blast Kills Five

A gas tank explosion in Medina, Saudi Arabia, killed five people and damaged several vehicles, according to officials. An investigation has been launched to ascertain the cause of the blast, which took place near the Prince Mohammed National Guard Hospital.

The blast did not damage the hospital's main building and did not harm any patient, said a joint statement issued by the National Guard's Health Affairs Department and Civil Defense. The hospital's medical services were not affected by the incident.

The explosion occurred at the Gasco (National Gas and Industrialization Co.) facility during maintenance work. The gas storage building caught fire as a result of the explosion, causing damage to surrounding areas.

Gasco said it had no direct relation with the maintenance work. "Our mission was limited to ensuring the gas tank's safety after maintenance works were carried out by the contractor," the company said, adding that its representative died in the explosion.

The Following Presentations were Given at the 2014 HSE Group Chemical Liabilities Symposium- from RACI site

[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 @ ENGENEOHS.](#)

[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.](#)





Photos: WSFB

My thanks this month go to Scott Young and Don Johnston.

If you have any interesting articles or pars. Please let me know – they are appreciated!
robhogan@tpg.com.au



Massive Chemical Factory Blaze

A massive fire at two factories in Bridgeport continues to have a widespread impact along the Connecticut coast. Fire officials said there are two businesses that occupy the building, a roofing company and a recycled perfume factory.

Fire officials announced they closed Long Island Sound from Fairfield to the Poquonnock River to shell fishermen due to fears of contamination from that fire.

"It's like a war zone," Kiven McCloughlin, of Bridgeport, said.

The fire got so big, a half a dozen other cities and towns had to send help. It did force about 400 people from their homes and sending to hotels and shelters for the night.

Neighbors and firefighters alike heard explosions every few minutes as fireballs erupted out of the Rowayton Trading Company perfume factory on Seaview Avenue. One fireball was said to have shot 100 feet in the air.

The deputy fire chief told Eyewitness News that they had heavy fire and smoke coming from the building when they arrived around 7 p.m. Inside, was 55,000 gallons of chemicals in drums.

Firefighters said the blaze grew to five alarms and was so intense that the heat melted the siding on nearby homes. Embers ignited small fires on the roofs of those homes as well. Nine homes were damaged. "At this time, fire investigators are working on the scene, but because of the instability of the building and the hazardous materials involved with it, we're going to have to prevent entry until we can make the area safe to get in there and make a determination on the cause of the fire," Carfi said.

DEEP also said that because of all the water to get the scene under control, some runoff went into a nearby stream and into Bridgeport Harbor. It described the runoff as a purple foam, believed to be from all of the chemicals inside the factory.

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[Watch Video](#)

[Local News and Video re Hazardous Run-Offs](#)

A fire chief says explosions and a fire at a Hamilton County grain silo began with a spark in a vacuum that pulls dust off the grain.

[WATCH: Explosion rocks Evendale grain elevator](#)

[Fire rekindles one day after grain elevator explosion](#)

NSW EPA: Trucking Companies on Notice

In an Australian first, all existing dangerous good trailers travelling on roads in NSW must be fitted with roll-over control by 2019 to reduce the risk of vehicle rollover.

The NSW Environment Protection Authority (EPA) made the Determination requiring roll-over control under the Dangerous Goods (Road & Rail Transport) Regulation 2014 in response to a number of fatal fuel tanker collisions in NSW, notably the 2009 incident at East Lynne, Batemans Bay and the 2013 incident at Mona Vale.

EPA's Director of Hazardous Incidents and Environmental Health, Mr. Craig Lamberton said the Determination was signed by the EPA late August and will mean that all existing dangerous goods tank trailers must be fitted with roll-over control by 1 January 2019. This is in addition to an earlier Determination requiring that all new dangerous goods tank trailers manufactured on or after 1 July 2014 will need to be fitted with roll-over control. Roll-over control is also known as Roll Stability System or Roll Stability Function.

[Read the full Media Release](#)

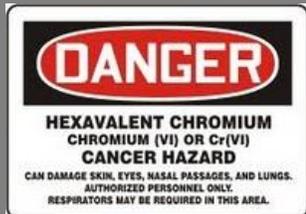
U.S.A. Hexavalent Chromium Exposure

For exposing workers to cancer-causing health hazards by inhaling, absorbing and ingesting [hexavalent chromium](#), Pride Plating Inc. is being cited by the U.S. Department of Labor's Occupational Safety and Health Administration. The company, which employs approximately 110 in Grove, Oklahoma, received 38 violations with proposed penalties totaling \$341,550.

"The chromium standard addresses exposure. OSHA has documented and cited three routes of exposure in this case," said David Bates, OSHA's area director in Oklahoma City. "At Pride Plating, workers were exposed to hexavalent chromium through spray painting and dip tank operations, and in the lunchroom and smoking areas." The citations can be viewed at:

<http://www.osha.gov/ooc/citations/PridePlating-962012.pdf>

<http://www.osha.gov/ooc/citations/PridePlating-971831.pdf>



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Website <http://www.aidgc.org.au>



Staff Photo: Billy Hefton

Ammonia Leak Caused Evacuation

A toxic gas leak caused an evacuation of about 200 employees at the Koch Nitrogen plant in Oklahoma. A preliminary report from the U.S. Coast Guard's National Response Center database also noted this leak of anhydrous ammonia was believed to be more than 100 pounds, or more than 2,000 cubic feet of the gas.

The Centers for Disease Control and Prevention states a leak of this size requires evacuation of 200 feet in all directions immediately after the incident. A zone of increased protection then extends downwind by almost half a mile during the day and by 1.4 miles at night.

Workers at Enid's Koch Nitrogen plant regularly encounter leaks or spills, which they then report to the NRC. According to recent NRC data, there are between two dozen and three dozen reports each year. There have been at least 17 reports in 2014, including the one made this week.

Another leak in late-April included an estimate that more than 100 pounds of anhydrous ammonia leaked into the air because a "system upset" triggered a release valve.

Koch Nitrogen said an atmospheric release of ammonia happened during a start-up procedure.

Source: enidnews.com

Nevada Museum Flash Fire

A flash fire that injured 13 people at a Reno, Nevada science museum happened when an employee applied the chemicals in the wrong order during a tabletop demonstration about the mechanics of tornadoes.

Reno firefighters said a three- to five-second blaze erupted at the Terry Lee Wells Nevada Discovery Museum after the presenter poured alcohol on a cotton ball that had been dusted with boric acid and partially ignited. The alcohol is supposed to be applied before the boric acid and the flame. The two chemicals are commonplace and often combined because they can produce green flames, said Vince Catalano, a chemistry professor at the University of Nevada, Reno. Boric acid is a mild solid that is sometimes used in eye washes, while methyl alcohol is a common solvent that produces low-heat flames when burned.

Eight children and one adult were transported to a Reno hospital for minor burns or smoke inhalation, Reno spokesman Matthew Brown said. One child remained hospitalized in good condition. Four other people were treated at the scene, but their ages were not available.

Source: nevadaappeal.com

[Watch the Flash Fire Happening](#)



Gas Leak Hospitalizes 10, Kills 8 Buffalo

Ten people fell unconscious while eight buffaloes died when a cloud of ammonia gas spewed from an ice-making plant in Green Town, Lahore, India. The incident triggered panic in the entire Bagrian locality as residents started fleeing to safer places.

Local residents said that eight buffaloes grazing in a plot beside the factory, also died due to the hazardous gas. As the workers arrived to start the processing, all of a sudden, they witnessed a large plume of ammonia gas shooting from a refrigeration unit inside the building. They tried to plug the leak but failed to do so because of massive gas pressure.

Investigation is underway but the rescuers pointed to faulty pressure relief valve in the refrigeration unit.

Source: The Nation

2 Workers Die Inside Sewer in USA

Two men died after getting trapped inside a sewer at a shopping center on Monday afternoon, according to Jay Ducote, division chief with the Scottsdale Fire Department. Their bodies have since been pulled from the sewer.

Three employees with Camp Industries were doing some maintenance or repair work on the sewage pumps, which were approximately 15 feet below the surface.

"The initial call came from somebody that heard them [the victims] screaming," Ducote said.

"It's sewer gas that was the problem," Ducote said. "We're not sending our workers down there until we ventilate it. Even with our breathing apparatus that we have it's still hazardous for our crews." Inside the hole, the hydrogen sulfide, or sewer gas, measured at lethal levels.

Part of the investigation will look into why the workers reportedly did not have any safety gear with them.

[Watch the News Report](#)

Isocyanates: Health Surveillance

Isocyanates are a group of chemicals often used in the hardeners of two pack paints, such as vehicle or cabinet paints. They are also used in making foams. They can cause occupational asthma and dermatitis.

This Guide for Employers from the W.A. Government is available online: <http://www.commerce.wa.gov.au/publications/isocyanates-health-surveillance-guide-employers>



In September of 1998, there was a fire in a natural gas processing facility in Longford, Australia. The fire resulted in 2 fatalities, 8 injuries, and disruption of the gas supply to the state of Victoria for several weeks. A Royal Commission investigation concluded that a HIRA study could have identified the potential failures that caused the incident.

Unfortunately, the HIRA study was planned but never conducted. Planning to do something is important. Actually doing it is required for success.

What is your role in Hazard Identification & Risk Analysis? Process Safety Beacon

Hazard Identification and Risk Analysis (HIRA) includes all activities involved in identifying hazards in your process, understanding potential incident scenarios, identifying safeguards, and evaluating risk to people, the environment, property, and business. Your plant may call this review a Process Hazard Analysis (PHA), a name used in regulations in some countries, including the USA. CCPS now uses the term “HIRA” because it specifically includes risk analysis, which has become a part of this activity in many companies in recent years. Regulations in the USA and many other countries, as well as many company process safety standards and policies, require participation of front line workers in HIRA/PHA studies – plant operators, maintenance workers, and other people directly involved with operating and maintaining the plant equipment. There are a number of techniques which are used for HIRA/PHA. The most common HIRA techniques in the process industries include “what if?” analysis, checklists, a combined what if/checklist, hazard and operability (HAZOP) studies, and there are also other techniques. Your plant may use some combination of these methods, and you may have a different name for your HIRA/PHA procedure. Regardless of the technique used, the role of the plant worker is critical. You operate and maintain the equipment every day, understand how it actually works, and, perhaps more importantly, how it can fail. It has been said that there are actually three plants – the plant that the engineers and managers think is there, the plant that the operators initially think is there, and the real plant. One of your key roles is to help make those three plants the same!

If you are asked to participate in an HIRA/PHA study, here are some things you can do to help make it better:

- Share your knowledge of how the steps in a procedure are actually executed, especially if this is different from what is written. Explain the reasons to the HIRA/PHA team so they can resolve them and make the actual and written procedures



[A Causal Analysis of The Esso Longford Gas Plant Explosion](#)

Andrew Hopkins
A.N.U. PP
Presentation



the same.

- **Before the HIRA/PHA, talk to your colleagues about what you will be doing. Ask them to tell you about any issues that they want to be sure the team discusses.**
- **Share your years of operating experience, and that of your co-workers, about the reliability of equipment, instrumentation, and alarms or safety systems. Make sure the team knows what works, what doesn't work well, and what has gone wrong in the past.**
- **Verify that any operator action – for example, action in response to an alarm – which the team considers a safeguard, is understood by operators, and can be done reliably in the time required to keep the process safe.**
- **Don't be shy! Proactively share your knowledge and experience, and don't wait for somebody to ask.**
- **Remember that your role is both to learn and to teach.**
- **You can learn from the other experts in the HIRA/PHA, and they will learn from you, particularly about how things really work in the plant. Share what you learn with your co-workers after the HIRA/PHA is completed.**

Safety Disasters & Organizational Learning

This article takes a closer study on the extent organizational learning is taking place, or lack of it, on safety management.

Organizations in discussion are in particular, the energy (oil and gas), nuclear and chemical industries whereby impacts of the safety accidents can be severe, e.g.

▶ **Bhopal disaster, December 3, 1984, a Union Carbide Corporation pesticide plant leakages of toxic gases, killed 18,000 within two weeks**

▶ **Piper Alpha, a North Sea oil production platform operated by Occidental Petroleum, exploded on July 6, 1988, killing 167 men,**

▶ **The Chernobyl disaster, a nuclear accident that occurred on 26 April 1986 in Ukraine, 985,000 excess deaths occurred between 1986 and 2004 as a result of radioactive contamination,**

▶ **Esso Longford gas explosion occurred on 25 September 1998 in the Australian state of Victoria's Gippsland region, killing two workers and injuring eight. Gas supplies to the state of Victoria were severely affected for two weeks.**

EP Coach and Trainer – Andrew Wong/2011

[Download article on .pdf](#)

**Research to determine the incidence,
prevalence and relative risk of ill health due
to chemical exposure in the chemical and
downstream oil industry sector**

Report by HSE.

<http://www.hse.gov.uk/research/rrpdf/rr1013.pdf>

Barbarians Bomb Iraq Oil Refinery

Islamic State militants set fire to an oil storage tank at Iraq's largest refinery as the U.S. prepares to escalate the campaign against the extremist group.

Militants fired mortar rounds at the Baiji refinery, 130 miles north of Baghdad, causing a crude storage tank to catch fire and emit a plume of smoke visible from miles away, the police said in a statement read over the phone by an officer.

"The fire could go on for two or three days as there is no civil defense to put it out," police said in the statement, without indicating how much oil the tank contained. "The situation in the refinery's perimeter is quiet now."

Islamic State militants have attacked the refinery several times since June as they seek to secure fuel and funding for a so-called caliphate they proclaimed in areas stretching over the Iraqi-Syrian border. They already control oil producing regions in eastern Syria. The Baiji refinery has an installed capacity of 310,000 barrels a day and the storage tank that came under attack belongs to a group that typically contain 100,000 barrels each, Saad Al-Obaidi, a protection force personnel at the plant, said by phone. The plant stopped working in June.

Source: Bloomberg Press

FIRE ON OIL STORAGE TANK



Maritime Statutory Alert: New SOLAS Requirements for Enclosed Space Entry, Rescue Drills and Draft Requirements for Portable Atmosphere Testing

Because of the serious threat posed to people working in enclosed spaces on board ships, the IMO has introduced new requirements to SOLAS Chapter III, regulation 19, which enter into force on 1 January, 2015. From this date, crew members will be required to participate in an enclosed space entry and rescue drill on board the ship at least once every two months.

The IMO is also finalising mandatory requirements for portable atmosphere testing instruments to be carried on board ships. These are expected to be adopted in November 2014 for entry into force on 1 July, 2016, as SOLAS regulation XI-1/7. These portable testing instruments will not be used as part of personal protective safety equipment but as part of the ship's equipment. They will be used to test enclosed spaces from the outside to make sure they are safe to enter and will cover, as a minimum, the following gases: oxygen, flammable gasses or vapours, carbon monoxide and hydrogen sulphide.

The IMO will be issuing an associated circular providing guidance on selecting portable atmosphere testing instruments, which we will detail in a future Class News.

Early implementation of regulation XI-1/7

Because the regulation XI-1/7 requirements for portable testing instruments will enter into force much later than the regulation 19 rescue drill requirements, the IMO has drafted a circular to encourage their early implementation. The circular is expected to be issued in December 2014.

Related IMO resolutions and circulars

The changes to SOLAS Chapter III, regulation 19 are detailed in IMO Resolution MSC.350(92)

Recommendations for entering enclosed spaces are contained in IMO Resolution A.1050(27)

High speed craft, mobile offshore drilling units and dynamically supported craft

The enclosed space entry and rescue drill requirements also apply to high speed craft, mobile offshore drilling units and dynamically supported craft from 1 January, 2015. Amendments have been made to the following Codes accordingly:

the 1979 Mobile Offshore Drilling Unit Code (Resolution MSC.357(92))

**the 1989 Mobile Offshore Drilling Unit Code (Resolution MSC.358(92))
the 2000 Mobile Offshore Drilling Unit Code (Resolution MSC.359(92))**

**the Dynamically Supported Craft Code (Resolution MSC.360(92))
the High Speed Craft Code 1994 (Resolution MSC.351(92)), and
the High Speed Craft Code 2000 (Resolution MSC.352(92)).**

Source: Lloyd's Register Maritime

Authorities Test for Toxic Contamination

Toxin testing is underway at Clovelly Park, North Adelaide, where solvent vapours are a risk in air, soil, and groundwater.

A drilling and testing program will begin there this week to test for toxic chemicals on populated land. Residents in Clovelly Park and Mitchell Park were told by authorities last month to relocate after elevated levels of industrial solvent were found in air, soil and groundwater.

They had known for years that there was toxic contamination in the area resulting from the area's long association with the automotive industry but houses were never thought to be at risk.

Now more than 137 holes up to 20 metres deep would be drilled over eight weeks to test soil vapour and groundwater for the industrial solvent trichloroethylene (TCE).

As well as asking residents to relocate, the South Australian Government has also warned that some homes might need to be demolished and rebuilt with impermeable membranes and concrete slabs.

Source: ABC

Two Women Killed, 50 Injured as Poisonous Gas Leaks in West Bengal

Two women were killed and 50 others affected, 12 of them seriously, when gas leaked from a cylinder in a welding workshop in West Bengal's Burdwan district.

The incident happened in Asansol under Gopalpur police station when ammonium (sic?) sulphate gas leaked from the cylinder, Asansol-Durgapur Police Commissioner Vineet Goel said.

Among those affected by the gas leak is a child.

The poisonous gas spread to an area stretching to more than two kms, Goel said.

The district administration has ordered a probe into the incident.

[See More](#)

