



WHAT'S HAPPENING?

November 2013

Chinese Gas Pipeline Explosion Kills 47 and 136 in Hospital

China's largest oil refiner Sinopec on Saturday apologized for explosions from a ruptured oil pipeline that killed 47 people and injured 136 others in one of the country's worst industrial accidents this year. Sinopec's expansion of petrochemical projects has met with resistance from members of the public, and Friday's blasts in the eastern port city of Qingdao will likely add to growing concern about safety and environmental risks. The accident was the deadliest involving Sinopec. The explosions ripped slabs of pavement and online photos showed bodies, overturned vehicles and shattered windows in nearby buildings. Black smoke rose above gigantic fuel silos and darkened much of the sky over a bay area. The pipeline, owned by Sinopec, ruptured and leaked for about 15 minutes onto a street and into the sea before it was shut off. Hours later, as workers cleaned up the spill, the oil caught fire and exploded in two locations, the city government said. Fu Chengyu, chairman of Sinopec, issued a public apology Saturday morning, according to a company statement. He said that Sinopec will collaborate with a State Council investigation group. "We will investigate the incident with responsibility and give timely reports," another Sinopec statement said. The Qingdao Environmental Protection Bureau said barriers had been set up to contain the oil as it spread into the sea, but that a mixture of gas and oil from a storm sewer exploded and caught fire over the sea. More than 3,000 square meters (32,000 square feet) of sea surface was contaminated, the city government said.

Authorities said the oil had seeped into underground utility pipes, which could have been a factor in the blasts, but they did not elaborate. They assured the public that the explosions did not affect any petrochemical plant or military facilities in the seaside district and that air quality remained good after the disaster.



Chinese rescuers search for survivors after an oil pipeline exploded, ripping roads apart, turning cars over and sending thick black smoke billowing over the city

**Congratulations
to
Robert Langton
who is now a full
Member**

AIDGC 2013 Conference

The papers are
now loaded onto
the Members'
Only Pages of
the AIDGC
website

[http://www.aidgc.org.
au/members/technical
-papers/2013-papers](http://www.aidgc.org.au/members/technical-papers/2013-papers)



This is what a
chemical plant
explosion did to a car:
picture from Facebook

About 18,000 residents have been evacuated in the wake of the blasts, and power was restored to all except two residential neighborhoods, authorities said.

Of the 136 people hospitalized, 10 remained in critical condition, the city government said.

The Beijing News cited a resident surnamed Gao, who works in logistics, as saying he was driving past Qingdao's Huangdao district when he felt the force of the blasts, and then realized the ground in front of him had fractured. The air was pungent, many cars on both sides of the road were overturned and there was dark smoke rising in the distance, he said. "It felt like an earthquake, and I was dumbstruck," Gao said, adding that there was chaos on the street as people ran, panicking, in all directions. Authorities ruled out terrorism but the incident remained under investigation, it said. President Xi Jinping urged local officials to go all out in finding missing people, treating the injured and finding the cause of the accident, state TV broadcaster CCTV said.

Source: <http://www.newstimes.com/business/energy/article/China-company-sorry-for-oil-blasts-that-kill-47-5000758.php>

Workplace Dangers that Kill Thousands

It is interesting to read this extensive article by Randy Lee Loftis in the Dallas News. It is a criticism of the U.S. Occupational Health and Safety Administration; the dangers of cleaning tanks, touches on the West Fertilizer catastrophe....

<http://www.dallasnews.com/investigations/20131123-osh-a-no-match-for-workplace-dangers-that-kill-thousands.ece>

About OSHA

The Occupational Safety and Health Administration is a federal agency that sets and enforces workplace safety rules. Some states, but not Texas, also have their own worker-safety agencies.

OSHA must be notified when workers are killed or seriously injured on the job. The agency recently proposed requiring companies with at least 250 employees to report all workplace injuries, regardless of severity. Even small companies in certain dangerous industries would be required to report all injuries under the draft proposal.

BY THE NUMBERS

2,000-2,200: Inspectors working directly, or indirectly through the states, for OSHA

8 million: Workplaces regulated by OSHA

40,961: Inspections by OSHA in 2012

4,383: People killed on the job in 2012

RUSSIAN ROAD BURSTS LIKE A BUBBLE

The footage
shot in
Yekaterinburg
east of Moscow
shows the
asphalt on the
city street rise
and crack
suddenly...

<http://news.ninensn.com.au/world/2013/11/26/06/45/russian-road-bursts-like-a-bubble>

Emergency vehicles at the Shell refinery in Geelong this morning. Picture: Daren Apps *Source:* HeraldSun



Chlorine Dioxide Fumes from Steel Mill

Nineteen people at Nucor-Yamato Steel, Arkansas, were exposed to chlorine dioxide, a chemical used to control bacteria in water treatment systems. “With chlorine gas, one of the big concerns is going to be respiratory, which is your breathing. So, we were watching for symptoms of swelling in the nose or throat. And then also swelling within the lungs”. The Fire Department set up a decontamination tent outside the hospital’s emergency room. The steel mill is still up and running, but the equipment involved in the chlorine dioxide leak has been taken out of service.

Video and story: <http://wreg.com/2013/11/18/chlorine-dioxide-fumes-send-19-to-blytheville-hospital-sunday-morning/>

Australia Issues Chemicals Business Checklist

If you’re starting or running a business that deals with chemicals or plastics, the new Chemicals Business Checklist can help you navigate your requirements and ensure your business is safe, sustainable and compliant.

The checklist is useful for anyone working in the chemicals and plastics industry including those who import, manufacture, use, handle, transport or dispose chemicals.

The checklist includes:

- a series of questions to help guide you through many of the issues you need to consider when operating your chemical business
- a contact list to direct you to the relevant regulatory body or government agency.

The checklist also covers a range of topics, including:

- understanding chemical products
- manufacturing, importing and exporting chemical products
- labelling and packaging requirements
- work health and safety requirements
- transporting chemical products
- disposing of chemical waste
- chemicals of security concern.

Take a look on the Department of Industry’s website.

<http://www.industry.gov.au/industry/chemicalsandplastics/RelatedLinks/Documents/ChemicalsBusinessChecklist.pdf>

Fuel Leak at Shell’s Corio Refinery

The facility was locked down after firefighters were alerted to the uncontrolled leak in the refinery’s catalytic cracking unit. Read more: <http://www.heraldsun.com.au/news/victoria/crews-contain-fuel-leak-at-shell-refinery-in-corio/story-fni0fit3-1226763989247>



Six Dead in Gas Leak at Spanish Coalmine

A gas leak at a coalmine in northwestern Spain killed six men and injured five in the country's deadliest mining accident in nearly two decades, officials said.

"There seems to have been a leak of methane gas. The mine is very treacherous."

The gas leak happened so quickly that the miners did not have time to put their protective masks on, said Jose Antonio Colinas, who represents miners at the local branch of the UGT trade union. "They really did not have time to react, the atmosphere was invaded by methane," he told reporters at the scene.

It is the worst accident at a Spanish mine since 14 miners were killed on August 31, 1995, due to a methane explosion at a coalmine near Mieres in the northern province of Asturias.

Spain's coal mining sector has been contracting for decades, with a reduction in government mining subsidies hastening the closure of unprofitable mines. Around 40 coalmines are still in operation, mainly in the north of the country, employing some 8,000 miners.

Photo and source: Channel 7 News

Gas Chamber Explodes at Indian Steel Plant

Eleven workers at Tata Steel's plant at Jamshedpur, West Singhbhum, were injured when a gas-holding chamber exploded. District officials said the chamber was 55 meters in diameter and 70 meters in height. "The LD-2 chamber that had a mix of carbon monoxide, carbon dioxide, nitrogen exploded and the loud sound caused a panic among workers. A fire broke out and was extinguished. Of 11 who were injured, 10 have splinter injuries and one worker may have inhaled the gases. I have ordered an inquiry," said West Singhbhum District Collector Amitabh Kaushal.

Tata Steel's 10-million-tonne plant at Jamshedpur is one of the largest in the country. "Tata Steel has a better record at maintaining at its equipment and factories than most companies in the country. The company holds regular training sessions for its labourers as well. The holder caught fire and exploded.

If this had been an instance of gas leak, this could have become a second gas tragedy like Bhopal. It needs to be looked into whether maintenance was as per requirements or not," said Samit Carr, an activist with the Occupational Safety and Health Association of Jharkhand.

Source: The Hindu



Photo:
www.telugutimes.net



Board of
Professional Engineers
Queensland Government

Board of Professional Engineers Queensland Government

Their November Newsletter has been loaded onto the Members' Only Pages on the AIDGC website and contains important information, especially for those practicing in Queensland, including: Direct Supervision Demystified, Elements of a Professional Engineering Service, Complaints, The Register and Case Updates. Goto (the end of the opening page)
http://aidgc.org.au/members_page

Victorian Factory Solvent Theft

Police fear hundreds of litres of solvent stolen from an unnamed factory in Cheltenham, south-east of Melbourne, could be marketed as GHB and sold to schoolies.

The Herald Sun reports that police are "baffled" as to how the theft was managed, and that they believe several 200-litre barrels of the solvent were stolen.

They are also uncertain of the exact time of the robbery, only that it happened sometime between November 8 and November 12.

"Of particular concern is that this industrial solvent will be marketed as GHB, which in itself is dangerous," Acting inspector Tim Day said, according to The Age. "This particular solvent could be lethal. If this industrial solvent is ingested there may be a delay of about 15 to 20 minutes before any effect is felt.

"Our fear is that another dose may be ingested, causing a rapid overdose."

Kingston CIU are investigating whether or not the theft was an inside job, and whether or not bikie gangs were involved.

Source: Manufacturers Monthly

ICE (Institution of Civil Engineers) and Costain Health and Safety Lecture 2013 Process safety – Do they mean us?

An interesting lecture by Judith Hackitt CBE HSE Chair

".....The theme of tonight's event is learning from other industries. You don't have to look too far to other sectors to see that they have learned some very hard lessons about the need to address personal safety and what they call process safety. Major hazards sites in the chemical and oil and gas sectors have prided themselves on their outstanding performance in personal safety for years. They have encouraged reporting of near misses, investigating many near misses and very minor injuries in depth to understand the causes. Behavioural safety programmes are embedded in their thinking. But the harsh reality is, that holding the handrails, wearing ppe, and avoiding slips and trips onsite may well be successful in driving down injury rates, but it will do very little to address issues of process safety – and it is process safety issues that lead to disasters like Buncefield, Texas City, Macondo and many more....."

To read the full lecture goto:

<http://www.hse.gov.uk/aboutus/speeches/transcripts/hackitt191113.htm?eban=govdel-chair&cr=22-Nov-2013>

Corporate Members

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

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OSHA Citations: Texas Fertilizer Plant

OSHA has issued 27 Serious citations to Adair Grain, Inc. dba West Fertilizer Co. totaling \$118,300.

Citations issued were:

- 1910.109 - Explosives and blasting agents
- 1910.111 - Storage and handling of anhydrous ammonia
- 1910.120 - Hazardous waste operations and emergency response
- 1910.134 - Respiratory Protection
- 1910.146 - Permit-required confined spaces
- 1910.147 - The control of hazardous energy (lockout/tagout)
- 1910.157 - Portable fire extinguishers
- 1910.178 - Powered industrial trucks
- 1910.303 - General
- 1910.1200 - Hazard Communication

Here is a pdf file of the citations:

<http://www.safteng.net/images/stories/PDF/osha-west-fertilizer.pdf>

OSHA Cites Aerosol Paint Plant after Explosion and Fire Injures 3 Workers

Fox Valley Systems Inc. has been cited for multiple safety violations following an explosion and fire that resulted in serious injuries to three employees on March 6 at the Cary plant. The U.S. Department of Labor's Occupational Safety and Health Administration cited the company for 26 safety violations, including two wilful violations where locked doors impeded exit routes and snow blocked exits, slowing employees from exiting the plant quickly.

OSHA proposed penalties of \$262,000 and placed the aerosol paint manufacturer in its Severe Violator Enforcement Program.

Flammable vapors ignited in the production facility, resulting in an explosion and fire that caused extensive damage to the building and the interconnected aerosol-propellant charging rooms. Multiple violations of OSHA's process safety management standards for facilities that use highly hazardous chemicals were found at the facility. Source:

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=24741

What to do? Gas Tank Fire

<http://www.youtube.com/watch?v=b89x8CAS6xU>

Fire and Explosion on Gulf of Mexico Platform: Panel Investigation Report

The Bureau of Safety and Environmental Enforcement (BSEE) has released the panel investigation report into the November 16, 2012 HOTWORK explosion and fire that occurred on an offshore platform. The explosion and fire resulted in the tragic deaths of three (3) workers, serious injuries to others, and the discharge of pollutants into the Gulf of Mexico. The investigation panel found these deaths were caused by a number of decisions, actions, and failures by the operator of the platform and contractors retained by the operator while conducting construction operations. The investigation found that the explosion and fire occurred when hydrocarbon vapors ignited while a contractor was welding on the incoming pipe segment to the wet oil tank. The ignition started a chain reaction that caused the wet oil tank and two connected dry oil tanks to explode. These explosions caused the three (3) tanks to separate at their bases, launching the wet oil tank and the first dry oil tank into the Gulf of Mexico and blowing the second dry oil tank into the air. The second dry oil tank then struck the platform crane and landed back on the WD 32 E platform. The hydrocarbons in all three of the tanks were released onto the platform and into the Gulf of Mexico. The hydrocarbons on the platform subsequently ignited, starting a fire on the platform. The report concludes that BSEE safety regulations were not followed, and accordingly BSEE will proceed with appropriate enforcement actions. And there's more...

http://www.bsee.gov/uploadedFiles/BSEE/Enforcement/Accidents_and_Incidents/Panel_Investigation_Reports/Final%20BSEE%20Black%20EIk%20report.pdf

Free Standards Guide - Dangerous Goods

This document provides information on Standards and other industry specific information that may be of interest to anyone working with different types of dangerous goods, including manufacturers, importers, suppliers and users. The publications outlined in this guide cover requirements for dangerous goods transported by road and rail.

To download your free copy of this guide and more visit

<http://www.saiglobal.com/guides>

Do you need online access to the Australian Dangerous Goods Code (ADGC) and all the referenced Australian Standards?

Register for a free trial today at

<http://www.saiglobal.com/Information/Standards/Collections/ADGC-Standards/>

Resource Safety Matters

published by the WA
Department of
Mines and Petroleum
is available for
download at

<http://www.dmp.wa.gov.au/18848.aspx#18851>

or subscribe for a
free hard copy

<http://www.dmp.wa.gov.au/18848.aspx#7306>



Photo: Mining Australia

An Inconvenient Cost

Injuries and unsafe practices pose huge costs to the mining industry, with New South Wales mining businesses spending \$24,791,000 on lost time injuries alone. On top of this, the Australian mining industry spends \$1.5 billion a year on rehabilitation, waste and environmental management.

With so much at stake, environmental and safety repercussions could cripple businesses who chose to ignore them. This free guide, from Cincom, outlines the key challenges for the mining sector and how an effective EHS Management system can help to mitigate the risks. To access this whitepaper, goto:

<http://www.safetowork.com.au/resources/whitepapers/existing/an-inconvenient-cost>

Top 5 Safety Risks in Mining

Mining can be a dangerous business, and throughout history there have been too many accidents, lives lost, and limbs severed. This whitepaper is a tool to help refresh the focus of those responsible for mine-site safety. To access this whitepaper, goto:

<http://www.safetowork.com.au/resources/whitepapers/existing/top-5-safety-risks-in-mining>

W.A. Mine Closure Planning up for Review

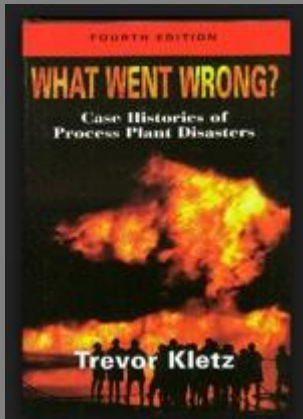
Submissions are now being called as part of a review of guidelines that aim to ensure Western Australian mines can be closed, decommissioned and rehabilitated in an ecologically sustainable way.

There are a number of issues that continue to challenge effective mine closure. This challenge includes issues such as acid and metalliferous drainage, mine pit lakes and the successful re-establishment of recalcitrant species.

[For more information, including access to feedback forms, go to www.dmp.wa.gov.au/mineclosure](http://www.dmp.wa.gov.au/mineclosure)

Mining Health and Safety Tips

Coal dust: One of the most common causes of concern when working in a mine is dust inhalation, and more specifically, coal dust. The ongoing inhalation of coal dust can cause what is colloquially known as 'miner's lung' or 'black lung'. Miner's lung is a form of the occupational lung disease group pneumoconiosis. It varies in severity, but symptoms include shortness of breath and scarring of lung tissue, which can cause ongoing respiratory issues.



Dr. Trevor Kletz, process safety expert and author, passed away on October 31, 2013.

He was a prolific author on the topic of accidents and chemical safety (process safety) based on his experience running hazardous process while he worked at ICI.

He was a Fellow of the Royal Academy of Engineers, the Royal Society of Chemistry, the Institution of Chemical Engineers, and the American Institute of Chemical Engineers. In 1997, he was awarded The Most Excellent Order of the British Empire for services to industrial safety.

Noise: Mines are noisy places to work. There is constant drilling and heavy machinery roaming around, so naturally your ears are potentially going to suffer. It can be easy for you to mentally get used to loud noises, but that doesn't mean that damage isn't still being done. Many people don't notice the damage to their hearing until long after they were first exposed to the noisy environment, as most damage occurs very slowly. Over-exposure to excessive noise can result in tinnitus (ringing in the ears), sleep disturbances, concentration problems and even permanent hearing loss.

Whole body vibration: Whole body vibration (WBV) is a slow forming physical hazard that occurs in mining workers and other occupations that work with heavy machinery. In the mining environment, WBV can be caused either by spending a lot of time sitting on machinery, which is most of the time in mining extraction, or by standing e.g. working on jumbo operators. Some forms of vibration are ok, but they become dangerous when they involve uneven surfaces, vehicle activity such as ripping versus pushing material in a bulldozer, and engine vibrations. Symptoms of WBV include musculoskeletal disorders, reproductive damage in females, vision impairment, digestive problems and cardiovascular changes.

UV Exposure: By now, most people have had the dangers of UV exposure drilled into them. Over exposure can put you at risk of skin cancer, of which Australia has the highest rate in the world. Not only can UV rays cause melanomas to form, but they can cause serious damage to your eyes if you are not wearing protective eye wear. In the short-term, overexposure to the sun can cause dehydration, headaches and nausea. Mine workers often spend whole days out in the baking hot sun, so are naturally at a very high risk of developing cancer and eye problems if they are not adequately protected.

Musculoskeletal disorders: Musculoskeletal disorders refer to any problems affecting your bones, muscles, blood vessels and nerves. Mine workers are exposed to a variety of potential health risks that fall under this broad category. While musculoskeletal damage can occur due to a trip, fall or heavy lift, the more serious ones occur slowly over time. This could be due to ongoing heavy lifting or repetitive strains.

Thermal stress: A common health risk that miners face is thermal – or heat – stress. Mining environments are often very hot and humid, particularly those in outback Australia, which over time can cause thermal stress in workers. Overexposure to heat and humidity can cause the body to become fatigued and distressed. This can result in heat stroke or more serious ongoing health problems.

Chemical hazards: When working in a mine it is likely you will be exposed to harmful chemicals. As an example, the most common group of chemicals that cause concern in a coal mining environment are polymeric chemicals. Regardless of the chemicals you work in close proximity to, appropriate safety wear and precautions need to be taken to minimise your body's exposure to them. Risks include chemical burns, respiratory problems and poisoning.

This article by Megan Clark originally appeared in I Think Mining. Megan has been researching mining medicine for years. She is especially interested into lung and skin diseases that can be developed as a consequence of long-term exposure to mining environment. This issue is primarily present in places with mining surrounding and it is not only environmental issue, but rather a health problem. One of the best known health issues related to mines is Pneumoconiosis which can be developed by inhaling mine dust. The health risks of working in a mining environment are varied, ranging from dust inhalation through to falls and musculoskeletal disorders. Understanding and being aware of your environment is the first step to preventing illness or injury in the workplace. Here is an outline of just some of the more common health risks to look out for if you are working in a mining environment. Contact Megan at megan1clark9@yahoo.com if you would like to discuss with her



Plesetsk Cosmodrome. Photo: <http://www.daviddarling.info/en/cyclopedia/P/Plesetsk.html>



Three Aerojet Rocketdyne launch boost motors blasted a U.S. National Reconnaissance Office satellite into orbit aboard a Delta IV rocket earlier this year from Vandenberg Air Force Base in Southern California. Photo: Patrick H. Corkery United Launch Alliance

Two Workers Die in Accident at Russian Space Launch Centre

Two workers at Russia's only space centre have died while carrying out routine work cleaning out a propellant tank, defence officials said. Another three servicemen were hospitalized after being exposed to poisonous nitrogen vapors while working in the Plesetsk cosmodrome in the northwestern Arkhangelsk province.

There was no reason given for the delay between the incident and its announcement but sensitive military issues are typically kept highly confidential in Russia, RIA Novosti reported.

A failure to follow safety regulations was cited as the cause of the incident.

Read more: http://www.upi.com/Science_News/2013/11/12/Two-workers-die-in-accident-at-Russian-space-launch-center/UPI-11651384294427/#ixzz2IRS4CDty

Aerojet Rocketdyne Explosion Injures Worker

Aerojet Rocketdyne said it is preparing a press release to explain what happened Tuesday morning at its Rancho Cordova plant that caused a loud explosion and reportedly injured an employee.

Rancho Cordova is the company's headquarters as well as a manufacturing and testing center for the rocket motor maker.

Much of what Aerojet designs and builds travels at supersonic speed, burns rapidly or explodes.

Local television news reported this morning that fire department personnel had confirmed an injury related to an explosion in an Aerojet building.

Aerojet rocket motors help fire payloads into orbit, launch ballistic missiles and move craft in space.

Source: Sacramento Business Journal

Lithium Batteries: Revision to the UN Manual of Tests and Criteria

Amendment 1 to the third revised edition of the Manual.

The recommendations in the Manual of Tests and Criteria supplement the "Recommendations on the Transport of Dangerous Goods" and the Model Regulations annexed thereto.

The third revised edition of the Manual of Tests and Criteria results from the decisions of the United Nations Committee of Experts on the Transport of Dangerous Goods up to its twentieth (1998) session.

Corrections to the third revised edition are included in Part I of this publication.

The amendments contained in Part II have been adopted by the Committee at its twenty-first session in 2000 (refer to ST/SG/AC.10/27/Add.2). They concern new provisions for the classification criteria and testing procedures for lithium batteries.

Download the .pdf:

http://www.unece.org/fileadmin/DAM/trans/danger/publi/manual/Rev3_Amend1/ST-SG-AC10-11-Rev3-Amend1e.pdf

Japan Recycling Plant Blast

An explosion at an oil-recycling plant in Noda, Chiba Prefecture, has left two workers dead and 18 people injured, two seriously. The blast blew the roof off the plant, knocked the walls down and broke windows of nearby factories and homes. The plant was operated by Ever Clean, a recycled oil producer.

According to local police and other sources, white smoke billowed up while four workers inside the plant were engaged in work to refine used engine oil. A tank exploded despite an emergency shutdown of machinery used in the operation.

Two workers—Kenji Iida, 50, and Kazuo Masuda, 52—died after suffering burns over their entire bodies. A fire caused by the blast was extinguished about one hour later.

Source: The Japan News

NDK Crystal Inc. Explosion with Offsite Fatality: Final CSB Report & Video

<http://www.csb.gov/ndk-crystal-inc-explosion-with-offsite-fatality/>



Gutted: An oil recycling plant devastated by an explosion Friday is seen in this aerial photo taken in Noda, Chiba Prefecture, on Saturday morning | KYODO



Environment Protection Authority Tests for Toxic Chemicals in Hillsdale Park Botched

The NSW government laboratory used by the Environment Protection Authority to test the levels of toxic chemicals and metals around a Hillsdale park area, made a series of embarrassing bungles that skewed the official results.

An investigation by Fairfax Media has uncovered the trail of errors by the Office of Environment and Heritage's laboratory, which included misinterpreting the levels of metal found in the soil by "100-fold".

The discovery comes after NSW Chief Scientist Mary O'Kane chose Emeritus Professor Chris Fells, AM, to scrutinise the EPA's methodology and analysis in concluding that toxic metals from the park and the verges of homes were below health investigation levels.

Controversy flared earlier this year when concerned residents engaged their own expert, Andrew Helps, from Hg Recoveries, a company that is part of the United Nations Environment Programme's Global Mercury Partnership, to carry out some testing for potential off-site contamination around the Orica chemical company's Botany site.

Mr Helps reported significant levels of a man-made organochlorine and heavy metals, including mercury, sparking a flurry of testing by the EPA on the front verges of homes.

The EPA did not release the full results and told residents they were below the residential health investigation levels. But residents obtained a copy, which was given to Mr Helps and the National Toxics Network, and their assessments disagreed with the EPA.

Documents obtained by Fairfax Media under freedom of information laws revealed the trail of laboratory errors, as well as emails that also showed the authority suddenly switched the health investigation levels it was using to compare the soil results. The most stringent residential level was dropped in favour of the weaker recreational level after senior managers were told the toxic metals exceeding the residential levels would then mostly "disappear".

Emails also show that right from the start, when the EPA was assessing the results, it was doing so against residential levels, in one case warning "we'll need to be cautious ... PCB (chemical) detection limits seem to be too high to compare with residential land-use scenarios".

The national laboratory accreditation body, NATA, is now reviewing the bungles.

Source: SMH, Natalie O'Brien



Denied misleading the committee: EPA chairman Barry Buffier. Photo: AFR

If you have any parts that might be useful or of interest to Members they would be much appreciated! Please forward to: robhogan@tpg.com.au

Recycling Company under Investigation by Environment Protection Authority

Australia's largest tyre-recycling company has abandoned thousands of tyres at its depots around the country and is now under investigation by the NSW Environment Protection Authority (EPA). Steve Beaman, the EPA's director of waste and resource recovery, confirmed that Carbon Polymers was in the State Government's sights. "The EPA is currently investigating Carbon Polymers Pty Ltd," he said. "We take the allegations concerning Carbon Polymers Pty Ltd very seriously and do not want to jeopardise our investigations by commenting any further at this stage." Source: ABC News, Linton Besser and Alex McDonald

The NSW Environment Protection Authority (EPA) issued Carbon Polymers Pty Ltd with a clean-up notice following an EPA investigation of community complaints regarding improper storage and disposal of waste tyres and a fire incident at a site in Woodpark Rd, Smithfield. The clean-up notice and penalties issued by the NSW Environment Protection Authority (EPA) to Carbon Polymers Pty Ltd are available <http://www.epa.nsw.gov.au/publicregister/index.htm>

Burning Rubber: The Deadly Dumps

A couple of hot Sundays ago, as a grassfire lit by a discarded cigarette incinerated 47 cars in an Olympic Park car park in central Sydney, a blaze with a quite different threat was sparking 20 kilometres to the west in Smithfield.

There, electric wires were shorting amid fierce wind gusts and 34-degree heat, setting a pole alight and sending flames into an industrial site on Woodland Park Road. The site, which Carbon Polymers lists as its principal office and factory, is in reality largely abandoned, serving mostly as a dump for thousands of disused car and truck tyres.

Carbon Polymers could easily have added to the 256 blazes involving tyres that NSW Fire & Rescue has had to battle over the past five years, at the surprising rate of one a week. That tally includes a major inferno in Chipping Norton the following Sunday that burned for more than a day, casting a toxic pall over the south-western Sydney suburb and leaving a major oil slick.

Unlicensed storage and disposal of tyres pose a potential health threat. Dave West, National Policy Director for Boomerang Alliance takes a tour of tyre storage facilities. Read more and see the Video: <http://www.smh.com.au/environment/burning-rubber-the-deadly-dumps-20131101-2ws8e.html#ixzz2jQzrhvus>



Firefighters battle a fire at the AL Solutions plant in New Cumberland, W.Va., on Dec. 9, 2010. Photo AP

Hancock Plant Blaze – U.S.A.

CSB Drops Combustible Dust Investigation

Two years ago, from AL Solutions, a small metals recycling plant along the Ohio River in New Cumberland, witnesses heard a loud thud and metal hitting the floor.

An explosion ripped through the building. Flames shot in all directions. Two Fish brothers, 39 and 38 years old, died inside from heat and smoke inside the building.

And now, the federal Chemical Safety Board is on the verge of dropping its investigation into the AL Solutions fire. Agency officials cite budget and staffing constraints, and say completing the probe would likely not provide much new information about the dangers of combustible dust.

Read the full story:

<http://www.wvgazette.com/News/watchdog/201212080037>

Safety Alert - Fitting Automotive LPG Vessels to Forklifts: WorkCover NSW

This safety alert provides advice on the danger involved in fitting forklifts with automotive LPG vessels.



<http://www.workcover.nsw.gov.au/formspublications/publications/Documents/automotive-lpg-forklifts-alert-1169.pdf>

California Chemical Plant Leak

About 70 people were taken ill after a sulphuric acid leak at a chemical company in California - Los Angeles County Fire Department officials said.

People in the Carson area complained of throat and nose irritation and vomiting after being exposed to an "apparent sulphuric acid release in the air from a neighbouring business," Los Angeles County Fire Department spokesman Robert Diaz said.

Thirteen people were treated at local hospitals and later released, Fire Department official Phil Ulloa said. Others were treated at the scene. Ulloa said the leak was caused by a scrubber machine malfunctioning at the Solvay chemical plant.

It was not immediately clear if there were any workers at the Solvay plant at the time of the leak.

Diaz said any threat to public safety "had been mitigated." Carson is a city of about 92,000 in Los Angeles County, California.

Source: Reuters: Eric M. Johnson; Editing by Janet Lawrence

NICNAS Chemical Gazette for November, 2013 is now available:

<http://www.nicnas.gov.au/communications/publications/publication/s/chemical-gazette/chemical-gazette-november-2013>

Newer Fuels and Storage Tank Corrosion

The Stell Tank Institute presents *Steel Facts* informational flyers. These handy pages present facts and figures about the benefits of using steel, researched by industry experts.

Over the past five years there have been increasing reports of compatibility and corrosion in underground tank systems storing newer fuels. **Steel Facts No. 6 Newer Fuels and Storage Tank Corrosion** assesses the research to date and emphasizes the importance of tank maintenance, regardless of tank material.

All titles in the Steel Fact Series are downloadable:

- **Newer Fuels and Storage Tank Corrosion**
- **Sustainable Steel**
- **The Strength of Steel**
- **Choose Steel for Lifetime Value**
- **Steel Tanks: Compatible with All Biofuel Blends**
- **Cathodic Protected Tank Inspection**

Goto:

http://www.steeltank.com/About/MediaPublicInformation/tabid/490/Agg1332_SelectTab/2/Default.aspx?utm_source=TANK+TALK+OCT+2013+2&utm_campaign=Tank+Talk+NOVEMBER++2013&utm_medium=email

Belgium: 2 Dead in Refinery Blast

Two subcontractors working for French oil company Total have been killed in an explosion at a refinery in the Belgian city of Antwerp. The company said the blast happened in a steam system of a unit producing petrol. To read more:

<http://www.euronews.com/2013/11/19/belgium-two-dead-in-total-oil-refinery-blast-in-antwerp/>

Dust Hazards in Assay Laboratories

W.A. Department of Commerce Bulletin

http://www.commerce.wa.gov.au/WorkSafe/PDF/Bulletins/Dust_hazards_in_assay_labs.pdf

One Seriously Hurt in Methanol Explosion

The employee was loading fuel into a tanker in Pennsylvania when the explosion occurred. "The whole wall of the building suddenly blew off," James Brewer, who was standing nearby, said. The east end of the building was engulfed in flames within seconds. Methanol spewed across the rear parking lot and down the north ditchline.

Watch the video, see the pictures and read the full story:

<http://www.t-g.com/story/2024962.html>



This month my thanks for their contribution goes to Don Johnson, Lewis Nottidge, Frank Mendham, Peter Hunt and Scott Young.



T-G Photo by David Melson

USCSB: Increased Sawmill Dust Explosion Hazard in Winter

Industrial incident investigations by the United States Chemical Safety Board found that seven in eight fatal combustible dust explosions from 1995 to 2009 occurred during cold winter months when these weather conditions were most prominent, according to a hazard alert issued by British Columbia occupational safety agency WorkSafeBC.

One of the two recent fatal sawmill incidents in British Columbia occurred in the middle of winter, and the second occurred in early spring.

A number of changes can commonly occur in wood processing facilities as the weather becomes colder:

- control measures and clean-up practices that rely on the use of water may not be suitable or effective
- openings such as bay doors and wall dampers may be closed up increasing the degree of enclosure and reducing natural ventilation or make up air
- ventilation may be reduced or shut down to conserve heat
- re-circulation of air from exhaust systems may also increase
- portable heating units potentially introduce additional ignition sources into work spaces.

Source: HazardEx

NSW Illegal Waste Disposal Act 2013

The *Protection of the Environment Operations Amendment (Illegal Waste Disposal) Act 2013* amends the *Protection of the Environment Operations Act 1997* to more effectively deal with illegal waste disposal and fraud in the waste sector. The amendments:

<http://www.epa.nsw.gov.au/warr/illwastedisact.htm>

Pupils Collapse after Inhaling Chemical Waste

Twenty five pupils of Ogba Junior Secondary School, Lagos, collapsed after inhaling chemical waste allegedly discharged into the drain by Bizcircuit Photo Laboratory, situated at the Ogba Shopping Plaza, Lagos.

Liquid chemicals with offensive and choking odour were stored and used for production in the photo lab on the first floor of the shopping complex. State Director of Fire and Safety Services Rasaq Fadipe said his men worked with other agencies to curb the spread of the chemical fumes. Source: Miriam Ekene-Okoro, <http://thenationonlineng.net>



Removal, Destruction Syria's Chemical Arsenal

The most dangerous components of Syria's chemical weapons stockpile will be shipped out of that country by the end of the year, and the entire arsenal will be completely destroyed by mid-2014, according to a plan adopted by the international agency overseeing the mission.

"This next phase will be the most challenging, and its timely execution will require the existence of a secure environment for the verification and transport of chemical weapons," says Ahmet Üzümcü, director-general of the Organisation for the Prohibition of Chemical Weapons (OPCW).

Under the plan, the "most critical" chemicals are to be removed from Syria by Dec. 31, with the rest of the 1,300-metric-ton arsenal to be shipped outside the country by early-February 2014.

Where the weapons will be destroyed remains an open question. Destroying the stockpile at sea is a possible alternative to finding a country willing to host the destruction, OPCW says. Several countries have refused to accept the chemicals.

OPCW has divulged little information about the contents of Syria's stockpile. Paul F. Walker, a chemical weapons expert at Green Cross International, says it consists mostly of precursor chemicals for producing nerve agents, such as sarin and VX, and different types of mustard gas.

"The only chemicals left behind will be about 150 metric tons of isopropanol, which will be diluted with water in Syria," Walker tells C&EN. Isopropyl alcohol, a widely used industrial solvent, is a precursor for sarin. Source: American Chemical Society

Terrifying Moment as Fork Lift Driver is Engulfed in Flames as Propane Tank Explodes....before he walks away alive

<http://www.dailymail.co.uk/news/article-2492798/Man-escapes-propane-tank-explosion-catching-fire.html>

1 Killed in Mississippi Refinery Blast

Authorities are investigating the cause of an explosion and fire at a southern Mississippi refinery Friday that killed one worker. An operator at the Cracking II Processing Unit died after something detonated inside a furnace and sparked a fire.

Goto: <http://www.wvltv.com/news/One-dead-after-refinery-fire-in-Mississippi-232048081.html>

U.S.A. = Top 10 FAQs about OSHA's New GHS Training Requirement

By December, more than five million U.S. businesses must train about 43 million employees on the new label elements and safety data sheets (SDSs) included in OSHA's hazcom standard revisions. OSHA's Hazard Communication Standard is being revised to comply with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). It's the most significant OSHA standard update in years, and your peers have been asking lots of questions. So, here are the top-10 most frequently asked questions about GHS.



- 1. What's the biggest change? The requirements for hazard communication training are mostly the same. It's the details that are different. OSHA has added and updated definitions of the various classifications of hazardous chemicals. Workers should learn the new signal words on labels and SDSs, and the new standardized pictograms.**
- 2. What are the deadlines? By Dec. 1, 2013, companies have to train employees about the new features on labels and SDSs. Up until June 1, 2016, manufacturers and distributors can use old or new style labels and SDSs. After that, they must all be under the new system.**
- 3. What are the new labeling requirements? There are two types of containers. Shipped container labels must have six sections on the labels: identifier, supplier, pictograms, signal words, hazard statements and precautionary information. If employers repackage chemicals into smaller containers for employee use, labels for these containers don't have to be like the shipped containers. Workplace container labels must have enough information on the container to help the employee find the appropriate SDS.**
- 4. How are SDSs changing? SDSs will now be a standard 16-part form, although sections 12 through 15 aren't mandatory because they're outside of OSHA's jurisdiction. While workers should know what each section is about, Section 2, which lists all substance hazards, should probably get the most attention. The material in Section 2 is good basic information to include on workplace container labels.**
- 5. What are the employee training requirements? Employees must learn about the new label elements and the new SDS format, including what's in each section.**
- 6. What's the biggest change for companies that must produce new SDSs for products they manufacture? The biggest change will be the reclassifying of all chemicals.**

- 7. What should we do with the old versions of SDSs, and how long should we keep them? Companies need to keep SDSs for all substances they are using. (Employee medical records are a different story, however. They must be kept much longer, even after the company is no longer using the chemical.) Right now, you're likely seeing a hodgepodge of labels. Some look like the old style, some like the new and some are even in between. Employers are not responsible for updating older shipped container labels. They are responsible for updating workplace containers if new hazards are identified.**
- 8. Does electronic management of SDSs change? The basic requirements stay the same. Of course, companies will have to update the new SDSs in their electronic management programs as they receive them. There must be no barrier to access for employees to these electronic records. Even if they use an electronic storage system, employers must be able to produce SDSs for all chemicals they're using in a reasonable amount of time if asked by OSHA. Bonus question: What's a reasonable amount of time? Generally, OSHA inspectors expect employers to be able to produce SDSs within 20 minutes.**
- 9. Are other OSHA standards affected by the changes in the hazcom standard? Yes, there are implications for some standards, such as ones which address specific hazardous materials. Example: OSHA's lead standard.**
- 10. What is Canada doing about adopting GHS? Canada has set a June 1, 2015 deadline for adopting GHS. It plans to pre-publish its plans in Spring 2014. So far it appears there will be a lot of similarities to the U.S. version. That is one of the benefits of GHS: Labels and SDSs will be more standardized after adoption across the world.**

(Based on a presentation by Glenn Trout, President, and Chuck Haling, VP Sales, MSDSONline, at the National Safety Council's 2013 Congress & Expo in Chicago)

Amendments Being Considered to Work Health and Safety Laws: Queensland

The Queensland Government has been reviewing work health and safety laws in Queensland and giving businesses an opportunity to provide feedback on those which came into effect last year.

Business representatives have generally supported the laws but considered some had a significant compliance burden for industry.

Read all:

http://www.deir.qld.gov.au/workplace/publications/safe/oct13/whsla/ws/index.htm#.UpF-cichq_g

Latest in the 2004 ICL Plastics Saga

The company held responsible for a devastating factory explosion has failed in its bid to pass on some of the liability to its liquefied petroleum gas supplier. What action should companies take if they have underground LPG pipework?

The explosion On May 11, 2004, a massive explosion ripped through the ICL Plastics factory in Glasgow. Nine people were killed, and many more were injured in the collapse of the four-story building. On investigation, it was determined that the blast was caused by LPG that had leaked from an underground metal pipe into the factory's basement. The pipe had been installed in the 60s and had been inadequately protected. It was ungalvanized, had no protective covering, and had been backfilled with unsuitable material including a large concrete slab. There was also no sleeve sealing around the pipe where it entered the building. The pipe had corroded over time and developed a large crack. The leaking LPG ran along the line of the pipe and into the basement of the factory.

The prosecution

In August 2007, ICL Plastics Ltd. and ICL Tech Ltd. pleaded guilty to contravening the Health and Safety at Work Act 1974 and were each fined £200,000. Specifically, the charges they pled guilty to were that there had been failures:

To make a suitable and sufficient assessment of the risks to the health and safety of employees while at work in failing to identify that the pipework conveying LPG from the bulk vessel storage to the premises presented a potential hazard and risk

To appoint one or more competent persons to assist in carrying out such risk assessments

To have a proper system of inspection and maintenance in respect to the LPG pipework concerned

To ensure, so far as was reasonably practicable, that the pipework was maintained in a condition that was safe and without risk to employees

HSE inspectors had asked for part of the pipework to be excavated for inspection in 1988, but the request was not acted upon, nor enforced. ICL Plastics explained in its defence that on receipt of a letter from the HSE requiring various actions to improve its LPG installation, it had sought advice from its supplier, Calor. The supplier had suggested that rather than excavate a section of the pipework to determine its condition, it could carry out a pressure test and an inspection of visible parts of the pipe.

A letter from the HSE apparently accepted the proposal.



Nine died and 45 people were seriously injured in the 2004 explosion Photo HSE

The inquiry and beyond

In 2009 there was a public inquiry under the direction of Lord Gill. The subsequent report identified serious weaknesses in the regime for LPG gas safety.

Following the prosecution and inquiry there have been multiple claims for compensation. In a recent case ICL Tech, ICL Plastics, and Stockline Plastics Ltd. sought a contribution from Johnston Oils Ltd. (JO) towards these compensation costs on the basis that JO would have been found liable in damages to the injured parties if they had sued it.

JO had installed a new supply tank in 1998 shortly after it took over the contract to supply LPG to the site. It had carried out leak detection and pressure testing at the time, but had not carried out any further inspections as it was the customers' responsibility to ensure the safety of its own pipework.

The court found that JO had acted reasonably. It was not under any duty "to inquire about the condition of the customer's pipework and to give unsolicited advice to the customer to investigate and maintain it."

Responsibilities

It's clear that organizations that use LPG can't expect to pass on responsibility for their installation to their suppliers. It's been found that many of the estimated 40,000 commercial users of LPG don't understand their responsibilities. In reality they are normally responsible for all of the pipework except for the tank and any pipework leading to the first regulator.

Following the criticism of the Inquiry, the HSE began a survey and inspection programme alongside the UKLPG (the trade association for the LPG industry). As a result, 33,000 surveys have been returned, and risk ratings have been undertaken. Those with buried metallic LPG pipes falling within the "higher risk" category have been asked to replace them with polyethylene by the end of this year. The remainder will need to be replaced by 2015 -- though there's talk that the deadline may be extended due a shortage of capacity within the industry to do the work.

HSE makes it clear that the preferred strategy is for pipework replacement, though an alternative is that duty holders "implement a robust inspection, examination, and maintenance strategy to ensure pipework continuing integrity."

Want to know more? The HSE has issued a "topic inspection pack" used by its inspectors. Details of the high-level plan for pipework replacement have also been published.

http://www.ifsecglobal.com/author.asp?section_id=565&doc_id=561572