



WHAT'S HAPPENING?

October 2012

**Welcome to our
new Associate
Members**

**Richard
Greenwood
Victoria**

**Mark
Anderson
Queensland**

and

**Congratulations
to new full
Member**

**Tendai
Mapondera
W.A.**

Expert Forecast on Emerging Chemical Risks Related to Occupational Safety and Health

It is estimated that about 74,000 work-related deaths may be linked to hazardous substances at work each year in the EU – about 10 times more than workplace accidents. About 15% of European workers report handling chemical products for a quarter of their working time and 19% report breathing in dust, fumes and smoke in their workplaces.

The 49 experts from 21 European countries who participated in this forecast highlighted particles and dusts as major emerging concerns and put nanoparticles at the top of the list of emerging risks. Other main groups of emerging risks identified were carcinogenic, mutagenic and reprotoxic substances, and the increasing use of allergenic and sensitising substances. Specific occupations of emerging concerns were also highlighted and include the increasing waste management industry, construction, and service activities such as cleaning or home nursing.

In addition, there is a growing number of workers in SMEs and sub-contracted jobs, where the management of chemical risks is generally poorer.

Last but not least, concern about multiple exposures is increasing as it was also shown in the three other forecasts on emerging biological, physical and psychosocial emerging risks.



Source: European Agency for Health & Safety at Work

Download the full publication as PDF  (3417Kb) from:
http://osha.europa.eu/en/publications/reports/TE3008390ENC_chemical_risks



Photo:
miningaustralia.com.au

Toxins Rise in NSW Hunter Valley Suburbs

A new pollution analysis suggests residents in the Hunter are being exposed to some toxins at levels more than 100 times higher than they were a decade ago. The Newcastle Herald reports analysis of National Pollution Inventory data shows the number of pollution generating industries rose from nine to 16 between 2001 and 2011 while the number of pollutants increased from 35 to 38.

The Herald reports that while some emissions like arsenic, lead and mercury have decreased, others have risen - Ammonia emissions increased 188per cent, benzene by 600per cent, sulphur dioxide by 312per cent and carbon monoxide by 6per cent.

An Environment Protection Authority spokeswoman said conditions of environment protection licences should prevent pollution, maintain environmental standards and monitor environmental performance.

The authority may also order licence holders to undertake pollution reduction programs.

“For example, the [authority] recently required Koppers Carbon Materials to introduce nitrogen blanketing to naphthalene tanks on its premises ... resulting in a reduction in naphthalene emissions from the site’s process tanks.”

New legislation was introduced to strengthen requirements for industry to notify and respond to pollution incidents in the wake of Orica’s hexavalent chromium spill on Kooragang Island.

Source: Newcastle Herald, Vicky Validakis

Contractor Sprayed with Acid at Milk Factory in New Zealand

A man has suffered acid burns to his face and torso at the Synlait milk powder factory near Dunsandel. St. John ambulance service was alerted and the Westpac Rescue Helicopter flew the 49-year-old man to Christchurch Hospital, where he was treated and discharged.

Synlait manufacturing manager Neil Betteridge said the man, an electrical contractor, was working in the waste-treatment factory beside the milk powder factory when the accident happened.

He had unknowingly leant on a pipe containing sulphuric acid to work on an instrument beside it when the pipe burst, spraying him with acid.

Betteridge said the man went into a safety shower immediately, which minimised the burn injuries.

Source: Fairfax NZ News, Joelle Dally

BP spill trial delayed until February 2013

A federal judge has delayed until February 2013 the start of a massive trial to determine liability from the 2010 Deepwater Horizon oil spill, citing tourist events that will keep New Orleans’ hotels booked.

Read More: <http://www.newsdaily.com/stories/bre89p0wm-us-bp-spill-trial/>



Photo: manmonthly.com.au

Safe Work Australia Codes of Practice

All second-stage model codes of practice have now been approved and are available on the Safe Work Australia website, including the codes for excavation work, welding processes, spray painting and powder coating, and abrasive blasting.

Meanwhile, draft model codes for preventing and managing fatigue and responding to workplace bullying are being revised following public comment. These model codes are expected to be finalised later in the year. The complete lot of 12 codes forming part of the second-stage release can be viewed at: <http://www.safeworkaustralia.gov.au/sites/swa/legislation/model-cop/pages/model-cop.aspx>

WORKSAFE Victoria

is currently reviewing their Regulatory Impact Statement – Dangerous Goods (Storage & Handling) Regulations September 2012. The report has been prepared by PricewaterhouseCoopers Australia (PwC) on behalf of the Victorian Government and considers a number of options to control the risks associated with the storage and handling of dangerous goods. The Dangerous Goods (Storage and Handling) Interim Regulations 2011 made under section 52 the Dangerous Goods Act 1985 are due to expire on 1 December 2012. To view recommendations visit the following link: http://www.worksafe.vic.gov.au/_data/assets/pdf_file/0004/24799/DG-Storage-and-Handling-RIS-20120911-Final.pdf

Canisters of Dangerous Poison Wash Up on Queensland Beaches

Police say four "small" canisters of aluminium phosphide, which can be fatal if inhaled or ingested, have been found so far and beachgoers are being warned not to go near them.

The deadly chemical they contain is used to fumigate ships and it's assumed the canisters came from a passing vessel. The four canisters have been found along a 200-kilometre stretch of coastline from Ayr to Ingham since February.

"This is a highly restricted toxic substance and indeed a very dangerous poison," Cairns District Crime Prevention Officer Cary Coolican said. "For safety's sake, if you come across one of these canisters, report it immediately. "Do not try to inspect, open or transport it and ensure you stand well away from it."

When the chemical comes into contact with air or moisture it generates a highly toxic phosphine gas, which under the right conditions can also self ignite.

"Even in the hands of experts, this chemical is highly dangerous and presents significant health risks, so it's vital members of the community heed our warning," Sergeant Coolican said.

Source: HeraldSun



Photo: Townsville Bulletin

Acetone Wash in Chemical Spill

Firefighters have cleaned up a highly flammable chemical, used for cleaning laboratories, which was spilled at a business in Brisbane's south.

Four 200 litre drums of acetone wash were moved by firefighters at a business in Ipswich Road, Rocklea after one of the drums started leaking, a spokeswoman for the Department of Community Safety said.

Wearing breathing apparatus, the firefighters had to first cool the chemical spill before cleaning it up.

The drum which was leaking is being monitored but the other three drums were moved as a precaution. No injuries have been reported.

Source: Brisbane Times, Bridie Jabour

Changes to Dangerous Goods Transport Rules on the Horizon - Victoria

WorkSafe Victoria recently announced changes to the state's legislation regarding the transport of dangerous goods by road and rail. While the draft proposes more than a few tweaks to the legal code, businesses operating in full compliance with current safety standards have little to worry about.

"Victorian law is now consistent with an updated national framework for transporting dangerous goods by road or rail," according to WorkSafe Victoria's website. "The framework, which is the responsibility of the National Transport Commission (NTC), closely aligns with international standards for the safe transport and storage of dangerous goods."

Among the most significant changes is an increase in the duration of dangerous goods licenses from three to five years, clarification of supply chain responsibilities and new definitions of terms, according to WorkSafe Victoria. The draft legislation also refers to the updated ADG7 version of the Australian Dangerous Goods Code, which came into effect on January 1, 2012, rather than the outdated ADG6 version.

The adjustments are part of a broader effort throughout Australia to standardise safety regulations between local jurisdictions. The Australian government hopes to ease the inconvenience and cost that disparate legislation between local governments places on the country's businesses. The harmonisation push in Australia may also reflect the efforts of the United Nations to create and propagate "model" safety regulations for its member states.

"In order to assist industry through consistency and standardisation of regulation, Australia has been closely involved in international efforts to harmonise the classification and labeling requirements for all dangerous goods," according to the Department of Infrastructure and Transport's website.

Currently, the transport of dangerous goods in Victoria is governed by a set of interim regulations created in 2011. This temporary legislation is set to expire on 1 December, 2012. WorkSafe intends to finalise and implement new legislation by that date.

Source: SafetoWork



Gulf Oil Slick Comes from Device used to Contain 2010 Spill

An undersea camera confirms that an oil slick discovered in the Gulf of Mexico came from a 100-ton device on the seafloor that BP had used several weeks after the 2010 oil spill in a failed attempt to cap its runaway Macondo well, the U.S. Coast Guard said Thursday. The oil is not coming from the Macondo itself, which was sealed in a relief well operation months after the 2010 blowout.

Less than 100 gallons of oil per day is leaking from the containment device, the Coast Guard said. The oil will continue to dribble out slowly for the time being. Officials are trying to figure out the best course forward.
Source: fueifix.com



Oil sheen in the Gulf of Mexico, as seen on Sept. 21, 2012. (NOAA photo)

Health Concerns over Sustainable Fuel

Biodiesel made from soy and canola produces compounds that can cause serious respiratory disease, researchers say.

A team from the Queensland University of Technology says the discovery could lead to restrictions on the use of biodiesel as an alternative to fossil fuel. The team looked at a range of biolubricants made from soy, tallow and canola.

They found that burning diesel fuels with a high percentage of biodiesel - up to 80 per cent - produced higher emissions of compounds linked to respiratory disease. The compounds, called reactive oxygen species, form on surface of small soot particles in exhaust emissions. Reactive oxygen species can lead to the cell damage called oxidative stress which, over long periods of time, can progress to serious respiratory disease.

Postdoctoral fellow Dr Nicholas Surawski says care must be taken to guard against respiratory illness that could result from new fuels. "Now we've identified a component of the emissions that causes the problem we can start to look for solutions," Dr Surawski said in a statement on Wednesday. The team is now trying to understand the way the reactive oxygen species in the emissions are generated, and how to remove them.

Their work is aimed at providing the transport industry with fuels that have a favourable environmental impact and are acceptable from a human health perspective.

Source: AAP

National Industrial Chemicals Notification and Assessment Scheme 2012

The Review of the National Industrial Chemicals Notification and Assessment Scheme (NICNAS)—June 2012 was released on 1 June 2012. Submissions were received between 1 June and 27 July 2012. The comments received from this consultation process will be used to inform the government of stakeholder views.

To read the submissions from organizations and individuals, goto:

<http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-nicnas-submissions-2012>

Bromine Gas Leaks from Pharma. Plant

Over 150 people needed treatment and three are in intensive care after bromine gas leaked from a pharmaceutical company in Kalyan, India – north east of Mumbai - and spread over a 1-km radius area affecting over 2.5 lakh (A *lakh* is a unit in the South Asian numbering system equal to one hundred thousand) people. Anger and fear are frothing in the surrounding settlements as this was the fourth instance of carelessness with chemicals that has imperiled people in the industrial area in the past two months. A negligence case has been registered against the management of Aarti Industries, which mainly manufactures cough suppressants and anti-nicotine aids, after an initial probe by the Manpada police found lapses in maintenance. Source: The Times of India



Firefighters try to contain toxic gases with water

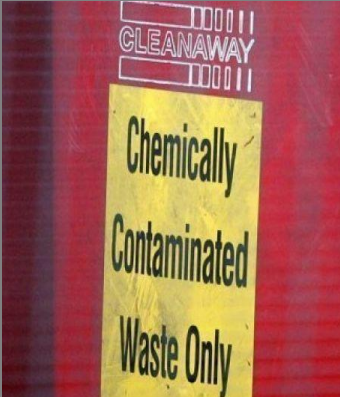


Photo: AFP/File

Toxic Gas Leak in South Korea

More than 3,000 South Koreans near the southeastern city of Gumi have received medical treatment as the damage from a major toxic chemical leak continues to grow, media reports said. An explosion at the factory of chemical maker Hube Global on September 27, which killed five people, led to the leak of hydrofluoric acid which has affected crops, livestock and villagers near the plant.

Nearly 3,200 people have so far been treated for nausea, chest pain, rashes, sore eyes or sore throats after apparently inhaling toxic fumes, Yonhap news agency said, citing data from the city government.

The explosion and leak affected nearly 80 firms, some of which were forced to shut plants. The estimated damage has increased to 17.7 billion won (\$15.9 million) from 9.4 billion won previously reported, Yonhap and other media reports said.

The leak also damaged 212 hectares (524 acres) of farmland and affected 3,200 livestock, which showed symptoms similar to a cold.

About 300 villagers at Bongsan-ri and Imcheon-ri near the plant have been evacuated to temporary shelters after complaining of health risks, with some reporting blood in their saliva. "We decided to move because the government overlooked us and did not come up with countermeasures," Park Myeong-Seok, the head of Bongsan-ri, was quoted by Yonhap as saying. Some 1,200 residents remain in the villages where an acrid smell still hangs in the air and crops and trees have withered, Yonhap said.

A team of 26 government officials and experts is expected to announce on Monday the result of their three-day investigation.

Source: Asia Pacific News

Hube Global, HF Release

Two workers at top of tank lorry for transfer and two workers at ground level for pump repair and one officer at office building close to tank lorry died.

See this tragic event unfold with *this CCTV footage* of the workers on top of the ISO tank connecting air lines to effect the transfer of HF – moments later the HF is released;

<http://tvpot.daum.net/v/v0aecHIQNWHWNHQQKQmHHTXX> Anhydrous HF leaked from the liquid valve as two workers were on top preparing to connect an Anhydrous HF ISO Tank for offloading. They accidentally fully opened the quarter turn valve. An estimated 8 tons of HF was released. 5 people including the 2 workers perished, 18 responders, workers, reporter wound-up in the hospital, almost 3000 villagers from 2 villages downwind of the facility were treated for irritation, exposure.

Some pre-report key issues in my mind are:

1. Both workers had no chemical protective clothing or SCBA
2. Emergency response equipment/systems to mitigate the leak
3. Emergency Responders were not aware of the treatment for HF
4. Calcium Gluconate was not readily available
5. Valving on the ISO should be reviewed

This has been reported to be the worst chemical accident in Korean history

This JOIFF Report from Eugene Ngai, Chemically Speaking LLC



Evacuees sleep in a function room in the Kraft Foods factory after an accident



A woman rests after the accident



Photo: HazardEx

Kraft Foods Leaks Poisonous Gas

Around 1,400 people have been evacuated from their homes in Germany, after a chemical accident at a factory run by US food giant Kraft caused a cloud of poisonous gas.

The accident, at the small town of Bad Fallingbostal, near Hanover in northern Germany, happened on Monday when employees accidentally poured acid into a tank containing sodium hydroxide solution, causing a chemical reaction.

Some 700 firefighters were still trying to cool the container amid rising temperatures and fears of a possible explosion. Technical experts were trying to pump out the acid.

Local authorities have imposed emergency measures, including closing local schools and nurseries as well as parts of a major motorway running nearby. An exclusion zone of 500 metres (yards) has been set up. A spokeswoman for the company said that no one had been injured so far. "There has at no time been any danger for the population because we decided, along with the authorities, to evacuate as a precautionary measure," Heike Hauerken told rolling news channel N24.

Production was halted as soon as the accident took place, she added.

Source: france24.com

Dental Nurse Sets off Surgery Explosion

Three people suffered burns in a blast inside a dental office in Worcester, Massachusetts, during a routine procedure last week. Firefighters said dentist Stanley Levenson was taken to UMass Medical Center with second-degree burns to his face and hands last Thursday following a flash fire that ignited inside an examination room at his dental surgery.

'It's very lucky in any incident like this, everybody came out standing up,' Tom Gingras, of the Worcester Fire Department, told the station WHDH.

An investigation into the October 11 incident has revealed that a dental assistant was pouring alcohol-based fuel into a lamp used to soften denture moulds when there was a flashback.

'They were filling a butane heating appliance and it was either too hot, the flame hadn't all the way gone out, and then used alcohol in the air and the alcohol they were fueling flashed,' Gingras explained.

Witnesses reported seeing people streaming from the downtown dental office, some of them kneeling on the ground and vomiting.

Source: MailOnline, Snejana Farberov

Decanting of Liquefied Petroleum Gas (LPG) into Cylinders: WorkCover NSW Safety Alert

This safety alert outlines the dangers and risk controls when decanting LPG into cylinders. Goto:

<http://www.workcover.nsw.gov.au/formspublications/publications/Documents/decanting-liquefied-petroleum-gas-safety-alert-3868.pdf>



Photo: HazardEx

New Jersey Ink Factory Blast and Fire

Seven people have been treated for burns injuries following an explosion and fire at US Ink in East Rutherford, New Jersey. The factory makes newspaper ink and the injured were mixing volatile chemicals when a carbon compound ignited causing a fire in the ventilation system. Many of the employees had their faces and bodies covered in a black soot-like substance, believed to be the carbon compound used in the manufacturing process.

Firemen quickly extinguished the blaze. A spokesman for parent company, Sun Chemical, said the explosion happened in the pre-mix room of the plant but that there was no danger of contamination to the neighbourhood. Gary Andrzejewski, Sun Chemical's corporate vice president for environmental affairs, said they would be investigating all possible causes.

Fire Chief John Giancaspro said more than 20 workers were standing outside the plant when firefighters arrived. He said: 'There doesn't seem to be any human error involved.'

A spokesman for parent company, Sun Chemical, said the explosion happened in the pre-mix room of the plant but that there was no danger of contamination to the surrounding neighbourhood.

According to the Occupational Safety and Health Administration database, the company has been reported for safety violations at the plant in 1976, 1986 and 1989.

Source: DailyMail.co.uk

Oil Platform Workers Injured

The Coast Guard confirmed that a W&T Offshore gas platform located in the Gulf of Mexico caught fire Wednesday morning, forcing three workers to evacuate.

Two of the workers suffered minor injuries as they evacuated the platform located in 120 feet of water about 29 miles south of Terrebonne Parrish, La.'s Dernieres Barrier Island Refuge.

W&T Offshore's Janet Yang said the accident occurred on an oil-processing platform, not a drilling rig. Yang said she did not believe an active well was located at the site.

Five contracted response vessels sprayed water on the platform.

W&T officials reported that an inspection cover on a heater-treater valve cover blew out, causing the fire. It also resulted in a hydrocarbon spill that caused a sheen 600 yards long by a half-mile wide to form. Workers were able to shut in the platform before evacuating, preventing additional pollution from entering the water.' The sheen was still present, but reports indicated it was dissipating. Source: <http://www.maritimeinjury.com>

NICNAS: Chemical Gazette October 2012

This latest issue is available at:

http://www.nicnas.gov.au/Publications/Chemical_Gazette/Chemical_Gazette_October_2012.asp

Solvent Company Prosecuted for Decanting Failures

A Doncaster solvent company has been fined after an unsafe decanting operation caused a huge fire that engulfed its Harworth base in England. Employees were transferring highly flammable toluene from a bulk container into a smaller drum ahead of the incident at Solvents With Safety Ltd at Plumtree Farm Industrial Estate.

They were attempting to fill the drum using a pipe from the container; however the pipe they used was too short. It meant dropping the liquid from the pipe into the drum, a process called 'splash filling' that is known to generate static electricity - a potential ignition source.

Doncaster Magistrates' Court heard that the flash point of toluene is just 4 degrees. So on a "hot" June evening when the process took place, the toluene would have a flammable vapour over its surface.

The build up of static electricity in the drum is thought to have ignited the vapour and sparked a fire that quickly took hold and spread to other containers of flammable and dangerous solvent mixtures at the site, some of which exploded.

Seven workers were present at the time, but all managed to escape unharmed after a quick-thinking supervisor ordered them to evacuate the site and called the emergency services. The initial blaze was described as escalating to a raging inferno within minutes.

An investigation by the Health and Safety Executive (HSE) found the 'splash fill' method was wholly inappropriate and posed a clear risk that wasn't properly assessed. Worker safety was further compromised by the fact that the pipe used to fill the container wasn't earthed, and because the personal protective equipment worn by the workers wasn't anti-static and was therefore unsuitable.

The court also heard that HSE had twice written to Solvents With Safety, in May 2006 and December 2007, to warn of the dangers of splash filling containers. The company pleaded guilty to breaching Reg 6(1) of the Dangerous Substances and Explosive Atmospheres Regulations 2002 and was fined £20,000 and ordered to pay £6,860 in costs.

After the hearing, HSE inspector Jayne Towey said: "The Solvents With Safety workforce were extremely lucky to escape unharmed from this incident. The size and scale of the fire was immense, it took hold in minutes and caused total devastation to the company's premises.

"Lives were needlessly put at risk because there would have been no blaze at all had the company taken more care with the decanting operation.

"The method they used was fraught with risk to say the least, and the generation of static charge could have been prevented by the provision of a longer filling pipe to avoid splash filling. This was a reasonably practicable measure to take, and the company was well aware of the dangers on the back of earlier HSE advice. "Companies working with dangerous substances must take extreme care at all times and in all aspects of their operations.

That clearly didn't happen on this occasion and it could have had far-reaching consequences." Source: HSE



The aftermath of the blaze



The scale of the fire damage

Cleaning Solvents and Thinners – WorkCover NSW Safety Alert

A safety alert about the adverse health effects of volatile solvents and thinners. All volatile solvents have the potential to cause a person to lose consciousness, and suffer a cardiac arrhythmia and possibly death when used in an enclosed or poorly ventilated area. Toluene xylene, hexane, methyl ethyl ketone, naphthalene, and other petroleum-based solvents have been implicated in deaths. Other chemicals present in proprietary thinners can greatly increase skin absorption causing or exacerbating toxic effects.

Goto:

http://www.workcover.nsw.gov.au/formspublications/publications/Documents/cleaning_solvents_and_thinners_3824.pdf

Fire at Vale Inco Plant

An explosion at the Vale Inco plant in Port Colborne, Niagara, Canada has sent two workers to hospital... The workers are being treated after inhaling chemicals.

20 other workers were being assessed at the scene by paramedics.

The explosion and resulting fire were being fueled by sulphur inside the refinery.

Source: <http://www.610cktb.com/news/local/story.aspx?ID=1793574>

Italy Faces Hefty Fines for Failure to Clean up Landfills

The European Commission has requested the European Court of Justice to fine Italy for failing to adopt measures to address the problem of its illegal landfills.

The commission filed the request on Wednesday citing Italy's failure to fully abide by a 2007 court ruling on cleaning up its landfills.

The European Union's executive body said in a statement that "it is clear that problems persist in almost all Italian regions. The court ruling of 2007 has not been complied with, and the commission has therefore decided to take Italy back to the court and ask for fines."

The commission requested the court to order Italy to pay a lump sum of 56 million euros and a daily amount of 256,819 euros in fines until all of the country's landfills are fully cleaned up.

According to the commission, Italy has so far coped with only 132 of a total 255 waste disposal sites, of which 16 contain hazardous waste.

The commission also said that it "has received no information proving that Italy has set up an adequate monitoring system to prevent new illegal landfills from being opened."

Italy is notorious for the difficulties it has in dealing with the disposal of waste.

Source: [Presstv.it](http://www.presstv.it)



**An illegal Italian landfill
west of Naples (file photo)**



Two Men Die in Abandoned Mine Used as Meth. Lab.

An abandoned mine in New Zealand has been uncovered as a drug lab, after police responded to calls of an explosion which killed two men at the site.

Police were called to the chemical fire or explosion which killed the two men, and uncovered drugmaking equipment.

It is believed that methamphetamines, or what is known in New Zealand as P, was manufactured on site.

The area is believed to be scattered with disused mines and closed shafts, and is well known for drug activities.

The closed mine was located in Coromandel, Waikato, on New Zealand's North Island.

Source: Australian Mining

Ammonia Leak Poisons 479: China

Twenty-six people remained in hospital Tuesday in the city of Honghu, Central China's Hubei Province, after an ammonia gas leak at an aquaculture company poisoned 479 people.

Some 1,000 people were evacuated from the area after the leak in Deyan Aquaculture Company, firefighters who joined the rescue were quoted by the Xinhua News Agency as saying.

Three of those who remained in hospital were suffering from severe poisoning. Hundreds of people were treated and released from five area hospitals. Local police in Honghu received a call that ammonia gas used by the company as a refrigerating agent had leaked. A large-scale evacuation of a neighbourhood was immediately ordered. A worker surnamed Li, who lives in company housing with his family, said the evacuation was rushed and caused some of his coworkers to fall.

The firefighting officers told Xinhua the leakage had been controlled, and the concentration of ammonia in the air had been declared safe.

The company's operations were restarted, after a suspension ordered by local authorities was lifted, the local news portal cnhubei.com reported.

Lu Deyan, owner of the company, said the decision to return to work was not compulsory, as some workers were still showing signs of stress.

The cause of the investigation is ongoing.

Source: Global Times - Agencies

Massive Fire at BHEL Plant in Bhopal

A massive fire broke out at the BHEL plant in Bhopal, New Delhi, when a 200 kW transformer exploded and the 19,000 litres of oil that it contained caught fire.

Sources said that the incident took place when the transformer was being tested at block 3. "With the impact of the explosion the roof of the electrical panel building was blown off. The transformer contained 19,000 litres of oil which spread in the area including the underground cable gallery. As a result, a massive fire engulfed the entire area," said sources.

Source: The Times of India

USFA, Hazard and Risk Assessments

Federal requirements established by the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor (DOL) in 29 Code of Federal Regulations (CFR) 1910.120 *Hazardous Waste Operations and Emergency Response* require that the individual in charge at a hazardous materials emergency must be able to identify, to the extent possible, all hazardous substances or conditions present and must address as appropriate site analysis, use of engineering controls, maximum exposure limits, and hazardous substance handling procedures. Furthermore, the IC is responsible for assuring that the personal protective equipment (PPE) worn is appropriate for the hazards to be encountered. To fulfil that obligation, the IC must implement a process commonly referred to as a hazard/risk assessment. Read this 'Coffee Break' Training from JOIFF:

http://www.usfa.fema.gov/downloads/pdf/coffee-break/hm/hm_2012_1.pdf



Paper Considers Why Process Safety Systems Aren't Enough to Prevent Incidents

Organizational failures pave the way for the technical failures that lead to process safety incidents, such as 2010's Deepwater Horizon and San Bruno gas pipeline disasters, say experts at global safety firm BST.

The firm has released a white paper describing what it calls a comprehensive process incident prevention approach. The paper also provides recommendations on how to integrate culture and leadership with catastrophic event prevention.

BST says the paper seeks to answer the question of why serious events continue to occur despite sophisticated technical and management systems in industry. "It turns out that process safety systems are critical to preventing catastrophic events, but they aren't enough," says BST president Scott Stricoff. "Good systems fail when culture and leadership don't support them."

Preventing incidents in man-made systems (in some industries known as process safety management) is a distinct discipline from employee safety. Employee safety focuses on preventing injuries and fatalities on the job, while the purpose of catastrophic event prevention is to stop systems failures that can result in fires, explosions, uncontrolled releases of hazardous materials, mine collapses, or train collisions.

The two categories overlap when a serious process failure injures or kills employees. Failure to distinguish between employee safety and process safety, specifically confusing good performance in one for good performance in the other, has been cited as a contributing factor in some recent catastrophic events.

"Preventing the kind of catastrophic events we've seen in recent years requires a willingness to address the organizational issues in addition to the technical issues," says Stricoff.

The white paper outlining BST's process incident prevention approach is available at <http://www.bstsolutions.com/en/processincident> (Note: to download the paper you have to enter your contact info)

WorkCover NSW Resignation

Hello Industry and others

Just to let you know that I have just resigned. I joined WorkCover as a dangerous goods inspector in 1990. It does seem like a long time ago!

I'd like to thank you for the support, as well as the challenges you have provided over the years. I will be on leave for most of the next two weeks. I will be at work on my last day which is Friday 26th October

I have accepted a one year contract in the private sector and I am looking forward to new challenges.

Joanna Fielding

State Coordinator Major Hazard Facilities | Major Hazard Facilities Unit
WorkCover NSW



Regulation of Tanks Inside Buildings-- A Guide for Code Users and Enforcers

WEBINAR

Monday, November 5, 2:00-3:00 pm Central Time



With Jeff Shapiro, PE, FSFPE, code consultant, and Scott Stookey, Emergency Prevention Division, Austin Fire Dept.

Whether you're a code user or code enforcer, don't miss this informative webinar. Learn what you need to know about regulations affecting tanks inside buildings, a growing installation option. Q/A session included.

Our expert presenters provide a guide to regulations and codes involving tanks inside buildings, including:

- **Regulations that restrict the installation of tanks inside buildings**
- **Group H Occupancy triggers and ways to avoid them**
- **Special considerations for tank fill and vent connections**
- **Requirements for fire protection systems and containment**
- **Special enclosures and tank vaults**

If you design, manufacture, install or inspect tanks inside buildings--or if you regulate those who do--register today and logon with Jeff and Scott for this important webinar!

[Space is limited--click here to register today!](#)

<http://www.cvent.com/events/regulation-of-tanks-inside-buildings/event-summary-79d7ce7c7b6d4336b8af2abad960ae79.aspx>

This is a USA Webinair – cost to non-Members is \$A75

Dangerous Oxygen Canisters on Commercial Air NZ flight: No Prosecution for Air Force.

The air force won't be prosecuted after potentially dangerous oxygen canisters were shipped on an Air New Zealand flight without the airline's knowledge.

The Civil Aviation Authority (CAA) says no one will be charged over the safety breach, but wants to be sure the air force follows proper procedures in the future.

The air force sent the canisters from Auckland to Vancouver aboard an Air New Zealand flight carrying 379 passengers and crew in 2009.

The airline was not notified and it also failed to tell the CAA once they became aware of the incident.

If incorrectly activated the oxygen can fuel a fire. Similar canisters brought down a United States passenger jet in 1996, killing 110 people.

The air force brought in new electronic systems for identifying the correct treatment of any item deemed dangerous goods, clarified roles and procedures and trained staff after a court of inquiry found shortcomings in the way it transported hazardous goods.

The CAA is now undertaking its own inquiry and its director Graeme Harris says it won't prosecute anybody due to the passage of time and its focus in improving safety procedures.

Mr. Harris says the incorrect labelling, categorization and preparation of the canisters highlighted by the court of inquiry was of particular concern.

An interim CAA report says investigators will focus on the effectiveness of measures the air force put in place after its court of inquiry to prevent the incident happening again.

It is also focusing on communication after the Transport Accident Investigation Commission was told the canisters were not carried on the flight but merely assigned to it, and the CAA wasn't told at all.

RNZAF chief, Air Vice-Marshal Peter Stockwell said the air force had shipped dangerous goods on civilian flights at least eight times between 2002 and 2009. Source: NZ City

AS/NZS 4745:2012

Code of Practice for Handling Combustible Dusts

This Standard is intended to assist those industries which may have risks associated with the presence of combustible dusts as part of their process, in minimizing the risk of injury, death or loss of property to fire and/or explosion. It sets out good design and management principles and practices for the construction, operation and maintenance of manufacturing and processing plants and associated transportation and storage systems.

Goto: <http://infostore.saiglobal.com/store/Details.aspx?ProductID=1592163>



Labelling errors have been blamed for the carriage of illegal cargo on an Air New Zealand plane (3 News file)



NSW Signs up to National Rail Safety Law

The number of jurisdictions signed up to national rail regulations has grown to three, with New South Wales passing legislation on October 24.

The *Rail Safety (Adoption of National Law) Bill*, which will establish the National Rail Safety Regulator (NRSR), cleared both houses of Parliament with bipartisan support.

NSW joins South Australia and Tasmania in passing the reform, with other jurisdictions expected to do the same in the coming months to allow the regulator to begin operating on January 1 next year.

It will replace the seven regulatory authorities and three investigative agencies currently in place. It will have oversight of urban passenger rail networks and interstate freight operations and is part of reforms that will also establish single regulators for the heavy vehicle and maritime sectors. The regulator, which will be based in South Australia, will take over responsibility for administering accreditation and registration schemes. Parliamentary Secretary John Ajaka says the Independent Transport Safety Regulator will act on the national regulator's behalf in NSW. "The national reforms currently being introduced will also establish a National Rail Safety Investigator to better facilitate the pooling of investigatory resources from all jurisdictions," he says.

Read More: Brad Gardner, Supply Chain Review

CO2 Incident at Fast Food Restaurant

On May 21, 2011 the Phoenix Fire Department responded to a fast food restaurant for a female worker who had reportedly slipped and fell. It was much more and the incident came close to being a real catastrophe for the worker and two Firemen! This video by the Phoenix FD is an excellent training video for those who work around Carbon Dioxide (CO2). There have been several CO2 incidents around the country in fast food restaurants and the one in GA resulted in a fatality of a customer!! Goto:

http://www.safteng.net/index.php?option=com_content&view=article&id=2159:co2-incident-fast-food-resturant&catid=77:video-of-the-week&Itemid=300

Chemical Leak Sends Workers to Hospital

More than a dozen workers were treated after inhaling fumes at a juice and processing plant in Del Rey in California. Fresno County firefighters were called out to the industrial accident at the Pom Wonderful plant on Del Rey and American just after 8:30 a.m. They found several people who reported breathing problems.

Fifteen people were treated and at least six of those were taken to the hospital.

Investigators say it appears muratic acid and chlorine were accidentally mixed together causing the fumes.

These chemicals are not meant to be combined.

Firefighters are trying to determine why it happened.

Source: Kathy Paez, KMPH Fox 26

Corrosion Linked to 2011 Chevron Refinery Fire

Corrosion that went unchecked — the suspected cause of a fire at Chevron Corp.'s Richmond refinery in August — has been linked to a fire at the plant in October 2011, the San Francisco Chronicle reported (<http://bit.ly/OzFQcu>). According to state inspection documents obtained by The Chronicle, a state Division of Occupational Safety and Health inspector who investigated the smaller 2011 fire documented allegations from two workers of corrosion at the refinery.

The 2011 fire took place during a scheduled maintenance shutdown and was quickly extinguished. "We're afraid something is going to fall through the cracks," one worker told Cal/OSHA safety inspector Carla Fritz, who went to the plant to investigate the fire last November.

"We're concerned about increased corrosion — we've increased temperatures and increased rates, and it takes a toll on the equipment," said the worker, who was identified in Fritz's notes as head operator of the lube oil plant — the most senior of a 20-member operator crew.

Cal/OSHA said in a statement that a violation notice was not issued to Chevron over the 2011 fire "because the problem alleged and potential hazard had been already identified and corrected."

The Chronicle obtained Fritz's notes under the state Public Records Act. State officials redacted the names of Chevron employees she interviewed. A Chevron spokesman told the Associated Press that the 2011 fire was contained in a furnace in the lubricants plant, and that the company took appropriate actions afterward to protect the safety of its employees and facilities.

"We immediately responded, shut down the affected operations, evacuated all non-essential staff, and successfully contained the incident," Sean Comey said in a statement. He added that workers at Chevron have the authority to stop any operation, without any repercussions, if they believe people or the environment are in danger.

Another fire struck the refinery on Aug. 6, creating a huge plume of black smoke and sending thousands of people to hospitals with health complaints. Chevron later said it was stepping up inspections after it was determined that the blaze was caused by a failure in a five-foot section of an old pipe.

Source: Associated Press

Backlash for Chevron: Fire Caused by Hydrocarbon Vapor Leak

Watch the Video:

http://abclocal.go.com/kgo/story?section=news/local/east_bay&iid=8764418



Sky7 HD flew over the Chevron refinery in Richmond to take a look at the fire damage.



Firefighters and state hazmat officials battle a two-alarm fire at a New England Confectionery Company

2 Firemen Injured in Candy Factory

Two firefighters were sent to the hospital and a hazardous material scene was declared after a fire at a candy factory in Revere in New England, USA, caused a leak of a dangerous chemical on Friday.

District Fire Chief Glen Rich said the fire started in the mechanical room of the building, which is always monitored by an employee because it contains tanks of a potent kind of ammonia commonly used for refrigeration and food preservation.

"It's pretty bad stuff," Rich said.

He said the employee called the fire department immediately, but as firefighters rushed into the building they were overcome by fumes from ammonia, which had begun to leak. Two firefighters passed out and were taken to Massachusetts General Hospital, where they were treated with oxygen.

As other fire crews put out the fire, a state hazmat team responded and shut off valves controlling the ammonia. But they deemed the building contaminated and were letting it ventilate Saturday, Rich said.

Source: Amber Parcher, The Daily Item

HSE - Warning to Offshore Industry on Possible Failure of Fire Resistant Composite Deck Gratings

This Safety Notice is being issued a result of investigations by the Health and Safety Executive into the consequences of exposing Fibre Reinforced Plastic (FRP) deck gratings to hydrocarbon pool fires. These gratings are commonly used by the offshore industry as a result of their apparent advantages over steel gratings and factors such as fire resistance certification, light weight and improved environmental resistance

This alert is to warn operators that fire resistant composite materials, especially FRP deck gratings, used offshore may fail, or lose integrity, after exposure to relatively short duration hydrocarbon pool fires. The time taken for this is considerably shorter than the specified resistance period of 60 minutes derived from the certifying test for cellulosic fires. Duty Holders must determine whether composite gratings are used in areas with potential hydrocarbon fire exposure and identify means of ensuring the safety of personnel should they walk on weakened gratings.

Read more...<http://www.hse.gov.uk/safetybulletins/deck-gratings.htm>

Refinery Fire and Explosion Surveillance Video from CSB

http://www.csb.gov/flash/video_player.swf?fullscreen=yes&data_src=/assets/videoresource/playlists/citgo_flash.xml

Geelong Company Fined \$80K after Pub Death from Carbon Dioxide

A Geelong company has been convicted and fined \$80,000 following the death of a worker who was overcome by carbon dioxide gas in the cellar of a Birregurra hotel. Hillcrest Private Nursing Home Pty Ltd, which operated the Royal Mail Hotel, was found guilty at the Geelong Magistrates' Court to one offence of failing to provide a safe system of work under section 21(1)&(2)(a) of the Occupational Health and Safety Act 2004.

The charge related to an incident in March 2011, when a 54-year-old man collapsed and died while moving empty beer kegs which were connected to carbon dioxide cylinders in the hotel cellar.

WorkSafe's investigation into the incident found a cylinder containing carbon dioxide had leaked resulting in a significant increase in the level of gas in the cellar when the man entered. Following the incident, WorkSafe directed the Royal Mail Hotel to install a cellar alarm system to warn workers of carbon dioxide leaks before they enter.

Cylinders storing carbon dioxide and nitrogen – which are used to carbonate beer and soft drinks - can be dangerous if they develop leaks, particularly when stored in enclosed spaces like cellars and cool rooms. Leaks can also occur at other points in the system, for example pipe fittings. An appropriate alarm system alerts people to the presence of a gas leak and warns them not to enter the area. WorkSafe's Regional Director, Adam Rogers, said it was a timely reminder of the risks of working in confined spaces. "With or without a gas leak or chemical exposure, limited means of entry and exit, poor circulation, and working in confined spaces, is dangerous," he said. "This isn't just an issue for pubs and clubs – small and large organisations across industry have a responsibility to make sure workers are safe. "It's essential that appropriate controls and training are in place to manage these risks, because if they're not, the risk of death or serious injury is high.

WorkSafe Victoria Guidance: Cellar & Cool Rooms, Beverage Gas Leaks

http://www.worksafe.vic.gov.au/data/assets/pdf_file/0003/36318/HSS0056-Cellarandcoolrooms-Beveragegasafetyv4.pdf

Dangers of CO Production in Wood Pellet Storages

http://www.pellet.org/images/2011-11-11_Research_on_Off-gassing_and_Self-heating_Report_2_for_BC_Ethanol.pdf

Lethal Carbon Monoxide Poisoning in Wood Pellet Storerooms—Two Cases and a Review of the Literature: Annals of Occupational Hygiene

Goto: <http://annhyg.oxfordjournals.org/content/56/7/755.full>

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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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AIDGC Welcomes New Corporate Member

EnLog Pacific Holdings Pty Ltd (formerly known as DGM Australia Pty Ltd) commenced operations in 1990. Initially concentrating on servicing the dangerous goods needs of the Oil and Gas sector, demands from other wide and diverse areas of industry, government and airlines soon necessitated the Company to expand and meet the ever growing requirement for a dedicated and specialist DG services provider.

Recently, the Parent Company has undergone a dynamic change with the introduction of RFL in 2009. RFL specializes in road haulage movements of all classes of material, including explosives & radioactive materials. Another change has seen the creation of RGM, the business segment with the overall responsibility for logistics and freight management of hazardous materials by all modes of transport.

EnLog's inception nationally around Australia brought about a paradigm change in the options available to shippers and supply chain departments from all industries when needing to safely and conveniently transport consignments of Dangerous Goods. A *specialist* DG Compliance & Technical Services provider coupled to a *specialist* Multi-modal Transport and Logistics Company. The confluence of this unique blend of disciplines and abilities enables EnLog to provide our clients with the option to outsource all aspects hazardous materials shipping.

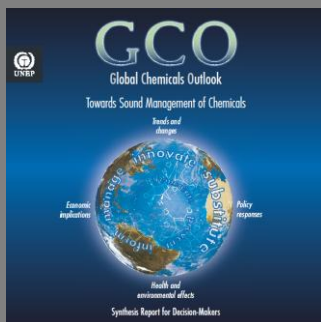
Contact details are on the left or at www.aidgc.org.au

The Toxic Truth

Amnesty International and Greenpeace have called for criminal investigation into Trafigura, the multinational company behind the 2006 dumping of toxic waste in Abidjan, Côte d'Ivoire, resulting in over 100,000 people seeking medical assistance. A major new report released - The Toxic Truth - is the result of a three-year investigation and provides an in-depth examination of the tragic litany of failures that created a medical, political and environmental disaster. It details how existing laws aimed to prevent such tragedies were flouted, with several governments failing to halt the progress of the Probo Koala and its toxic cargo towards Abidjan. The report further challenges the legality of a settlement in Côte d'Ivoire that allowed Trafigura to evade prosecution for its role in the dumping of the toxic waste. Through interviews with both the victims of the toxic dumping and medical experts who treated them the report sheds new light on the devastating impact it has had. The waste was originally brought to the Netherlands, but Trafigura turned down the option to have it properly treated there because it thought the price quoted was too high. Despite concerns about the waste, the Dutch authorities let it leave the Netherlands - a serious violation of Dutch legal obligations. Source: allAfrica.com

Links to evolving story:

http://allafrica.com/view/group/main/main/id/00019532.html?aa_source=useful-column



Read the Report:

http://www.unep.org/pdf/GCO_Synthesis%20Report_CB DTIE UNEP September5 2012.pdf

I am grateful for any contributions – this month my thanks to Scott Young, Peter Hunt and Don Johnston.

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

Chemical Use Inflicts Mounting Costs on Poor Countries

The spiraling use of chemicals, especially in developing countries, is inflicting a rising bill by damaging people's health and the environment, according to a UN report.

Formerly small-scale consumers and producers of chemicals, developing economies now represent the fastest-growing sector of this industry, importing or making compounds for manufacturing and agriculture.

The substances go into making mobile phones, personal computers and plastic components for cars, as well as dyes for textiles, pesticides for farming and detergents and adhesives for household products.

But many countries lack safeguards for handling chemicals safely or disposing of them properly, according to the UN Environment Program report, entitled "Global Chemicals Outlook."

Western industrialized economies still account for most of the world's chemical production, but developing giants Brazil, China and India, as well as Russia and other transitioning economies, are catching up fast, it says. Between 2000 and 2010, chemical production in China and India grew at an annual rate of 24 percent and 14 percent respectively, compared to between five and eight percent in the United States, Japan and Germany.

Global chemical sales are likely to increase by about three percent a year until 2050, says the report.

Africa and the Middle East are set to register a rise of 40 percent in chemicals production by 2020, with Latin America expected to see a 33-percent rise.

This intensification carries a risk.

"Poor management of volatile organic compounds is responsible for global economic losses estimated at \$236.3 billion (188 billion euros)," UNEP said.

"Exposure to mercury results in health and environmental damage estimated at \$22 billion."

In just one year, water pollution caused \$634 million in damage to commercial fisheries in China, it said.

Between 2005 and 2020, the accumulated cost of illness and injury linked to agricultural chemicals on small farms in sub-Saharan Africa could reach \$90 billion.

In Ecuador, villagers living near an oil drilling site bathed in and drank water that had up to 288 times the permitted maximum in Europe, the report said.

UNEP called for smarter use of chemicals, including low-dosage use of agricultural compounds and safer and more efficient recycling instead of dangerous techniques to recover gold and copper from electronic waste.

Source: Agence France Press Global Edition

Hazardous Cargo Bulletin

HCB free weekly newsletter - Sign up to get the latest news

http://www.hazardouscargo.com/content/email-subscription?qoback=%2Egde_3810750_m



Dangerous goods on Department of Mines and Petroleum W.A. Radar

As part of Safe Work Australia Week 2012, the Department of Mines and Petroleum (DMP) is working to improve the general public's safety awareness when transporting small quantities of dangerous goods. At present, licences are not required for transporting small amounts of dangerous goods, such as those purchased at hardware stores. However, drivers still need to adhere to rules such as segregating or separating mixed dangerous goods loads and ensuring adequate ventilation. To promote this, DMP dangerous goods director Philip Hine said the department had launched an awareness campaign to make drivers aware of the rules and risks surrounding the transportation of small quantities of dangerous goods.

"While transport operators are guided by the Australian Dangerous Goods Code, some small private operators like couriers, tradesmen and farmers have a lack of understanding in this area," Mr. Hine said.

"This means they're adopting poor transport practices, particularly when transporting fuels, cooking and welding gas and toxic products such as fumigants, pool chemicals and cleaning agents."

Some common mistakes the department is witnessing involve passenger vehicles carrying liquefied petroleum (LP) gas cylinders and fuel jerry cans inside vehicles.

"It is not unusual to see trade vehicles with oxy-acetylene gear in the back - with the gas regulators still attached," Mr. Hine said.

"In country areas, fumigants and other toxic chemicals have been found on the seat or cabin floor." Mr. Hine added some drivers needed to realize that chemicals can react when mixed, potentially leading to fires, explosions and toxic gas. "It is important to know which chemicals need to be separated or kept apart," he said. "It wasn't too long ago that a driver was badly burnt after lighting a cigarette in a vehicle where petrol fumes had accumulated after venting from a jerry can."

For more information on transporting dangerous goods go to www.dmp.wa.gov.au

Dangerous Goods Transport Incidents in WA in 2012

The Department of Mines and Petroleum (DMP) employs 15 dangerous goods inspectors. So far in 2012, the department has handed out 94 remediation notices and 19 infringement notices for dangerous goods transportation, while in 2011 the DMP issued 39 remediation notices and one infringement notice. A remediation notice is issued when the DMP requires someone to take action to fix an issue, while an infringement notice is an on-the-spot fine.

So far in 2012 there has been 17 reported dangerous goods transport incidents.

Dangerous Goods Transport Incidents in WA in 2011

Eleven dangerous goods transport incidents were reported in 2011, which is on par with the annual average for the past 20 years. About half of the reported incidents were attributed to human error, with no dangerous goods loads being the causal factor in any incident. Fortunately, there were no serious injuries or fatalities resulting from any of these incidents.

Reported incidents in 2011: _

- February 8, near Albany - Drums containing Jet A1 (aviation fuel) fell from a trailer. All were damaged and about 300 litres of fuel was spilled.
- March 7, near Leonora - A kibble restraint mechanism vibrated loose, resulting in zinc sulphide concentrate falling onto the road shoulder. The contaminated soil was removed.
- July 11, Fitzroy Crossing - The middle trailer of a triple road train carrying flammable liquids rolled over. All fuel was safely recovered.
- July 20, Aubin Grove - A vehicle carrying sodium hypochlorite solution collided with a light pole. There was no loss of product.
- July 28, near Minilya Roadhouse -The rear trailer of a road train carrying aviation fuel rolled over, causing a major fuel leak.
- August 22, Myalup - An LP Gas tanker rolled over and some LP Gas leaked through the roughage.
- August 24, near Minilya Roadhouse - The second trailer of a B-double rolled over, spilling about seven tonnes of ammonium nitrate.
- October 5, near Port Hedland - LP Gas and oxygen cylinders fell from a trailer and vented.
- October 11, Fremantle - About 800kg of ammonium nitrate spilled from a freight container.
- November 24, Meckering -The rear trailer of a road train carrying LNG rolled, causing some product to vent.
- November 29, near Telfer - The rear trailer of a double road train carrying ammonium nitrate prills rolled over, spilling 20 tonnes of the 30 tonne load.

Chemist Arraigned over Toxic Barrels

TEXAS TOWNSHIP, Mich. (WOOD) - A chemist who allegedly stored toxic barrels on his property in Texas Township was arraigned Monday on two felony charges. Goto:

https://www.youtube.com/watch?feature=player_embedded&v=VKDZBfVpKcg

Hazardous Substances: WorkSafe W.A.

<http://www.youtube.com/watch?v=QCq3aL2ds2A>

NHK - Explosion At Hyogo Prefecture Chemical Plant

<http://www.youtube.com/watch?v=JYR3L7JGV8s>

From the Archives: 'Rabbit Island' Attracts Pet-Loving Tourists Despite its Dark Past

Just a couple miles off the coast of Takehara, Japan, lies a small island with a dark history, wild parks and a large population of rabbits eager for tourist attention. Okunoshima, which is nicknamed Rabbit Island, has a circumference of just 2.5 miles and attracts thousands of tourists a year. Visitors flock to the tiny Inland Sea destination for its natural beauty and historic significance, but mostly to feed and pet the hundreds of bunnies that call the island home.

But before Okunoshima was a giant petting zoo, it served as the base for the Imperial Army's lethal gas operation. From 1929 to 1945, more than 6,000 tons of poison gas were manufactured on the remote island, and the program was shrouded in secrecy.

For 16 years, Okunoshima was omitted from maps, and workers who produced the five types of poison gas — which were mostly used in warfare in China — were told to keep the factories a secret.

While the husks of factories and other long-abandoned buildings remain on the island, nature has reclaimed them. Today, vines snake over crumbling walls and floppy-eared critters seek shelter from the elements.

According to some sources, the rabbits were brought to Okunoshima to test the effects of the poison and released by workers when World War II ended. Others sources say that a group of schoolchildren on a field trip released eight of the animals in 1971.

Today the island is better known for its wildlife and natural beauty than its military history; however, Rabbit Island's poison gas legacy isn't over.

In addition to its parks and nature museum, Okunoshima is also home to the Poison Gas Museum — and lingering chemical contamination.

In 1996, the water supply was found to contain arsenic, and in 2005 the Environment Ministry reported arsenic levels 49 times the environmental standard at one Okunoshima location.

The Japan Times reports that 6,500 workers were employed at dozens of buildings on the island from 1929 to 1945 and although no official statistics exist, many workers became ill or suffered respiratory problems. Some workers were also involved in accidents and “became horribly disfigured when the arsenic in the mustard gas penetrated their bodies and created bubbles under the skin.”

Although the island is said to be safe for tourists, Masayuki Yamauchi, a volunteer who gives tours of Okunoshima's crumbling factories, says there are 11 sealed locations on the island where workers reportedly buried gas when the war ended.

Source: Laura Moss, MNN.COM



Although it once housed poison gas factories, Japan's small island of Okunoshima is now home to hundreds of friendly bunnies.

Photo: GetHiroshima/flickr

