



WHAT'S HAPPENING?

March 2012



Updated Standard: AS/NZS 5026:2012 The Storage and Handling of Class 4 Dangerous Goods

This Standard sets out requirements and recommendations for the safe storage and handling of flammable solids, substances liable to spontaneous combustion, and substances that in contact with water emit flammable gases, i.e. dangerous goods that-

**(a) in Australia, are classified as Division 4.1, 4.2 or 4.3 in the Australian Dangerous Goods Code (ADG Code); and
(b) in New Zealand, meet the 4.1, 4.2 or 4.3 classification criteria of the Hazardous Substances and New Organisms Act, 1996, referred to as 'the HSNO Act'.**

The Standard also applies to other dangerous goods that are assigned Division 4.1, 4.2 or 4.3 subsidiary risks by the ADG Code, except where more stringent requirements apply under another relevant Standard or regulation.

<http://www.workcover.nsw.gov.au/formspublications/publications/Documents/concrete-batching-safety-alert-3712.pdf>



**Young father Michael McLoughlin, who died on Tuesday in an explosion in Moranbah, holds his newborn son.
Photo: Daily Mercury**

Queensland Welder Dies

It is believed the 22-year-old man was killed instantly Tuesday morning after welding in an outside area around gas bottles and diesel fumes.

The man was a new father and had recently moved to Moranbah for work. It was the man's second day on the job, at not-for-profit mining service company Tri Q and no other workers were injured in the incident. A Queensland Workplace Health and Safety spokesperson said it is investigating the death.

Source: Daily Mercury

Hospital Emergency Department Evacuated after Chemical Scare

The emergency department at Newcastle's Mater Hospital had to be evacuated overnight after a man who had ingested a dangerous chemical was brought in. Police say the 32 year old man had swallowed the chemical in the science laboratories at Newcastle University. Concerns were raised about the volatility of the chemical and the Fire Brigade's Hazmat unit was called in. Police Inspector Michael Gorman says a number of people who were in contact with the patient had to be decontaminated. "They took steps to isolate the patient, close the emergency department to any more incoming patients and a partial evacuation of the emergency department as carried out until such time as Hazmat was satisfied that the area was safe." The toxicologist was brought in both to treat the male patient but also to liaise with the HAZMAT staff in terms of the air quality and any possible contamination to any persons who had come into contact with the male during the course of the evening," he said.

The 32 year old man died early this morning.

Source: Sydney Morning Herald

Victorian Blast Victim in Serious Condition

A 35-year-old local Yarram man received burns to up to 50 per cent of his body when his house exploded. He suffered severe burns on his face, upper body and legs and was airlifted to Melbourne's Alfred Hospital, where he was placed in an induced coma. As of yesterday morning, he was still in an induced coma with his condition still listed as serious.

CFA fire investigators and detectives from the Arson and Explosions Squad in Melbourne have been investigating the cause of the explosion, which nearly levelled the house and was heard across Yarram. "We believe we've located the origin of the fire, which was the lounge room". A leaky gas bottle is believed to have been the cause of the explosion. "The gas bottles were being kept indoors, which was not unusual (for the occupant)," "However, as far as an ignition source, we are still investigating what may have actually sparked (the fire)."

Source: Gippsland Times



The Emergency Department. Photo: The Daily Telegraph



Thirty firefighters battled the blaze for 45 minutes. Picture: Stephen Harman Herald Sun

OHS Harmonisation: What's Really Different?

The recent OHS Strategy Summit on the Gold Coast highlighted a number of concerns regarding the now in force national OHS harmonisation laws; probably the most significant reform to OHS legislation in the past 30 years. The new model Work Health and Safety Acts (WHS) came into effect on 1 January, 2012, with the exception of four jurisdictions.

Tasmania has essentially passed the Bill, and is now waiting to ratify its start date of 1 January 2013. South Australia is currently debating the Bill, and Victoria and Western Australian are likely to defer implementation until later in the year.

Tracey Browne, Australia Industry Group's manager of national OHS policy and membership services said Ai Group has been debating the laws for the last three years, and believes the outcome has been a set of laws that can work in the industry.

"It is clear the laws do not have to be identical to be harmonised. When the Bill was out for public comment there were many concerns about the number of jurisdictional notes that were in there, allowing the jurisdictions the opportunity to make changes," Browne said.

However, the jurisdictional notes are not about allowing divergence from the laws, she explained.

"Instead, they are there to allow the regulators or the Parliaments to implement these laws within the complex legal systems in which they operate," she said.

Applying the New Laws

Browne said a key factor in making the laws effective is how employers or persons conducting a business or undertaking (PCBUs) adopt the new legislation.

"From Ai Group's perspective, large organisations that operate across multiple jurisdictions have the opportunity to highlight where the issues are, raise them back with the regulators, raise them through Safe Work Australia so we can have them addressed." "It's not actually the courts that will determine whether harmonisation works or not," she said.



**2012 AIDGC
Conference
September 14
ParkRoyal, Sydney**

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Distractions

Browne said the different additions each state has made so far will not be a barrier to harmonisation. "Right from the start, harmonisation was never about identical laws," Browne said. "Part of the issue that we're seeing in the media debate is concerns that if four jurisdictions aren't there yet, and can't be convinced that we're actually going to have harmonised laws, maybe we should just let them all fall over," she said. "There was even a comment made recently that New South Wales was actually the start of the failure of harmonised laws because of the amendment that was put in to allow a much more narrow application for union right to prosecute."

However, Browne believes that from the perspective of what the harmonised laws mean within a workplace, that detail is not as significant as workers and unions might have feared. "That's something that might get applied by the unions at some stage if they want to prosecute a particular employer," she said.

Safety on the Agenda

Konekt principal of health, safety and compensation Nicholas Ward said now is "a time like no other" for workplace health and safety. "We actually are seeing a national debate about Workplace Health & Safety." "If that is the sole outcome of harmonisation then I think the harmonisation project has achieved a great deal already." Ward said he has certainly noticed the paradigm shift in the way employers and officers of organisations have been embracing work health and safety. "And a lot of the impetus has been these laws," he said. "[The laws] have given health and safety managers - who are looking to influence the officers of their organisations - the opportunity to have the discussion in the first place, and to then bring in what the new laws actually mean for those officers," Ward said.

Defined Responsibilities

Ward explained that the new laws make the duties of officers extremely clear, in regards to what they do and what they have to achieve.

"So there's no ability to hide from what their duties are anymore. There's no delegation back to the OHS manager. They are responsible, they know that," Ward said.

HazMat 2012 Melbourne May 9 and 10

Registration Program

<http://a.cdn.fpaa.com.au/events/docs/HZ12%20Rego%20Brochure%20web.pdf>

Speaker Profiles

<http://a.cdn.fpaa.com.au/events/docs/HZ12%20Speaker%20Profiles.pdf>

The 2 GHS workshops on the day before are a great opportunity to train your senior technical managers and specialists.

1/ TOXICOLOGICAL & ECOTOXICOLOGICAL BASIS OF GHS HAZARD CLASSIFICATION

John Frangos (M App Sc. (Toxicology)), Senior Toxicologist, Golder Associates Pty Ltd

2/ GHS AND WHS – A PRACTICAL GUIDE TO HAZARDOUS CHEMICALS
Richard Greenwood, Senior Consultant – Hazardous Chemicals, Noel Arnold & Associates

"They also know that in that context they've got massive increases in penalties and they've just got more skin in the game. So essentially what I have seen is that the engagement of officers has certainly increased," he said.

The Question is...

Safe Work QLD associate director general Barry Leahy said the key question in the whole harmonisation debate is: 'Why do it?' Leahy said the simple answer is that there are just so many different sets of regulations that the situation has become unwieldy. "In a country with a working population of about 10 million people, why on earth do we have nine or 10, or far more than that, sets of regulations around Workplace Health & Safety?" he said. "It just doesn't make sense to me, and particularly when our economy, as it develops, will have more and more national companies with employees in each of the jurisdictions," he said. So, in a sense, "harmonisation is a no brainer," Leahy said.

Source: Angela Welsh, Manufacturers' Monthly

NSW: Letter Shows Pressure to Suspend Work Safety Cases

The NSW state government has been accused of trying to shut down criminal prosecutions against employers charged with breaching workplace safety laws. The government introduced new laws in January that made it harder to prosecute employers for breaches of workplace safety. But the laws were not retrospective, meaning hundreds of cases would still be prosecuted under the old Occupational Health and Safety Act.

An internal government document obtained by the *Herald* says three NSW ministers agreed to ask for legal advice on whether these cases should continue. The letter by the Minister for Resources and Energy, Chris Hartcher, on February 16, to his department, requests "all prosecutions pending under the OH&S Act to be stayed pending the receipt and consideration of the advice of the Crown Solicitor and senior counsel".

It says Mr. Hartcher had the agreement of the Finance Minister, Greg Pearce, and the Attorney-General, Greg Smith.

Last month WorkCover, which prosecutes employers for breaching workplace laws, tried to adjourn 22 cases in the NSW Industrial Relations Commission.



**"All prosecutions pending under the OH&S Act to be stayed pending the receipt and consideration of the advice of the Crown Solicitor and senior counsel" ... Chris Hartcher.
Photo: Dean Osland**

The president of the commission, Justice Roger Boland, refused to adjourn nine of the cases after WorkCover said it was unable to reveal why it was reviewing them. The cases included a death. "I do not understand the need for WorkCover to keep the purpose of the review, and its relevance to the charge that is before the court, secret," he said.

The opposition's acting finance spokesman, Adam Searle, said the document obtained by the *Herald* revealed that senior ministers had "sought to interfere in criminal prosecutions already before the court". "This is an extraordinary intervention that could see employers, who have put their workers at risk, escape prosecution ..." he said. "Governments can seek to change laws for the future, but Ministers should not involve themselves in decisions about whether or not individual companies or persons should be prosecuted," Mr. Searle said.

Mr. Pearce denies he directed WorkCover to conduct the review but said the government asked WorkCover to "consider its prosecutions" in light of a 2009 High Court case in which the Kirk Group challenged the way the Industrial Court of NSW had interpreted the act.

"Importantly, back in 2010 WorkCover, as a result of the Kirk decision and on the advice of senior counsel and with the knowledge of the then minister [Michael] Daley, reviewed all prosecutions before the courts to determine whether any amendments to the charges were required," he said.

Mr. Hartcher said his letter to his department had addressed concerns raised by the Kirk decision and its implications for the mining industry - as opposed to WorkCover. Mr. Pearce said no similar direction was given to WorkCover. "The government has not interfered," Mr. Hartcher said. "All it has done is ask for legal advice."

A Greens MP, David Shoebridge, said the letter showed political interference with the WorkCover authority.

"Politicians should never be in a position to give directions to prosecutors in regards to criminal cases, and work safety matters are no exception," he said.

Read more: <http://www.smh.com.au/nsw/letter-shows-pressure-to-suspend-work-safety-cases-20120316-1valg.html#ixzz1pL8VniSO>

Service Station Australia Magazine

The Autumn 2012 issue is now available. Goto:

http://ssa.org.au/magazine/2012_autumn/index.php

Apple: 2011 Explosions at Chinese plants Caused by Aluminium Dust Company Says it has Required Suppliers to put Anti-Dust Measures into Place

Apple confirmed that explosions last year at Chinese plants of two of its parts suppliers were caused by excessive aluminum dust. In its annual report on its suppliers' efforts in worker safety, labor rights and environmental impact, Apple said the explosions at facilities operated by Hon Hai Precision Industry -- better known by its trade name, Foxconn -- and Pegatron last year were traced to small airborne particles. The Foxconn plant explosion in May 2011 in Chengdu, China, killed four and injured 18 others. A December explosion at a Shanghai factory run by RiTeng Computer Accessory, a subsidiary of Pegatron, injured 59, Apple said. Other reports had put the injured tally at the latter explosion at 61.

Reports at the time of each explosion had identified aluminum dust -- produced while milling and polishing the casings of such Apple products as its iMac, MacBook and iPad -- as the likely culprit.

Interviews with air-quality experts last May after the Foxconn explosion also pointed to combustible dust. Very fine particles of all kinds of materials can trigger an explosion, said Brian Edwards, director of engineering at Atlanta-based Professional Engineering, in an interview at the time. "By creating fine particles or dust powder, you increase the surface area of the material, which with a spark, can cause a rapid exothermic reaction," said Edwards, using a more technical term for an explosion. "That decreases the minimum energy needed for ignition and speeds up the reaction."

Aluminum is more explosive than either sugar or grain dust, Edwards added, talking about two typical causes of dust explosions in the U.S. "You need a perfect storm," Edwards said. "You have to have the right concentrations of dust in the air, you need sufficient oxygen, and you need an ignition source." Edwards speculated that the cause of the Foxconn explosion was aluminum dust that had collected in the



Photo: ComputerWorld

I am grateful for any contributions – this month Peter Hunt contributed the link to the WorkSafe Victoria Alert.

Please email robhogan@tpg.com.au if you have any interesting articles, noticed any opinions or newspaper pars. or anything that could contribute to entertaining and informing our Members.

ductwork that drew off dust from polishing or grinding equipment, which in turn ignited dust in the actual workspace. Such explosions can be massive, he noted. "In a dust explosion, you typically see structural damage," Edwards said.

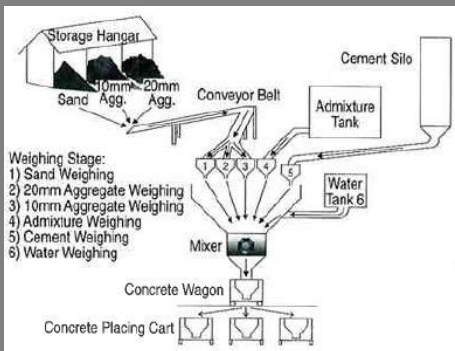
In its report, Apple said that it had worked with external experts to audit all its suppliers that handled aluminum dust, and with one exception, put new measures into place. "We have established new requirements for handling combustible dust throughout our supply chain," said Apple. The company ticked off several action items, including ventilation requirements, regular inspections of ductwork, and banning the use of compressed air for cleaning, a practice that makes more dust airborne. "All suppliers except one have implemented the counter-measures identified by the team of external experts," Apple said. "The one supplier that has not will remain shut down until modifications are in place."

Apple did not identify the laggard.

Source: ComputerWorld, Gregg Keizer

The Apple report can be downloaded from the company's website:

http://images.apple.com/supplierresponsibility/pdf/Apple_SR_2012_Progress_Report.pdf



Concrete Batching: NSW WorkCover Safety Alert

A worker at a batching plant has received serious and permanent injuries following an uncontrolled release of cement dust during a concrete batching operation.

Goto:

<http://www.workcover.nsw.gov.au/formspublications/publications/Documents/concrete-batching-safety-alert-3712.pdf>

WorkSafe Western Australia

Has a number of videos on OHS that are available for viewing online or for purchase. Options include: Hazardous Substances, Asbestos and 'Spot the Hazard'.

Goto:

<http://www.safetyline.wa.gov.au/resources/videos.html>



Photo: Mining Australia

The AIDGC Members' Only Pages of your AIDGC website are constantly being updated, Check out the new links for Members.
<http://www.aidgc.org.au>

Four Exposed to Gas Leaks at Collinsville Q'ld Coal Mine

The Queensland Mines Inspectorate and mining unions are investigating a series of alleged coal gas leaks at the Collinsville mine. Three workers were forced to evacuate from an area undergoing dragline operations after high gas levels were detected. Last month a female truck driver was also exposed to high gas levels, and reported symptoms of gas exposure. A mines inspector and DEEDI representative have already visited the site to uncover the cause of the leaks. According to the DEEDI the Collinsville coal mine's seam is historically known to be prone to emissions, however the CFMEU pointed the finger at management on the site. "(The gas leaks) are from years and years of mismanagement," CFMEU industry safety and health officer Tim Whyte said. "The mines need to have stringent controls in place... at the moment there are only temporary measures. "Humans cannot smell or see the gases... exposure to the gasses can be fatal."

A directive was already in place which required the mine operator - Thiess - to review the coal mine's safety system regarding mitigation of gas related accidents and the heating of exposed seams. At the Hazelwood Power Station a two kilometre coal seam caught fire in 2006. Similarly, Burning Mountain in the Hunter Valley is a coal seam that is believed to have been burning slowly for the last 6000 years.

Thiess confirmed that no one was injured in the gas leak on Friday. The coal mine is a joint venture between Xstrata, Itochu, and Sumitomo.

Source: Cole Latimer, Australian Mining

Storing Gas Cylinders in Vehicles: WorkSafe Victoria Alert

Summary: This Safety Alert provides advice about how to manage the risk of explosion from leaking portable flammable gas cylinders inside work vehicles.

Goto:

<http://www.worksafe.vic.gov.au/wps/wcm/connect/04781b004a84cbb39619de9eba2a8093/Alert+-+Storing+gas+cylinders+in+vehicles.pdf?MOD=AJPERES>



Deadly gas ... the orange oxides of nitrogen gas clouds in open mine fields are a proven health detriment. Photo: Robert Rough

No Warning on Drifting Toxic Fumes

Clouds of toxic gas are regularly blasted out of open-cut coalmines in NSW but the public is not being warned when the "fume" has left mine sites and is heading its way.

The orange oxides of nitrogen gas clouds, sometimes hundreds of metres wide, are produced when explosives fail to properly detonate and can be deadly if inhaled in significant amounts.

Miners are supposed to minimise the gas by ensuring the right balance of explosive components and placement, especially when the ground is wet, which increases the risk. They are also supposed to monitor wind direction and other weather to ensure the gas disperses over the mine site. But the *Herald* found many examples of the gas being produced at mines in NSW and instances when it has drifted away without warnings being issued to nearby residents. On March 2, a motorist needed medical treatment after allegedly driving through the gas on a public road in the Hunter Valley. The NSW Planning Department is investigating the incident.

The gas was suspected of emanating from the Mount Thorley Warkworth mine complex about 15 kilometres south-west of Singleton in the Hunter Valley.

The NSW Environment Protection Authority refused to say whether mines were supposed to have an evacuation plan or alert system for residents or other members of the public in the path of the gas. However, an agency spokeswoman said changes to existing laws would require mines to have such plans in place by September. She said the authority was investigating an unrelated fume incident in New England but declined to provide any details. She said there were laws requiring mines to immediately notify relevant authorities such as the authority, WorkCover, Fire and Rescue and NSW Health when material harm to the environment was caused or threatened.

The Mount Thorley Warkworth general manager of operations, Cam Halfpenny, said the mine was investigating the incident and working with authorities. A mine spokesman said the blast had occurred in the Mount Thorley mine, with the gas going over a stretch of Putty Road, which had been closed to the public, and dissipating above Warkworth mine.

Source: Rory Callinan, Sydney Morning Herald

Dust in the Factory – Still an Explosive Topic

The risk of a dust explosion occurring in a factory is not as remote a possibility as people might think. A dust explosion requires only three things: air, combustible dust and a source of ignition such as an electrical spark or hot surface. Here, we look at the USA regulations governing the sector and how factories can reduce the risk of dust explosions occurring.



Indeed, many companies are potentially at risk here. Why? Because combustible dusts are present in many manufacturing environments. Wood shavings, carbon dust, flour, grain, custard powder, sugar, coffee, tea, animal feed, plastic and aluminium dust are just some examples of highly combustible dusts. The problem is when these combustible dusts are left to gather on hot surfaces in a workplace, such as on an overheated electric motor or fan. This can cause smouldering fires to occur, or can cause an explosion when the dust is kicked up, for example, by a person opening a nearby window.

Dust explosions can have catastrophic consequences because the initial shock wave resulting from the explosion kicks up more dust, which triggers a chain reaction through the plant, often resulting in mass destruction of equipment and buildings, as well as causing possible death or injury to employees.

Therefore, as potential sources of ignition, all electrical equipment installed in these areas, including mixers, filling hoppers, conveyor systems, mills, silos, dust extraction plant, kilns and drying systems, need to be adequately protected and designed to operate under these conditions. Directors, company owners, plant managers and maintenance engineers, in fact anyone who is responsible for the health and safety of employees or for sourcing electrical equipment for hazardous areas, need to be fully aware of the risks of dust explosions. They must also be up to date on relevant European Directives and Standards relating to electrical equipment installed in hazardous areas and the measures that can be taken to eliminate the risk of dust explosions occurring. Therefore, the European Directive for hazardous equipment 94/9/EC pointed out that this was valid in the same way for dust explosion-

protected equipment as well as for gas hazardous areas. Owners of new equipment are governed by the compulsory European directive 1999/92/EC, implemented in the UK as the 'Dangerous Substances and Explosive Atmospheres Regulations 2002' (DSEAR). From 2006, this directive also includes 'old' as well as 'new' equipment. In summary, owners are required to identify the risks of explosion; implement explosion protection measures such as avoiding sources of ignition (secondary explosion protection); define zones in areas at risk from dust explosions; create an explosion protection document; use suitable production equipment; and to create a test plan. The Standards for electrical equipment in areas at risk from dust explosions have seen a few changes in the last few years. EN61241-0 came into effect from 1st July 2007 and came into force on the 1st October 2008. This stricter standard superseded the old standard EN 50 281.

On 16th April 2010, the new version of the standard EN 60079-0:2009 was first published in the Official Journal and came into effect. In this standard, the requirement for explosive dust atmospheres now includes significant changes with respect to the previous edition limited only for explosive dust atmospheres are listed below:

Requirements for explosive dust atmospheres transferred from IEC 61241-0.

Dust groups defined as Group IIIA, IIIB and IIIC.

Equipment protection levels (EPL) introduced.

This new standard will supersede the old existing standard EN 60241-0 on 1st June 2012. Within this new series of standards, one of the main protection types for production equipment at risk from dust explosions in accordance with ATEX Directive 94/9/EC is the protection by enclosures type "tD" as given in IEC 61241-1. This protection type is where the electrical production equipment is equipped with an enclosure to prevent the penetration of dust and where measures to limit the surface temperature have been implemented. On 7th July 2010, the new standard IEC 60079-31:2009 "Equipment – dust ignition protection by enclosures "t" comes into effect and will supersede the standard EN 61241-1:2004 on 1st October 2012.

There are a number of changes to the current and future standards, which you should be aware of. There are increased requirements, from the old 50281 series to the 61241 series and now to the 60079 series such as: impact energy – high demand on impact energy as in Zone 1;



electrostatics – electrostatic conductance of the enclosure; and ageing resistance – high demand on the ageing resistance of the plastic enclosure associated with an ingress protection test after ageing. Customers need to be aware of these changes when sourcing or upgrading electrical equipment for hazardous dust areas, so that they can purchase equipment that fully complies with the new requirements.

Hazardous areas for explosive dust atmospheres are classified into three Zones: 20, 21 and 22. Zone 20 is an area in which an explosive atmosphere in the form of a cloud of combustible dust in the air is present continuously, or for long periods or frequently.

Zone 21 is an area in which an explosive atmosphere in the form of a cloud of combustible dust in the air is likely to occur in normal operation occasionally.

Zone 22 is an area in which an explosive atmosphere in the form of a cloud made up of combustible dust in the air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

For the equipment to be used in explosive dust atmospheres, the sub-grouping system as known from the sub-grouping system for explosive gas atmospheres is now also implemented for explosive dust atmospheres.

Electrical equipment of Group III is sub-divided according to the nature of the explosive dust atmosphere for which it is intended.

Group III sub-divisions:

IIIA: combustible flyings.

IIIB: non-conductive dust.

IIIC: conductive dust.

The equipment protection level (EPL), which is the level of protection assigned to equipment based on its likelihood of becoming a source of ignition and distinguishing the differences between explosive gas atmospheres, explosive dust atmospheres, and the explosive atmospheres in mines susceptible to firedamp, is now also implemented for explosive gas and for explosive dust atmospheres (details can be found in the standard EN 60079-0).

When can dust explode?

A dust explosion requires three ingredients: air, combustible dust and a source of ignition. Combustible dust-air mixtures have different ignition temperatures. The surface temperature of the equipment in areas where there is a risk of dust explosions is allowed to reach two-thirds

The AIDGC Board is considering adding a competency flag for hazardous areas for the benefit of members and those that need assistance in hazardous areas assessments.

of the minimum ignition temperature of the surrounding dust-air mixture. With a 5mm thick layer of dust, this surface temperature must be at least 75°K below the minimum ignition temperature of the dust (glow temperature).

It is therefore the equipment owner's responsibility to ensure that the cleaning and maintenance intervals of installed equipment with a dust explosion risk are scheduled so that no dust layers thicker than 5mm are allowed to form. At higher dust deposits, the minimum ignition (glow) temperature of the dust is reduced significantly.

The goal of the current European Directives is to protect operating plants from dust explosions and to prevent damage or personal injury. The explosion protection measures are divided into 'Owner' and 'Manufacturer' Directives. Again, the objective is to implement all necessary measures to ensure that explosion-protected products can only be operated if they do not pose any danger to health and safety and provided that they are correctly assembled, installed, maintained and used for their intended purpose.

Source: HazardEx, Author : Gordon Low, COOPER Crouse-Hinds

Stopping Dust in its Tracks

The NSW Environment Protection Authority (EPA) has issued all operating coal mines in NSW with pollution reduction programs in the first stage of a program designed to significantly reduce dust emissions at mines. Acting Chief Environmental Regulator for the EPA, Mark Gifford, said all 60 operating coal mines in NSW have been put on Pollution Reduction Programs (PRPs) and the initial PRP reports from the first nine mines has been received. "The PRPs require each mine to assess their operations against contemporary best management practice and identify ways to significantly reduce their on-site dust emissions. "The mines were issued with the PRPs in stages from August 2011 and have been given 6 months to report back to the EPA on how they will reduce on-site dust," Mr. Gifford said.

The program is being implemented in response to recommendations from an independent *International Emissions from Coal Mining* report, commissioned by the EPA.

This report looked into dust suppression techniques used by 54 operational coal mines in NSW and then benchmarked them against local and international best practice. Mr. Gifford said the EPA has received the PRP reports from the first nine mines. “It was good to see that a variety of best practice measures are already being used by mines to reduce dust, however there is more work that can be done. “Increasing haul road watering, applying gravel to exposed areas and temporary revegetation of soil and rock waste piles were some of the measures outlined by mines that could be implemented. “The reports support the finding in the International Emissions from Coal Mining report that dust generated from machine traffic within the mines is the biggest source of fine dust particles on most mine sites contributing about 40% of total emissions. So this is one of the key areas we’ll be looking at,” Mr. Gifford said.

The EPA will now thoroughly review each of the nine PRP assessments to ensure that they have been prepared in accordance with its requirements. The EPA will then negotiate a second round of legally binding PRPs with each mine requiring it to implement any feasible best practice measures, where necessary, within a specified time period.

PRP reports from the first group of nine mines issued with PRPs in August 2011 are accessible from the mines websites including; Tasman, Liddell, Bengalla, Dendrobium, Moolarben, Invincible, Stratford, Charbon and Mount Arthur.

All PRP reports are due back from the coal mines by September 2012. The requirements of each PRP are available by viewing the individual mine licence on the EPA’s Public Register of environment protection licences <http://www.environment.nsw.gov.au/air/coalminingNSW.htm>

Source: Media Release: NSW Office of Environment and Heritage

China CIQ Initiates Strict Inspections on the Import of Hazardous Chemicals

China’s entry-exit inspection and quarantine administrations (CIQ) has started compulsory inspections on over 160 hazardous chemicals substances exported to China and their packages from 1st Feb 2012.

Under the State Decree 591- Regulations on Safe Management of Hazardous Chemicals in China, General

Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) or CIQ is responsible for performing inspections on imported & exported hazardous chemicals and their packages.

On 29 Dec 2011, China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and General Administration of Customs (GACC) jointly issued the 2012's Catalog of Entry & Exit Goods Subject to China's Entry-Exit Inspection & Quarantine Administrations (hereinafter referred to as the Legal Inspection Catalog). One of the biggest changes is that one hundred and sixty (160) hazardous chemicals listed in the Catalog of Hazardous Chemicals (2002) have been added to the Legal Inspection Catalog. In China, any entry/exit goods listed in the Legal Inspection Catalog shall receive compulsory inspections by China's entry-exit inspection and quarantine administrations (CIQ)

- **The list of hazardous chemicals in the Legal Inspection Catalog download here (English name for each chemical available now).**

If you export hazardous chemicals to China:

If companies export those hazardous chemicals to China, the Chinese importer must apply for an inspection from the local Inspection and Quarantine authority at the port of entry and provide the following documents.

- **Declaration of conformity**
- **Information on inhibitors and stabilizersties (names and quantities)**
- **Chinese SDS and sample of hazard communication label**
- **Other documents required for customs declaration)**

If the goods fail an inspection (for example, SDSs and labels are not compliant), the goods will then be held or be detained by customs.

The following items will be inspected by CIQ:

Identify whether the composition/constituent information of goods, physical and chemical properties, hazard class, packaging category meet the requirements of relevant standards, and whether they are consistent with the hazard identification and classification report, SDS and chemical safety label provided when applying for an inspection;

- **Identify whether a Chinese SDS has been provided along with the goods, whether a Chinese label has been affixed on the packaging of goods; whether the**

contents in SDS and label meet the requirements of relevant standards and are consistent with the goods;

- Identify whether the models, category, specification, unit quantity and mark of packaging meet the standard requirements and whether the packaging has been adapted to the properties and uses of the inspected goods;
- Identify whether the packing method meets standard requirement and whether the use of packaging is appropriate, whether the packaging is sealed tightly and whether the goods inside the package have leaked.

At the moment, only hazardous chemicals in the Legal Inspection Catalog are affected by the new rules. In the future, all hazardous chemicals listed in the Catalog of Hazardous Chemicals will be affected. CIRS suggests that companies prepare Chinese SDSs and labels in compliance with China's GHS national standards beforehand for all hazardous chemicals to avoid any delay of customs clearance and possible fines.

Ongoing Investigation into the Release of HF at the CITGO EAST Refinery in Corpus Christi, Texas

Three CSB investigators will be returning to the CITGO East Refinery in Corpus Christi, Texas, to continue investigating the March 5 release of highly toxic hydrofluoric acid (HF) from the refinery's alkylation unit. A seven-person CSB team was deployed to the refinery last week following the release, which occurred at about 7 p.m. Monday, March 5. Investigators will be returning to the facility to conduct follow up interviews with plant personnel and further examine the unit.

To date the team has determined that the incident occurred during a leak from a piping flange on a 12-inch line operating at 145 pounds per square inch gauge (psig). The released process stream contained hydrocarbons and about 5% HF, according to refinery officials. The release triggered the alkylation unit's automatic water cannons, designed to capture airborne HF.



A fire in the alkylation unit at CITGO's Corpus Christi refinery led to a release of hydrofluoric acid (HF). The alkylation unit makes high-octane blending components for gasoline.
Photo: USCSB

Last week the CSB designed and conducted a test on the failed flange intended to determine the leak rate. The line was pressured up with nitrogen gas and the rate of depressurization measured. CSB investigators are currently calculating the estimated size of the release using the test data. Investigators will also be examining several failed bolts that were recovered from the flange, reviewing key data from the process control system, and examining records of previous releases of HF from the flange and other locations in the alkylation unit.

To read an update on this investigation goto:

[http://www.csb.gov/assets/news/document/Statement -
final to post 3 16 2012 - 2.pdf](http://www.csb.gov/assets/news/document/Statement-_final_to_post_3_16_2012_-_2.pdf)

Plastic Gas Pipes to be Replaced in California after Explosions

California state regulators have said large sections of Pacific Gas & Electric's gas distribution network will need replacing because of the high risk of failure of a particular type of plastic pipe used extensively throughout the network. Pipes made by DuPont before 1973 from a plastic called Aldyl-A were responsible for explosions in Cupertino and Sacramento in 2011.

Pacific Gas and Electric Co. (PG&E), whose lines were involved in both blasts, said late last year that it would remove more than 1,200 miles of the pipe from its system. When the operation has been fully costed, PG&E will go to the California Public Utilities Commission to ask for a rate increase to cover the cost.

The pipes are used to supply natural gas directly into homes and businesses, and are smaller than main transmission lines such as the PG&E pipe that exploded in San Bruno in 2010, killing eight people.

The August 31 blast in Cupertino destroyed a condominium, and the Roseville explosion less than a month later resulted in the shutdown of a major intersection for more than 12 hours. No one was hurt in either incident.

A task force that the Public Utilities Commission formed after the San Bruno disaster said that Aldyl-A pipe was among 17 major hazards connected with the state's natural-gas delivery system that require immediate action.



Photo: HazardEx

It said in a statement that it would investigate whether other utilities in California besides PG&E were taking steps to identify and deal with the risk from the plastic pipe, which federal officials first recommended be removed in 2002.

In 1998, after a similar type of plastic pipe cracked in Waterloo, Iowa, causing an explosion that destroyed a bar and killed six people, the National Transportation Safety Board recommended utilities and state regulators better monitor plastic piping from that era and replace it when they find it to be a risk.

Source: HazardEx

ICAO: New Lithium Battery Regulations

The International Civil Aviation Organization has just released its anticipated changes in the lithium battery regulations going into effect on 1 January 2013.

It appears that ICAO has set up a three tier set of regulations. The first tier would deal with fully regulated lithium batteries that will require UN Specification packaging.

The second tier will deal with fully regulated lithium batteries that will not require UN Specification packaging. The third tier would represent non-regulated lithium batteries similar to what is in Section II of all six packing instructions currently in effect. The total watt hours per cell and per battery will still be the criteria to determine whether the cells or batteries are fully regulated, “not so fully regulated” (our terminology) and not regulated.

To read the report goto:

<http://www.icao.int/safety/DangerousGoods/Pages/Working-Group-of-the-Whole-on-Lithium-Batteries.aspx>

Harbour not Hit by Orica's Cyanide

No cyanide has been detected in Gladstone Harbour after an investigation was launched last week.

Chemical manufacturer ORICA found itself in hot water when news broke it was under investigation for releasing up to double the acceptable levels of cyanide in its waste water.

That waste water flows into a waste water facility where it is further diluted, before flowing in to the harbour. While the company is still in trouble for the detected release, it appears the contamination has not flowed into the harbour at harmful levels.



Photos: ABC Newcastle



Department of Environment and Resource Management (DERM) said its first results from water quality samples taken from Gladstone Harbour have found no detectable levels of cyanide. DERM Director-General Jim Reeves said the water quality tests had been taken from the area in the harbour near the plant's release diffuser and potential stormwater runoff areas. He said the detectable limit for cyanide is 0.004 milligrams per litre. "Further results from samples taken on Thursday and Friday will be available later this week," Mr. Reeves said.

DERM took samples from the Orica plant on Thursday night as soon as advice was received from Orica that a number of non-compliant discharges of waste water had occurred since January. The department will take regular samples both in the harbour and at the Orica site and these will be tested by accredited laboratories. DERM issued Orica with an Environmental Protection Order on Thursday night to cease wastewater releases to a trade waste facility unless authorised by DERM. Mr. Reeves said the department was continuing a comprehensive investigation of non-compliant releases. "DERM officers are onsite at Orica to monitor and ensure compliance prior to approving any discharge from the Orica cyanide plant," Mr. Reeves said.

While there is no suggestion this case as resulted in environmental damage, cases where a company is convicted of willful serious environmental harm it can be liable for fines up to \$2,082,500 and company directors can be liable for prison terms up to five years

Source: 1233 ABC Newcastle, Anna Patty

Big Polluters go Unpunished

There is no limit on the amount of toxic substances allowed to contaminate the NSW environment, and big industry routinely delays the reporting of pollution spills, a new report has found.

The report also concludes the Environment Protection Authority, the state government's pollution watchdog, has become too close to illegal polluters to police their operations adequately.

The report, *Clearing the Air: Opportunities for Improved Regulation of Pollution in New South Wales*, was prepared for the Nature Conservation Council by the Environmental Defender's Office, a community legal centre that is funded by the NSW government.



Conservationist Pepe Clarke outside a NSW oil refinery this week. Photo: Anthony Johnson

It says the EPA has a flawed regulation system, under which the watchdog rarely prosecutes big environmental offenders and thousands of pollution licence breaches go unpunished every year.

The findings, expected to be released on March 19, follow the appointment of a new EPA board member who ran a company that caused one of Sydney's worst pollution disasters.

The NSW Environment Minister, Robyn Parker, said that she was aware before the posting that Alec Brennan was the former head of CSR Ltd when one of its subsidiaries dumped thousands of kilograms of toxic chemicals in the Parramatta River in 2006 and delayed making it public. CSR denied the spill for more than a year before the company finally pleaded guilty in the Land and Environment Court and was fined a record \$280,000 plus clean-up costs.

Undertaken after the O'Farrell government announced a restructuring of the EPA late last year, the report reveals that hundreds of millions of kilograms of pollutants are being pumped into the air, water, and soil across the state. "No one knows the cumulative impact of this pollution on the environment and people's health," the report warns. The 46-page report makes 33 recommendations.

Industries operate on an honour system for reporting breaches, the report finds, but are rarely prosecuted no matter how many accidents they may have had.

When the EPA does compliance audits, it regularly finds unreported breaches and there is an "implicit level of acceptability of licence breaches among both industry and the EPA", it says.

The Orica incident was an example of this, in that the company breached its licence at the Kooragang Island plant at Newcastle, 131 times in 10 years yet it was prosecuted just once by the EPA, in 2005.

There is an urgent need for the EPA to review its compliance and enforcement policy, the report concludes. It recommends asking the NSW Bureau of Crime Statistics and Research to conduct a review of the EPA's enforcement offences.

Source: Sydney Morning Herald, Natalie O'Brien

An environmental catastrophe ... BP's Deepwater Horizon oil rig burning after an explosion in the Gulf of Mexico in 2010. Photo: AP



BP: \$18 Billion Spill Bill

The US government has vowed to press ahead with its \$US18 billion (\$16.7 billion) legal action against BP, despite the oil company's \$US7.8 billion settlement with 110,000 Gulf of Mexico businesses and individuals over the Deepwater Horizon oil spill.

In a strongly worded statement, the US Department of Justice said the settlement "by no means fully addresses its responsibility for the harms it has caused" or meant that BP had paid for "its violation of law".

The Department of Justice, which is bringing a federal negligence case under the Clean Water Act that could cost as much as \$US18 billion, said it remains "fully prepared" to try the case. BP, which denies gross negligence and also disputes the amount of oil that poured into the gulf, has set aside \$US3.5 billion to pay fines.

But the US government is also investigating whether there are criminal charges to be brought.

The news of the settlement with the plaintiffs was welcomed by BP's senior executives. The agreement ends one of four "pillars" of the trial in New Orleans, originally scheduled to begin last Monday, but postponed.

The other three pillars in are claims outstanding from the states of Louisiana and Alabama; counterclaims between BP and its former Deepwater partners, including Transocean; and civil claims under the Clean Water Act from the federal government.

In addition, BP faces shareholder lawsuits in Houston. Shareholder reaction seemed positive.

"Overall this will probably be seen as good news, more the reduction in uncertainty than the number involved," said Robert Talbut, of Royal London Asset Management, which owns 0.37 per cent of BP's shares.

The settlement was made between BP and the Plaintiffs' Steering Committee, which represents 110,000 local businesses and individuals from the US gulf coast that claim to have lost out financially as a result of the spill. The settlement is preliminary and subject to final written agreement, which must be made within 45 days, and court approval.

The New Orleans trial has been indefinitely postponed pending clarity on the implications of the settlement.

Sources: Telegraph, London and Sydney Morning Herald



An oil storage tanker being decommissioned at the plant . Photo: BBC

Fox's Biscuits Factory Explosion Leaves Six in Hospital – U.K.

Six people were taken to hospital when a diesel storage tank exploded at a West Yorkshire biscuit factory.

The incident happened at the Fox's Biscuits plant, Batley, as the tank was being drained and cleaned, the company said. One man was rescued by firefighters and taken to Pinderfields Hospital in Wakefield suffering from burns. A further five people were taken to Dewsbury District Hospital suffering from the effects of breathing in smoke. Production at the plant was temporarily halted and 450 staff evacuated the site, the company said.

A spokesman for Fox's Biscuits' parent company, 2 Sisters Food Group, said a contractor had suffered burns to his legs following a spark in a diesel tank on the edge of the site. Source: BBC

Man Dies on Portland Barge U.S.A.

A 57-year-old man was killed Sunday after falling into the chemical holding tank of a barge located on the banks of the Willamette River in Portland, according to fire officials. Firefighters responding to the scene said they had found a rope that led into an open hatch that covered a chemical holding tank on the barge. Almost 4 hours later, the man's body was pulled from the emptied tank by HAZMAT crews. According to the Portland Fire and Rescue report the tank contained about 12 feet of liquid Lignin Amine, a corrosive material used in agriculture. Initial reports indicate that the air above the liquid had an oxygen level of less than 1 percent and likely caused the man to pass out and fall into the tank. Source: www.maritimeinjury.com

At least one hundred people sought medical help and eight were hospitalized after a dangerous chemical leaked from a transport container in the Urals. Up to ten glass containers holding bromine were smashed at a train station in the city of Chelyabinsk. Bromine is a strong-smelling dark-red liquid that changes easily into a gas causing serious breathing difficulties. A chemical cloud has spread for several kilometers.

<http://www.youtube.com/watch?v=sle-LkV3vPs>

Traffic camera footage of the Bromine Release which looks like a major HAZMAT incident.

http://www.youtube.com/watch?feature=player_embedded&v=Z2_kf2UsQno