Australasian Institute of Dangerous Goods Consultants

WHAT'S HAPPENING?

September 2013

Welcome to new associate Members

Robert Hoogervorst N.S.W.

Monahan Nair Queensland

Lewis Nottidge N.S.W.

Renton Parker N.S.W.

Anthony Whiddon N.S.W.

...and new Corporate Member

SAI Global

The AIDGC Annual Conference

Sydney, September 27
Please RSVP your registration to
robhogan@tpg.com.au if you wish to attend

'Writing Winning Proposals"

Is a one day AIDGC sponsored Seminar conducted by Claire Duffy, who is a strategic communications advisor with 25 years experience in getting messages to audiences in ways they'll understand.
This does not just mean winning the work, getting the grant or the green light for your next project - it could mean your making an internal proposal for a decision, even a pay raise. Anything with a persuasive element.

The flyer is available on the AIDGC website or email robhogan@tpg.com.au

Brisbane October 14

Melbourne October 21

Sydney October 22

Chemical Plant Explosion and Fire in Danlin U.S.A

http://www.youtube.com/watch?v=uVK9fRuhffc

http://www.youtube.com/watch?v=n6g71ffKDoY

Photo: Fox 25 Oklahoma City

Chemical Plant Explosion Rocks USA Town

A chemical plant explosion in the Town of Thomas prompted evacuations and sent fireballs hundreds of feet into the air.

The explosion happened around 10:00 p.m. All of the 75 employees had gone home hours before. Danlin produces chemicals for the oil and gas industry. Nearly all of those chemicals were flammable.

"Once the container explodes all of the flammables ignite immediately and that's when you get that big fireball," said Custer County Emergency Manager Mike Galloway.

Immediately emergency crews evacuated residents within a four mile radius. Because the town of Thomas doesn't have equipment to handle volatile chemicals, firefighters had no choice but to stand back and let it burn. Thomas's fire chief said, "If we put water on it the chemicals are going to spread. So we just have to let it burn."

By Thursday evening the fire was out. All that was left was a foot and a half of smoldering ash and the remains of the plant. "The fire Marshall is going to do their investigation and see if we can find the cause of this fire," said Galloway.

Galloway says investigators will look into every possible cause including arson.

In preparation for possible rain, crews did set up embankments around the plant so any remaining chemicals don't spread.

Source: Christine VanTimmeren, Fox 25

HSE Report: Generation of Flammable Mists from High Flashpoint Fluids

Hazardous Area Classification (HAC) for explosive gas atmospheres is well established, with guidance published in various standards and industry codes of practice. However, the same situation is not currently the case for high flashpoint liquid releases that could give rise to an explosive mist atmosphere. There is a pressing need for clear guidance on mist hazards to allow operators to determine the extent of areas where flammable mists may be present and to select appropriate equipment for use in those areas.

This report provides a survey of the recent literature on flammable mists and pulls together information that will be useful in developing a HAC methodology for explosive mist atmospheres. It focuses on the three fundamental issues: mist flammability, mist generation and mitigation measures. Read the Report: http://www.hse.gov.uk/research/rrpdf/rr980.pdf

Chemical Risks Management
Safe Storage, Handling and Management of Ammonium Nitrate

The Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) ("we") are issuing this advisory as part of an ongoing federal effort to improve chemical risk management, and to advance safety and protect human health and the environment. This advisory contains information on recent and past accidents involving AMMONIUM NITRATE (commonly referred to as AN), on the hazards of AN, how to manage these hazards, and appropriate steps for community emergency planning and proper emergency response. It is focused primarily on safe handling and storage of higher density, solid AN pellets and prills (a prill is a small bead) used in fertilizers. This advisory is intended to broadly disseminate lessons learned from recent incidents involving AN so that such incidents can be prevented in the future. Also provided is a list of information resources, including relevant codes and standards, industry publications, and applicable statutes and regulations that will help facilities handling AN and first responders better understand the hazards so they can effectively manage the risks. The information provided is not intended to cover all the hazards, safe practices or technical challenges associated with the manufacturing of AN; liquid fertilizers containing AN; manufacturing, storage or use of explosives or blasting agents containing AN; or the transportation of AN. For these particular situations, please consult other sources including the appropriate references, standards and regulations, cited at the end of this document.
Click here for the Advisory:
http://www.epa.gov/emergencies/docs/chem/AN_advisory.pdf

"It's Just Ammonia" – yep it sure is!

Routinely we hear the argument that Anhydrous Ammonia should not be on OSHA's or EPA's chemical lists for PSM/RMP inclusion. Like most industries that use a single highly hazardous chemical as a "utility" in their process(es) v.s. manufacturing the HHC or using the HHC in the manufacturing process, the industry feels their chemical is "safe" and no one should have any concerns. For this article written by Bryan Haywood, SAFETENG go to the July 2012 What's Happening on the AIDGC website.

Motiva's Giant Texas Refinery Battered by Accidents after US $10billion Upgrade

The biggest oil refinery in the US is largely out of service after fires damaged equipment at the Motiva Enterprises plant in Port Arthur, Texas. The fires are the latest in a series of mechanical failures at the refinery, which doubled in size last year after a $10 billion expansion paid for by the two companies that own Motiva, Royal Dutch Shell and Saudi Aramco.

After the fires, Motiva had to take offline its 325,000 bpd crude-distillation unit, the first step in fuel production, and various other units, according to Genscape, an energy information service that uses flyovers and infrared sensors to detect activity at refineries. Motiva declined to comment on mechanical problems.

Accidents started occurring almost immediately after the May 2012 opening ceremony in Port Arthur, a week later, an accidental chemical release corroded the expanded refinery's new crude-distillation unit, forcing it to suspend operations for six months. In December, the same unit was shut down again for several weeks after a small fire broke out and leaks were found, according to regulatory filings and information provided by the company at the time. Another leak forced the company to repair key diesel-production equipment in June.

Source: HydrCarbon Processing, Ben Lefebvre and Alison Sider

Childproof Packaging for Battery Buttons

Battery makers, retailers and ACCC endorsed childproof packaging for button batteries after the death of Sunshine Coast girl Summer Steer who died after swallowing one of the small batteries. Battery manufacturers, retailers and industry associations came to this agreement at a summit in July, 2013 with the Australian Competition and Consumer Commission (ACCC. The 20 representatives have also agreed to ramp up consumer education, improve warnings on packets and develop safer battery designs. ACCC acting chairwoman Delia Rickard said in a statement the industry had agreed to act "as quickly as practicable". "The ACCC has been concerned about the number of severe injuries to children from lithium coin-cell batteries over recent times," the statement said. Button batteries can burn through the oesophagus, reaching internal organs within a few hours. An estimated five Australian children are taken to emergency rooms every week after swallowing button batteries. **Source: Kathleen Donaghey, Courier Mail**

Antifreeze and Laptop Battery Started Fire

Antifreeze that leaked into a laptop battery is being blamed for a massive car fire. Smoke and flames roused residents from their sleep after a two-vehicle fire got dangerously close to their apartment building. The fire started around 4:30 a.m. in a parked car and spread to a neighboring truck. The car is "completely melted" and damage to the truck is also extensive. Firefighters say antifreeze that was in the car spilled onto the laptop. Somehow the antifreeze got into the computer's battery. Firefighters say that caused a chemical reaction that started the fire. Source: KKTV.com

Preliminary First Draft Proposed 2015 Edition National Fire Protection Association (NFPA) 652

This document is the Preliminary First Draft of the proposed 2015 edition of NFPA 652. The standard will provide the basic principles of and requirements for identifying and managing the fire and explosion hazards of combustible dusts and particulate solids. The standard will provide the user with general requirements and direct the user to the appropriate industry or commodity-specific NFPA standard for additional requirements. It establishes the basic principles and requirements that shall be applied to all facilities where combustible dusts or particulate solids are present.

Where an industry or commodity-specific NFPA standard exists, its requirements shall be applied in addition to those in this standard. CLICK HERE to see the first draft.
https://www.nfpa.org/Assets/files/AboutTheCodes/652/652_PreliminaryDraft.pdf

Queensland Government Ask for Industry Feedback on Mine Safety Improvements

It is asking for submissions from the mining communities and industry. The improvements including an additional coal industry health and safety representative, more protection of contract workers, and regulation of alcohol, drug and fatigue management on mine sites. It also includes changes to health guidelines for contractors and workers, and laws to make sure the hazards of explosive dust would be alleviated with "stone dusting". According to the Daily Mercury, this involves combining rock dust with coal dust.
The CFMEU launched a campaign against the Queensland state government's proposed safety legislation changes in December last year. It said the government was under pressure from the QRC to remove powers held by mine check inspectors and place it in the hands of mine management.
The Queensland Resources Council backs the modifications but said it would assess its stance before submissions have to be made. Source: Mining Australia
Read the Queensland's Mine Safety Framework Consultation Regulatory Impact Statement: deadline for submissions is November 11
http://mines.industry.qld.gov.au/assets/safety-and-health/mine-safety-framework.pdf

Tank Collapse: Don't Let This Happen to You!!

The industrial gas industry, (producers of liquid oxygen, nitrogen and argon…amongst other products of air), require large site-erected tanks to be built in order to store these liquids for later use. These tanks can range in size up to 2 million gallons or more, and cost millions of dollars. The stored product, like liquid oxygen, exists at about minus 300 degrees Fahrenheit. This situation and concept applies equally to other cryogenic processes, such as LNG stored at approx minus 260 degF, etc.

In the process of bringing such a newly constructed tank into service, it must first be carefully "cooled-down" such that it can accept incoming cold liquid later.

Nordstern Associates LLC – CASE STUDY # 7

A major global producer of industrial gases, recently "cooled-down" such a tank, utilizing their own qualified personnel and historical procedures. This time, however, things went horribly wrong, and their 450,000 gallon, liquid-oxygen tank went from being a multi-million dollar asset to nearly scrap metal value, in a fraction of a second - in the process of cooling down the tank, it vacuum collapsed !

To illustrate the violence, suddenness and uncontrolled nature of the collapse, here is a YouTube film clip showing a similar (this time, on purpose) tank collapse of a railway tanker:

http://www.liveleak.com/view?i=72e_1208694365&p=1

Source: TapRoot Archive

Unsafe Marine Work Practices: Video

A new video highlighting the ongoing safety concerns for maritime workers has been released by the Australian Transport Safety Bureau (ATSB). The video features the accident of a crew member on board a ship who was tragically killed by an explosion while cutting a used 200 litre drum with an angle grinder.

ATSB Chief Commissioner, Martin Dolan, said "the video provides a powerful reminder to all workers of the need to take risk seriously and to make sure the risk is appropriately managed."

The video, the fourth in the ATSB's SafetyWatch video series, can be found on the ATSB's YouTube channel.

Goto: http://www.youtube.com/watch?v=bdyL21uvERE

NICNAS Chemical Gazette for September, 2013 is now available:

http://www.nicnas.gov.au/communications/publications/chemical-gazette/chemical-gazette-september-2013

WorkCover N.S.W. New Explosives Laws Commenced on 1 September 2013

The new laws include changes to licence conditions, licence requirements and fees

The NSW Explosives Act and Regulation, a range of Australian standards, codes and a licensing and notification system, work together to regulate explosives, certain explosive precursors and fireworks throughout the supply chain.

From 1 September 2013, the NSW Explosives Regulation replaces the Explosives Regulation 2005. The changes to licensing of explosives and fireworks are:

- **you do not need a licence to learn blasting**
- **you do not need an explosives licence if you store up to 12kg of propellant powder for reloading purposes – and hold a licence under the Firearms Act 1996.**
- **you can get a single-use fireworks licence up to four times a year.**
- **there are changes to licence conditions (ie explosive licensing conditions and conditions applying to pyrotechnician and fireworks (single use) licences) licence fees have changed. Refer to the WorkCover NSW fees schedule.**
- **an unsupervised handling licence has been abolished and replaced with a security clearance.**

Changes from 1 March 2014:

- **you need a safety management plan to hold a manufacturing licence**
- **you must notify WorkCover at least seven days before using explosives (except for coal and mining workplaces).**

The Explosives Regulation requires all activities involving the handling of explosives and fireworks to be carried out in accordance with the licensing conditions and:

- **Australian standard 2187 – explosives: storage, transport and use**
- **Australian code for the transport of explosives by road and rail.**

In relation to explosive precursors, activities must be carried out in accordance with the:

- **Australian dangerous goods code**
- **Australian standard AS 4326: storage and handling of oxidizing agents.**

SAFETY VIDEOS OF THE MONTH

Applicants and licence holders should also refer to the Guide for the secure and safe handling of explosives and security sensitive dangerous substances.

WorkCover licences specific activities related to explosives, certain explosive precursors and fireworks including:

- **security clearance (previously called an Unsupervised handling licence)**
- **security sensitive dangerous substances**
- **manufacture**
- **import**
- **supply**
- **storage**
- **transport**
- **pyrotechnician and fireworks single use**
- **blasting**

It is an offence to be in possession of or have unsupervised access to explosives, explosive precursors or fireworks without the appropriate security clearance and licence issued by WorkCover (with exceptions such as marine distress signals for boating use etc).

Licence applicants will need to satisfy WorkCover's licensing criteria and receive a favourable national probity assessment from NSW and Commonwealth police and security agencies.

WorkCover may suspend, cancel or impose penalties on licence holders who do not comply with the conditions of the licence or security clearance or requirements of the legislation.

Goto:
http://www.workcover.nsw.gov.au/licensing/explosivesfireworks/Pages/default.aspx

RESPONSE TO ETHANOL-BASED INCIDENTS (USA)

Foam Performance Test Results

The Ethanol Emergency Response Coalition has published a testing on various foam agents against ethanol fuel fires to determine which foam types were most effective in extinguishing fires and maintaining vapor suppression.

Read the .pdf
http://ethanolrfa.3cdn.net/3bb9648a0e009a4cec_unm6bawxz.pdf

Japan to Build Ice Barrier to Contain Fukushima Leaks

Nuclear regulators inspect the storage tanks. Photo: Reuters

The Japanese government has announced a programme to build a wall of frozen water around the Fukushima nuclear plant to halt radioactive leaks. Government spokesman Yoshihide Suga estimated that 47bn yen ($473m) would be needed, with a further 15bn yen spent on equipment to decontaminate radioactive water currently being stored at the plant.

Around 400 tonnes of water a day is continually pumped around reactor cores at the plant to prevent overheating, creating vast volumes of contaminated water.

Fukushima operator TEPCO announced in August that large quantities of highly radioactive water had leaked from one of the tanks at the tsunami-damaged plant. The report confirmed that coolant has been seeping into the soil beneath the reactor and flowing into the sea at a rate of about 300 tonnes a day.

Under the government plan, a wall of frozen earth 1.4km long and 27 metres deep will be created around the four damaged reactors using pipes filled with coolant. The barrier should prevent groundwater coming into contact with the contaminated water from the plant.

Japanese prime minister Shinzo Abe has pledged increasing involvement by the government in the cleanup operation following criticism of TEPCO's capacity to properly deal with the situation. "Instead of leaving this up to TEPCO, the government will step forward and take charge," said Abe. "The world is watching if we can properly handle the contaminated water but also the entire decommissioning of the plant."

Read More: http://www.chinadaily.com.cn/world/2013-09/13/content_16969445.htm

Read more: http://www.theage.com.au/world/fukushimas-toxic-water-pool-grows-as-tepco-dithers-20130830-2svvn.html#ixzz2dVxIr7mc

SAI GLOBAL: Free Standards Guide - Dangerous Goods has been updated, goto:

http://infostore.saiglobal.com/store/getpage.aspx?path=/publishing/shop/productguides/dangerous.htm

Thousands Protest after Toxic Spill at Dalian Chemical Plant Scare

http://www.youtube.com/watch?v=LT_fCIQKeJg

W.A. Ammonium Nitrate Truck Accident

Photo: northrock.net.au

A truck carrying ammonium nitrate crashed about 60km west of Coolgardie in Western Australia earlier this month, closing a section of the Great Eastern Highway. The driver lost control of the truck on the highway near Pumping Station Road.

A police spokesperson said ammonium nitrate had spilled onto the road. The driver of the truck was not seriously injured.

Earlier this year two men died and another was injured after a crash which saw a truck carrying ammonium nitrate catch fire in Western Australia.

Ammonium nitrate is a fertilizer that is highly flammable.

It is commonly used in the mining industry as an additive to explosives.

Source: SafetoWork

Another Orica Ammonia Spill

The scene at Orica's Kooragang Island plant; photo, Dean Osland, Newcastle Herald

A gas leak at Orica's Kooragang plant has been labelled a "major concern" by critics of the site. Less than 100 kilograms of ammonium vapour was lost in the spill, which was contained within the site.

Orica self-reported the incident, which the NSW Environment Protection Authority will investigate.

Fire and Rescue NSW Newcastle zone Inspector Greg Symonds said some ammonium in a pipeline had escaped through a "gasket-type flange joint". The remaining material was removed from the pipeline over several hours yesterday as firefighters sprayed escaping gas with water to prevent it spreading.

"That pipeline had the potential to contain 100 kilograms of ammonium but it's unclear how much was in there," Inspector Symonds said. HAZMAT monitoring near the leak failed to detect any excess ammonium, Inspector Symonds said.

An Orica spokeswoman said the spill was contained "without impact on Orica's Kooragang Island workforce or the surrounding community."

"While the release was below reportable levels, Orica contacted relevant authorities and the fire service and regulators attended the site as a precautionary measure," she said.

"The cause of the release will be investigated."

Source: Newcastle Herald

Hydrofluoric Acid Review: RACI Speaker Alex Simovski Worksafe Victoria

http://www.raci.org.au/document/item/1243

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

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Clandestine Drug Labs—The Problem, The Danger, The Future: Produced by U.S. EPA Environmental Response Team

Clandestine methamphetamine labs have been implicated in fires, explosions, toxic chemical releases, and hazardous waste dumping. Experts anticipate these problems to proliferate as methamphetamine use spreads across the United States. "Cooks" with little or no training use chemicals from local drugstores, equipment from hardware stores, and recipes from the Internet. Cooks may be drug users, or they may be involved with drug cartels. Their main concern is maintaining their supply of methamphetamine, without regard to the safety of their children or neighbors. Labs may be small and mobile, or they may blend in with the surrounding neighborhood, making them hard to locate until a disaster occurs. Teams of trained specialists from the USEPA assist police officers and firefighters in shutting down laboratory operations safely, cleaning up contaminated areas, and disposing of hazardous materials. These response teams are trained to handle unlabeled containers, unknown mixtures of chemicals, and high concentrations of toxic or explosive fumes. This video lists telltale signs of illicit drug lab activities and shows precautions to follow when a lab or dump site is discovered. Running time is 25 minutes.
http://www.clu-in.org/studio/video/

N.S.W. Woman Attacked with Chlorine

A woman has been doused with chlorine on her own doorstep during an apparently random attack in Sydney's west.
A man aged in his late teens or early 20s knocked at the front door of the 53-year-old woman's Bidwell home and asked to use her tap. He then threw a bucket of liquid, believed to be chlorine, over the woman before fleeing, police say.
The woman was taken to Nepean Hospital with non-life-threatening injuries.
A police spokesman was unable to say what injuries the woman suffered but skin injuries similar to frostbite can occur if a person is exposed to liquid chlorine, according to the Centre of Disease Control.
Police are treating the incident as a random attack and are searching for a man of Aboriginal or Torres Strait Islander appearance.
Source and Video: http://news.ninemsn.com.au/national/2013/09/03/16/05/woman-in-hospital-after-chlorine-attack

15 Dead, 26 Injured in Liquid Ammonia Leak in Shanghai

Workers carry the body of a victim of a leak accident in the Baoshan District of Shanghai, east China, Aug. 31, 2013. At least 15 people died and 26 others were injured after a liquid ammonia leak at the refrigeration unit of the Shanghai Weng's Cold Storage Industrial Co. Ltd. on Saturday, local authorities said. (Xinhua/Pei Xin)

A firefighter hoses down the protective suit of a fellow rescuer, following an ammonia leak at a food refrigeration plant in Shanghai's Baoshan District Photo: Shanghai Daily

Fifteen people were killed when ammonia leaked in a seafood refrigeration plant in Shanghai's Baoshan District. The accident also left 25 people requiring hospital treatment for the effects of the caustic gas, including five in a critical condition, local authorities said.

Doctors said most victims suffered internal burns after inhaling the highly corrosive fumes, while some of those who died had severe facial burns. All the dead and injured were in the plant at the time of the leak, and authorities said there was no danger to the wider population.

More than 200 firefighters in 25 fire vehicles and 100 police were dispatched to the scene, where firefighters sprayed water to dilute ammonia in the air. A chief firefighter told the Xinhua news agency that there were no naked flames after the leak, so the team carried out rescue work immediately and closed down valves that are suspected of having been the source of the leak.

The majority of workers at the plant are women from neighbouring provinces. Many have worked for Shanghai Weng's for just a couple of weeks, the Xinhua news agency said.

Liquid ammonia is widely used as a refrigerant because it can absorb a large amount of heat. However, the colourless liquid must be stored under high pressure or at a very low temperature because it boils at minus 33.5 Celsius degrees.

A report on Xinmin Evening News website said the accident was caused by a pipeline leak in a workshop, while a report by China Central Television said the leak occurred in an ice glazing workshop in a food processing unit inside the plant.

Shanghai Weng's Cold Storage specializes in import and export, logistics, purchasing, processing, cold storage, sales and international trade of seafood products, according to its website. It has a cold storage covering an area of more than 30,000 square meters and a 3,000-sq-m temperature-regulated storage and a processing workshop for frozen foods.

As liquid ammonia is volatile and high corrosive, it has a high incidence of causing chemical accidents. In June, 121 people were killed and 76 injured in an explosion caused by a liquid ammonia leak in a poultry company in Changchun City of northeast China's Jilin Province. And last October, 479 people were poisoned in an ammonia leakage attributed to worn machine parts in Honghu City of central China's Hubei Province.

Source: http://english.cri.cn/11354/2013/08/31/2941s785184.htm

Gas Leak Kills 7 in Mehsana Cold Storage

Seven workers, including a woman, died of asphyxia following a massive ammonia leak at a cold storage unit in Vijapur Taluka of Mehsana on Saturday. Five others were hospitalized after being rescued. Four of these have been rushed to Ahmedabad Civil Hospital in critical condition while one is being treated at Vijapur. Sources said that the leakage took place at Manan Cold Storage in Ranasar. Rescue teams had to cut the roof and break the side wall to enter the storage facility to reach the workers. P V Waniya, deputy superintendent of police (DSP) at Vijapur said, "The gas leak was triggered by a carton of butter falling on a valve of a pipe that had ammonia. Sixty-five workers managed to flee then the leak started. "

A large quantity of butter and other milk products were destroyed as this was the only cold storage for milk products in the entire district.

Fire brigade personnel rushed to the spot from Mansa, Mehsana, Visnagar and Vijapur with teams from IFFCO and ONGC. Rescuers had a tough time as ammonia causes irritation to eyes and it was difficult to reach the premises because of heavy smoke.

Mehsana collector Raj Kumar Beniwal said, "I have ordered a probe into the matter by a team of police and technical officials."

Pramod Panwar, TNN

NICNAS Matters: September, 2013

Included in this month's issue:

NICNAS's preferred approach to ensuring compliance with their legislation is to work with industry, providing advice to help you understand your regulatory obligations and helping to find the most practical way to meet those obligations.

Training and Outreach Sessions

2013: Newcastle: 21 November

2014: Brisbane: 27 February, Melbourne: 27 March, Sydney 10 April

NICNAS Customs Broker Seminars

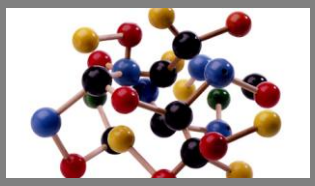
2014: Brisbane: 27 February, Melbourne: 27 March, Sydney: 10 April

Download from:

http://www.nicnas.http://www.nicnas.gov.au/communications/publications/nicnas-matters/nicnas-matters-september-13gov.au/communications/publications/chemical-gazette/Chemical-Gazette-August-2013

Globally Harmonized System of Classification and Labelling of Chemicals University of N.S.W. Fact Sheet

http://www.ohs.unsw.edu.au/hs_procedures_forms/information/HS681_Fact_Sheet_on_the_GHS.pdf



Chemical Classification: U.K. HSE

Chemical classification means finding out how the chemicals you supply can harm you, others or the environment. Classification is very important and provides the starting point for the controls needed to protect us and the world we live in. These pages provide an introduction to the basics of classification.
Goto: http://www.hse.gov.uk/index.htm

Compatibility of UST Systems with Biofuels

An Alternative Fuels Workgroup composed of regulator members of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) – @ Washington - has released a report entitled "Compatibility of UST Systems with Biofuels." The document includes 22 case summaries and photos of actual UST incompatibility incidents.
The report recommends that state tank programs:

- **Implement database tracking mechanisms for biofuel blends storage and use;**
- **Implement a notification requirement for change of fuel stored in a UST system;**
- **Establish a permitting process for installation of new or upgraded UST systems storing biofuels;**
- **Encourage a requirement that owners monitor and periodically remove water.**

Click here to download the Compatibility of UST Systems with Biofuels report from the Association of State and Territorial Solid Waste Management Officials.
Source: Tank Talk
http://www.astswmo.org/Files/Policies_and_Publications/Tanks/2013.06-Biofuels_Compatibility-Alt_Fuels.pdf?utm_source=TANK+TALK+AUG+2013&utm_campaign=Tank+Talk+AUG+2013&utm_medium=archive

OSHA announces Notice of Proposed Rulemaking for Respirable Silica

What is silica and where is it found?

What is the hazard?

What tasks can lead to high crystalline silica exposure?

Risk management

Goto the W.A. Department of Commerce

http://www.commerce.wa.gov.au/worksafe/content/safety_topics/hazardous_substances/Additional_resources/Silica.html

OSHA has announced that the Notice of Proposed Rulemaking for Respirable Crystalline Silica has been published in the Federal Register. OSHA invites and strongly encourages the public to participate in the process of developing a final rule through written comments and participation in public hearings.

The public will have until December 11, 2013, to submit written comments on the proposed rule. Hearings are scheduled to begin on March 4, 2014 at the Department of Labor's Frances Perkins Building in Washington, DC. Members of the public who wish to participate in public hearings must submit a notice of intention to appear by November 12, 2013.

Additional information on the proposed rule, including five fact sheets, and procedures for submitting written comments and participating in public hearings is available at http://www.osha.gov/silica/index.html.

Exposure to airborne silica dust occurs in operations involving cutting, sawing, drilling, and crushing of concrete, brick, block and other stone products and in operations using sand products, such as in glass manufacturing, foundries and sand blasting. OSHA estimates that the proposed rule will save nearly 700 lives per year and prevent 1,600 new cases of silicosis annually, once the full effects of the rule are realized.

The proposed rulemaking includes two separate standards – one for general industry and maritime employment, and one for construction.

OSHA believes these standards are based on extensive review of scientific and technical evidence, consideration of current industry consensus standards, and outreach by OSHA to stakeholders, including public stakeholder meetings, conferences, and meetings with employer and employee organizations.

In a statement by Dr. David Michaels – Assistant Secretary of Labor, he states "This proposal is long overdue. OSHA's current standards for protecting workers from silica exposure are dangerously out-of-date and do not adequately protect worker health. The current standards are more than 40 years old, and they are based on research from the 1960's and even earlier. They do not reflect the most recent scientific evidence".

Source:OHSA

This month my thanks for their contribution goes to Don Johnson and Scott Young.

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

Orica Botany Mercury Review

The NSW Environment Protection Authority has announced the appointment of CDM Smith Australia Pty Ltd to undertake the expert analysis of information and data on mercury emissions from the Orica Botany site, assess the risk and determine appropriate environmental testing.

The review will be a comprehensive process assessing any potential off-site mercury impacts from the former Orica chlor-alkali plant at Botany.

For more information about the independent mercury review and the Terms of Reference goto:

http://www.epa.nsw.gov.au/Oricabotanycttee/indrevoricabotany.htm

EU Reports a Drop in Deadly Goods Entering

The European Union in Brussels says better detection has led to a substantial drop in the amount of deadly products coming into Europe from outside the bloc.

More than half of the dangerous products entering the EU are from China, latest research from the European Commission shows. Cancer-causing toys, faulty electrical goods and suffocating clothes are the most common.

EU Commissioner for Health and Consumer Policy John Dalli told euronews: "We have been working with China, with our policy of quality at source, to make sure that we train, that we give technical assistance to make sure that they produce good and safe products for our markets, and also our importers are being much more aware to insist on European standards when they are importing from China"

In spite of the apparent drop in dangerous products entering Europe, critics of the current alert system insist even better checks and clearer design rules are needed to tighten controls further.

Source: 2013 euronews

Leaks Discovered in Barrels Containing Nuclear Waste in Belgium

Leaks have been discovered in five different barrels containing nuclear waste in Belgium. The discovery was made at an installation and reprocessing facility in Dessel during a routine check.

Watch: http://www.euronews.com/2013/09/20/leaks-discovered-in-barrels-containing-nuclear-waste-discovered-at-belgian-plant/

Dust Explosion at NZ Wood Pellet Plant

Two sawdust hoppers caught fire after a dust explosion at the Nature's Flame wood pellet plant in Taupo, New Zealand, on September 2. The plant is owned by the Solid Energy group.
The plant's fire suppression and safety systems worked as they should and as a result the fire was contained into a small area, Solid Energy spokeswoman Vicki Blyth.
Two operators were at the plant at the time of the fire, but no one was hurt.
Solid Energy has begun an investigation into the cause of the incident.
Source: Solid Energy New Zealand Ltd

Explosion Protection For Biomass and Waste Industry White Paper

Renewable energies witnessed a 19 Percent growth in 2011, making it the ninth year of double digit growth for renewal Energy. Bio-fuels like Bio ethanol and Bio Diesel alone grew by more than 13 percent.
Processes handling a combination of Dust, Gas and Vapour hazards are beginning to be developed, requiring the full range of Explosion prevention and protection systems available.
Explosions are being reported every month from Wood processing facilities, Bio diesel plant, Sewage treatment, Grain Silos, Coal fired plants, saw dust mills (with pine beetle killed wood coming in dryer), even the pellet drying plants are seeing incidents.
Read this White Paper from: Atek Explosion Hazards Limited
http://www.explosionhazards.co.uk/system/assets/209/original/biomassexplosionprotectionwhitepaperswp1.pdf?1348494853

Watch some Videos:

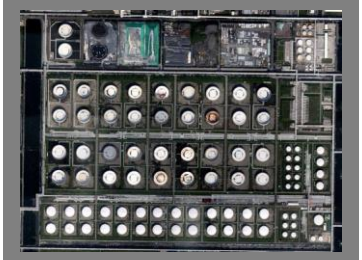
http://www.youtube.com/watch?v=a4pShnMe6Rk

http://www.youtube.com/watch?v=5wNRYmgUNTg

http://www.youtube.com/watch?v=FJlbrVZzF08

http://www.youtube.com/watch?v=enmDe1eayp8

http://www.youtube.com/watch?v=4X44xbuxJtI



FPG Taipei Underreports Tank Numbers by More than 50% in Petrochemical Complex

Aerial images taken by environmental protection authorities have disclosed more than twice the number of storage tanks in Formosa Plastics Group's (FPG's) sprawling petrochemical complex in Yunlin County as reported by the group, the Environmental Protection Administration (EPA) said Tuesday.

The images were taken during flights since May last year using unmanned aerial vehicles (UAVs) over the No. 6 Naphtha Cracking Complex in Mailiao Township to monitor whether FPG was meeting its environmental protection promises. The pictures show 3,129 tanks storing petrochemical products around the 2,603-hectare complex, which houses an oil refinery, several naphtha cracking plants and other facilities. The number was more than twice as many as that listed in a report on the project's environmental impact that FPG submitted to the EPA before the project began in 1991, according to Chen Hsien-heng, head of the EPA's team responsible for the monitoring mission.

Chen said his administration has demanded that the group present a report detailing the contents of the tanks and the impact the tanks might have on the environment and industrial safety.

The EPA started last year using UAVs equipped with high-resolution cameras and video recorders to monitor sprawling, far-reaching industrial projects that have passed local environmental reviews. The images also show that the group violated environmental laws by using the complex's green areas for development purposes and therefore incurred a NT$300,000 (US$10,108) fine, Chen said. From 2002 to the end of 2012, the EPA carried out 3,517 monitoring missions.

Since the EPA increased penalties on violators in 2011, it has meted out 321 punishment fines totalling over NT$572 million.

Source: http://focustaiwan.tw/news/aeco/201309100031.aspx

Chemical Spill in Budgewoi N.S.W.

Photo: Phil. Hearne, Newcastle Herald

HAZMAT crews were clearing up a chemical spill at Budgewoi on after an unidentified powder was discovered on the road.

A Fire and Rescue NSW spokesman said a vehicle had crashed into the back of a parked car, exposing an acid-based chemical that was stored in the boot. Some of the chemical spilled on the ground, causing emergency services to close the road to the public.

Source: Janek Speight, Newcastle Herald

Chemical Plant Pollutants Kill Fish in China

A resident of Wuhan, China, cleared dead fish from the Fu River. Agence France-Presse — Getty Images

Thousands of dead fish floating along a 19-mile stretch of a river in Hubei Province in central China were killed by pollutants emitted by a local chemical plant,

Environmental protection officials said tests on water taken from the Fu River upstream from the metropolis of Wuhan revealed that extremely high levels of ammonia in the water were caused by pollution from a plant owned by the Hubei Shuanghuan Science and Technology Company.

The tests, conducted by environmental officials from Xiaogan City, revealed ammonia concentrations downstream from the plant as high as 196 milligrams per liter.

Provincial officials ordered the company's plant to cease production while the cause of the leak was investigated. The plant produces sodium carbonate, used in making glass, and ammonium chloride for fertilizer, according to local news media reports. It has been cited for environmental violations four times since 2008, said Ma Jun, director of the Institute of Public and Environmental Affairs, a Chinese nongovernmental organization that tracks air and water. **Source: Neil Gough, New York Times**

Toxic Spill in Wagga Wagga

Photo: The Daily Advertiser

Two men were hospitalised, but the consequences could have been so much worse when 500 litres of toxic liquid poured out of a ruptured fuel tank in Wagga.

The dangerous accident happened after a forklift collided with the 1000-litre fuel tank. A major evacuation at Wagga Griffith Fast Freight and neighbouring businesses followed.

One man, 41, had to be taken to Wagga Base Hospital after coming into contact with the substance. A second employee took himself to hospital due to concerns about his health.

There were 12 firefighters on scene wearing breathing apparatuses while they worked quickly to stop any more toxic liquid pouring onto the ground. They then used sand to absorb the large amount of liquid that had spilled out of the tank.

Duty Commander for the Murray region Inspector Jeremy Stubbs said the accident could have cost a life. "People without respiratory protection shouldn't be dealing with pesticides, they are a toxic substance," he said.

WorkCover will be investigating the accident.

Source: Ashleigh Gleeson, The Daily Adviertiser

Syrian president Bashar al Assad had previously denied having chemical weapons (Reuters)

Syria Completes Submission on Chemical Weapons Details

Technical experts at the Organization for the Prohibition of Chemical Weapons were reviewing Saturday a further disclosure from Syria about its chemical weapons program.

A day earlier, the body that polices the global treaty outlawing chemical weapons said it had received a preliminary submission from Syria.

No details have been released of what is in the Syrian declarations, and OPCW spokesman Michael Luhan refused to give any more information about the latest submission.

Under a US-Russia agreement aimed at swiftly ridding Syria of its chemical arsenal, Damascus had until Saturday to submit a full list to the organization of its chemical weapons and production facilities so they can be secured and destroyed.

US officials said last week that Washington and Moscow agreed that Syria had roughly 1,000 metric tons of chemical weapons agents and precursors, including blister agents, such as sulphur and mustard gas and nerve agents like sarin.

In the aftermath of the UN report that concluded sarin had been used in an Aug. 21 attack in Damascus, the Hague-based chemical weapons watchdog is looking for ways to fast-track moves to secure and destroy Syria's arsenal of poison gas and nerve agents as well as its production facilities.

Read more: Mike Corder, http://www.3news.co.nz/

For previous reports on Chemical Weapons read: What's Happening: June and November 2012; April and August 2013

Fox Valley Systems Cited by OSHA

Fox Valley Systems was cited Thursday for 26 safety violations in connection with the March explosion that left three workers with serious injuries.

The Occupational Safety and Health Administration released its detailed findings of the March 6 incident at the Cary paint plant, a marking and striping company that does traffic and athletic field painting. The report includes six willful violations and recommends $262,000 in fines.

OSHA found multiple violations of its safety management standards for facilities that work with highly hazardous chemicals and hit the Cary plant with two willful violations for a lack of easily accessible exits.

Source: Shawn Shinneman, NorthWest Herald

Truck Unloading Dangerous Goods 4 killed, 36 Injured in China

At least four people died and 36 were injured, one seriously, in an explosion that ripped through a building in south China's Guangzhou City. Fire authorities believe the blast happened as a vehicle was unloading dangerous goods at a warehouse in the city's Baiyun district. Residue of explosives were discovered at the scene and rescuers found the remains of four bodies among the debris. Authorities believe two of the dead were the truck driver and the owner of the cargo, both of whom are unaccounted for. The blast shattered windows at a nearby shopping mall and damaged billboards at a bus station.

The warehouse, which covers an area of 14,000 square meters, was mainly used to store shoes. Source: Shanghai Daily, Dong Zhen

Deadly Gas from Rotting Potatoes in Cellar

An eight-year-old Russian girl has been orphaned after her entire family was wiped out by deadly gas caused from rotting potatoes. Maria Chelysheva lost her father, mother, brother and grandmother who were killed one by one after entering a cellar where they stored potatoes for the winter. Relatives are caring for the girl who is inconsolable over her loss.

Her father, respected law professor Mikhail Chelyshev, 42, was first to enter the cellar, not realising the potatoes had become seriously rotten. He fainted from the noxious fumes, and soon afterwards died, say police. When he failed to re-appear, his worried wife Anastasia, 38, went to look for him in the dark and was also overcome by the poisonous gas. Next the couple's 18 year old son Georgy went in search of his parents, only to suffer the same tragic fate as his mother and father after inhaling the highly toxic fumes. Anastasia's mother Iraida, 68, called a neighbor to say there was something suspicious and to plead for help. But before assistance arrived, she also went into the cellar, suffocated from the gas, and collapsed and died like the others, say police.

It is understood that as she went in, she left the door open, allowing the fumes to disperse. When Maria entered the cellar, she found the bodies of her whole family on the cellar floor.

The shocking case was at Laishevo, a town near Kazan, in the Russian republic of Tatarstan on the Volga River. 'They all died of gas poisoning which has accumulated in the basement as a result of badly rotting potatoes,' said a local investigator. Source: Daily Mail

POTATO TOXICITY…

Potatoes contain toxic compounds known as glycoalkaloids, of which the most prevalent are solanine and chaconine.
Solanine is also found in other plants in the family Solanaceae, which includes such plants as the deadly nightshade (Atropa belladonna), henbane (Hyoscyamus niger) and tobacco (Nicotiana) as well as the potato, eggplant, and tomato.
This toxin affects the nervous system, causing weakness and confusion.
These compounds are generally concentrated in its leaves, stems, sprouts, and fruits.
Exposure to light, physical damage, and age increase glycoalkaloid content within the tuber; the highest concentrations occur just underneath the skin.
Cooking partly destroys them. The concentration of glycoalkaloid in wild potatoes suffices to produce toxic effects in humans.
Glycoalkaloids may cause headaches, diarrhea, cramps, and in severe cases coma and death; however, poisoning from potatoes occurs very rarely.
The U.S. National Toxicology Program suggests that the average American consumes at most 12.5 mg/day of solanine from potatoes (the toxic dose is several times this, depending on body weight).

Afghan Mine Collapse Kills 28 Workers

At least 28 miners are confirmed dead after a mine collapsed in northern Afghanistan on September 15. The collapse followed a gas explosion at the site. Early reports that 12 miners were trapped alive underground have since been revised, with officials confirming there are no more survivors.
Around 100 other workers were taken to hospital, but discharged after brief treatment. Four emergency workers were also badly injured during the rescue operation. According to Al Jazeera within hours of the collapse, 20 civilian rescuers found themselves choking on the dirt and fumes released into the air.
The tragedy has highlighted the dangerous conditions of many Afghan coal mines, with workers using old equipment and little safety gear whilst working in mines that are not properly ventilated or supported.
The site of the explosion was in one of Afghanistan's many illegally operated facilities.
Source: Mining Australia.com

Five Killed in Chinese Chemical Plant Blast

Five people have been killed in an explosion in a plant in China's northeastern Liaoning Province, local authorities said on Sunday.
The explosion occurred on Saturday in a small private chemical plant in Dongzhou District of Fushun City, when workers of the factory were checking material tanks, officials said.
Five workers were killed in the accident.
The blast caused fire, but the fire is under control, state-run *Xinhua* news agency reported.
Source: The Hindu

Managing Ageing Plant through Risk Based Inspection

Author : Wahid Azizi, Chilworth Technology Ltd.

All plants are susceptible to ageing, and so are automatically subject to the risks of mechanical integrity failure such as loss of containment. Given this, companies should be taking action to manage their ageing plant, but at the same time all companies need more output for less input; higher production and less investment, higher reliability but lower maintenance. Risk Based Inspection (RBI) may be a solution in effectively managing ageing plant and achieving that aspiration of higher product.
RBI is about inspection of the plant in a manner which is bespoke to its needs, and finding the correct and most efficient inspection regime. This can remove the need for unnecessary and costly inspections, especially those which are legally enforced under PSSR (Pressure Systems Safety Regulations).
This article gives a real-life example of RBI being used to examine the inspection requirements on a mist eliminator in a sulphonation process, which is highly toxic and corrosive.
This led to significant savings in parts replacement and in down time, as well as saving logistical costs in facilitating invasive-visual-internal inspection.
Read the Full Article:
http://www.hazardexonthenet.net/article/60771/Managing-ageing-plant-through-Risk-Based-Inspection.aspx