June 08

FLASHPOINT

NZ INSTITUTE OF HAZARDOUS SUBSTANCES MANAGEMENT

Patea pyre

USEFUL ORGANISATIONAL CONTACTS

NZ Institute of Hazardous Substances Management
www.hazsafe.org.nz
The official home of professionals committed to the safe management of hazardous substances and dangerous goods. The Institute is a partner of the NZCIC.

NZ Chemical Industry Council
http://www.nzcic.org.nz
The New Zealand Chemical Industry Council (NZCIC) is a 'not for profit' industry association specialising in improving safety, health and (site) environmental performance, particularly the safe management of chemicals in the workplace, The council works closely with Government and industry partners to successfully implement the Hazardous Substances legislation. This is achieved by implementing and promoting Responsible Care™, the international SH&E protection initiative practised by the chemical industry in more than 53 countries worldwide.

ERMANZ
www.ermanz.govt.nz
Extensive information on working with hazardous substances.

Ministry for the Environment
www.mfe.govt.nz
The Ministry administer the HSNO Act, and provides policy, publications, technical reports and consultation documents

Department of Building and Housing
www.dbh.govt.nz
The Government agency that maintains the Building Act and the Building Code.

Local Government NZ
http://www.lgnz.co.nz/lg-sector/maps/
Local Authorities have responsibility for policing building controls. Some local authorities are contracted to Department of Labour to provide enforcement of the Hazardous Substances legislation.

If you know of other agencies which could be useful to members, please let us know at joanna@nzcic.org.nz.

Certification of HSNO

It has now been over 10 years since the HSNO Act was promulgated. Since then we have seen many changes and amendments to the legislations and let us not forget the fundamental purpose of the Act "to protect the environment and the health and safety of people and communities".

The implementation of the several different certification processes has helped to move away from the old view that holding a dangerous goods license meant safe use of hazardous substances. The advent of the Approved Handlers Certificate has proved this.

It now means, however, we have a lot more certification to address and as a result, much more work involved for industry and, of course, our ERMA-approved test certifiers. It is probably fair to say the approximate number of test certifiers (around 200) would probably equate to the old staffing of local authority dangerous goods inspectors and the occupational safety and health explosive inspectors. When you look at those who can certify for classes 2 to 5 for location certification it drops to around 30.

This is obviously not enough and the results can be shown in the number of HSTLC issues. ERMA had estimated that there were, or should have been, around 10,000 nationally. A very conservative figure, I believe, knowing the size of industrial manufacturing in some of our bigger centres, and imported goods through our ports. Four years since the old transitional dangerous goods licences ceased, there are still only 3250 that have been issued.

This is just the tip of a much larger problem, of lack of certification. The approvals of SCSTC is another area that is falling well behind scheduled targets.

It is hoped ERMA can take a more holistic approach, if the present legislation is to be complied with.

Consistency

The first area that needs to be addressed is consistent interpretation of the legislation and competent certification by the privately contracted test certifiers. The recent publication of approved guidelines for test certifiers published by ERMA has been a major step forward and we look forward to more later this year.

But leaving the training of new test certifiers to the individual certifiers with just the baseline of the time period and a single ERMA assessment is not enough. The Personnel Qualifications Regulations lay out the fundamentals, but the interpretation of practical experience is left up to the certifier who employs them. In the first instance, test certifiers need financial assistance to employ potential certifiers, as it may well be a drain on stretched resources of the smaller firms.

It is essential that we get new blood into the industry.

The training also needs to be in a centrally approved uniform format. I note NZCIC is

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Jack Travis
Institute president

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Flashpoint

Flashpoint is the official journal of the NZ Institute of Hazardous Substances Management.

Editorial material does not necessarily reflect the views and opinions of the Institute.

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Partnership with NZCIC a milestone

by Jack Travis, president NZIHSM

April 2008 represents a major milestone in the Institute's short but eventful history. The New Zealand Institute for Hazardous Substances Management is entering another phase in its development, after making the decision to become a partner with the New Zealand Chemical Industry Council (NZCIC) in Responsible Care™ New Zealand.

This is a well-considered move which the NZIHSM national executive is confident will enable us to maintain the present NZIHSM governance and independence, allow us to share administrative support, and give us access to technical support not previously available.

The decision was made as a result of an assessment by the national executive of the direction the institute should be heading over the next decade, where it felt it should be focusing its attention and how it should be using its limited resources.

Our members will be now be able to take advantage of discounts on a range of NZCIC's compliance tools, including professional training, approved HSNO Codes of Practice, the popular PRINCE site compliance certification programme, the council's 24/7 CHEMCALL Emergency Response Service, and the Chemsafe programme.

These products and services will enable NZIHSM members to improve their capabilities in respect to HSNO knowledge, advice, training and enforcement, for a very modest subscription! Add this to our established Flashpoint publication, which has proved every successful and our Yahoo chatline which is a constant source of debate and discussion and you can see there is a huge resource here..

At NZIHSM, we will now be able to focus our attentions and resources on a number of very important priorities:

- Training test certifiers, approved handlers, hazardous substances enforcement officers, and everyone interested in safer hazardous substances management.
- Contributing to the development of essential national performance standards (Approved HSNO Codes of Practice) and promoting their use.

As a member you will be able to:

- Refine and increase your professional expertise.
- Access the global Responsible Care™ initiative, including the NZCIC's products and services at a substantial discount.
- Reinforce your capability to provide timely and comprehensive advice to clients seeking HSNO compliance solutions.
- Add value to your membership by sharing your expertise with fellow professionals dealing with chemicals, hazardous substances and dangerous goods, in the workplace.

Together with the NZCIC, the NZIHSM stands for 'continuous improvement' in workplace health and safety and environmental protection through the highly successful Responsible Care™ initiative, implemented in 53 countries.

Over half of the chief executives of the world's top 200 chemical companies have so far pledged their commitment to Responsible Care™, reflecting their determination to support local Responsible Care™ initiatives, particularly product stewardship programmes.

The national executive is confident this partnership is a positive move for our members and for the entire industry. We will be keeping you informed of progress and initiatives over the year, and are keen to hear your views on the decision. Don't hesitate to contact office@hazsafe.org.nz or Jack.Travis@tauranga.govt.nz

editorial continued...

presently running a one-day course but obviously this is not sufficient to provide the required ongoing training. Possibly a NZQA course and some kind of ongoing correspondence certification is required.

There needs to be a separate audit regime established to assess test certifiers to assess test certifiers. It is not acceptable that existing test certifers are left to assess other certifiers, all searching for the same job prospects. It is my opinion ERMA should seriously consider employing their own auditors, or at least, contracting in independent contractors who are not themselves test certifiers.

Even though we have been attempting to educate industry to move towards compliance and certification under HSNO, there is still a lot more required. The old adage of you can lead a horse to water, but you cannot make it drink is just as true here.

Without the resources being spent on providing monitoring and enforcement staff to back up the promotion and advisory information presently being provided by ERMA, we can't expect industry to all walk to the drinking trough.

There is a long way to go but the end solution will result in a far more effective regime for the protection of our environment and the safety of our people. As Rachel Hunter once said " It might not happen over night but it WILL happen.

Here's to a productive 2008 and a safety regime that ensures compliance soars.

Patea pyre compounds HSNO problems

by Gary Bedford

Patea hit the headlines on Waitangi Day (which also happened to be Ash Wednesday this year) when a large fire at the small Taranaki town's disused freezing works resulted in hundreds of people being temporarily evacuated from their homes because of fears of airborne asbestos in the smoke.

Actions on the day and in the days immediately following focused on fire fighting, the management of the evacuees, and determining and communicating answers to questions around public health.

The site's HSNO issues were known well before the fire, with the Taranaki Regional Council having already begun work on an assessment of the old works and any potentially dangerous substances still there - an assessment subsequently made much more difficult by the fire and its aftermath of damage to an already derelict and disintegrating site. After approximately 100 years of use, expansion, and alteration, the site has been abandoned for the past 20 years.

Besides asbestos, the line-up of suspected hazardous materials includes PCBs, petrol, and other leftover substances including nitric acid and unknown chemicals.

Asbestos

A preliminary site inspection in May last year identified the need for a licensed asbestos removal company to conduct an assessment and report on options and costs for disposal. Old asbestos insulation was wrapped around a number of steam lines, while the large sprawling buildings were clad and roofed in old fibrolite.

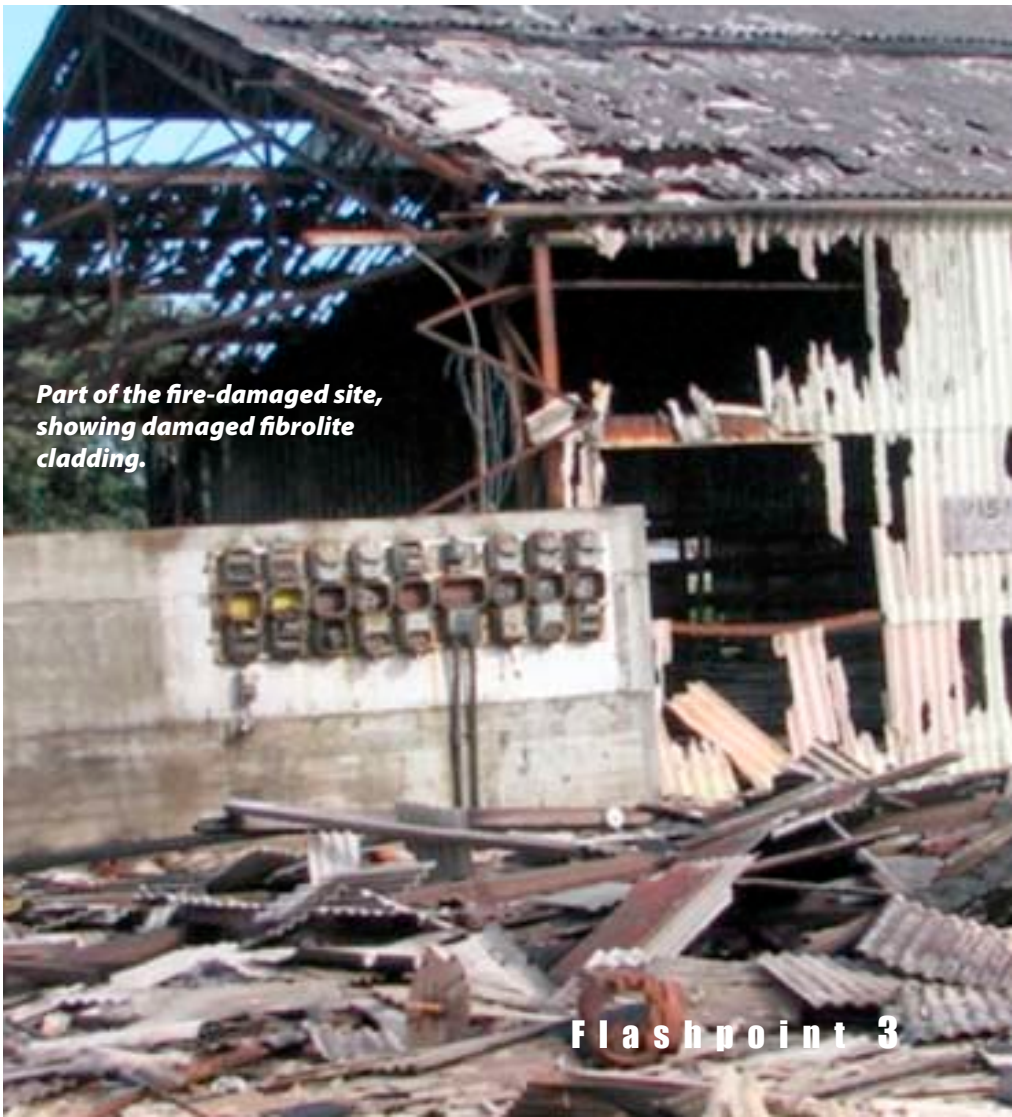
The fire on 6 February gave this issue greater urgency and greater complexity because of the possibility of accelerated release of asbestos fibres into the town– and brought an imaginative medium-term response.

Tests of air and ash samples in the first couple of days following the fire indicated there had been no asbestos contamination in residential areas, but there remained the potential threat of release of asbestos from the substantial debris and ash left after the fire, now even more exposed to the elements than previously. Much of the intact fibrolite had been either shattered by the fire's heat or damaged during the fire-fighting efforts, which continued for four days.

In order to minimise the risk of emissions of dust and ash containing asbestos, once the Fire Service left, the site was initially kept damped down with a continuously operating water cannon – an inefficient and expensive exercise in an area suffering critical water shortages during a one-in-30-year drought. And there was simply no possibility that the buildings could be wrapped in polythene sheeting to contain this material.

Taranaki Regional Council technical and compliance staff applied a bit of lateral thinking, however, and suggested the use of a dust suppressant of the type they are familiar with at construction sites and transport yards.

After investigating the options in consultation with suppliers, the council settled on a non-toxic acrylic resin called AW95, to bind and settle dust particles to help prevent any possibility of airborne asbestos contamination.



Part of the fire-damaged site, showing damaged fibrolite cladding.

The application of the AW95 was managed in accordance with Department of Labour guidelines for asbestos sites. It was not without technical challenges – the buildings are expansive and fire damage meant that personnel could not enter them or access across roof framing. Fire debris and ash lay in deep piles around the site, while cladding and wrapping were still draped over much of the building skeleton.

It was necessary that the fire was completely extinguished, with no deep-seated hot spots remaining. A digger was used to drag scattered debris back to the building line, and to expose the interior of the larger piles. A mobile water cannon (truck mounted) with a range of some 40-50 metres was then used to apply the water-based polymer in copious volumes over the buildings, with the application operation taking a full day. Interceptor trenches prevented run-off into the adjacent tidal estuary.

Air quality monitoring conducted during and after the application operation confirmed that there was no release of asbestos fibres at any time. The polymer remained sticky to the touch for a couple of weeks after application – it has succeeded beyond expectations.

It's really done better than we imagined, adhering to hard surfaces and soaking into the fine material and forming a thick spongy layer that is binding ash and other fire debris, and ensuring dust from that site won't be going anywhere. We expect it to be effective for a good 12 months, giving us time to consider longer-term options.

Where the polymer has been sprayed on the ground close to the buildings but subsequently driven over by earthmoving machinery, the polymer layer has been broken and material has reverted to dust.

The contractor is making regular return visits to monitor the effectiveness of the binder and will apply more if necessary. The material does break down on exposure to ultra-violet light, and is regarded by the parties involved as being only an interim solution. The Council will continue monitoring for asbestos around the site and within the township.

PCBs

The preliminary site inspection in May last year led to a provisional conclusion that since the electrical switchboards appeared to have been stripped of fittings, all PCB equipment had been removed at some time.

After the fire, however, former freezing works staff came forward with information about electrical equipment containing PCBs still within the site. Given the significance of this material, dealing with these was given a high priority.

Taranaki Regional Council staff subsequently explored as much of the buildings as could be considered safe to enter, with appropriate protective gear, and located a considerable number of fittings.

They then confirmed with the freezing works staff concerned that these were indeed the items as known. As a result, 34 large PCB capacitors – some leaking badly -– and one fluorescent light fitting were removed, loaded into recovery drums and taken away for proper disposal.

Some PCB equipment could not be removed from the fire site for safety reasons, and options for this material are being investigated. The equipment is secure in the meantime, however, being bolted to walls. The locations of these fittings have been carefully mapped for future reference.

Petrol

From the investigations conducted to date, fuel was known to be stored in three underground tanks at the works site. Upon continuing the site investigations commenced before the fire, one tank was found to have been previously removed by person or persons unknown, but leaving 100 cubic metres of fuel-soaked contaminated soil as a legacy.

The tank was used for the on-site fire engine, which coincidentally is now on display at the local museum and was found to be petrol-driven. Given the age of the site, the petrol is certain to have been leaded. This soil has been initially spread on site while options for disposal are investigated.

The others two tanks have been removed without incident.

Removing recovered PCB units from the site.

Full nitric acid drum discovered during inspection - note its state.

Other material

What could at best be described as drums in an advanced state of decay, but containing nitric acid (one) and sodium sulphite (two), were found in an inner storeroom during a post-fire inspection.

The nitric acid container was in such poor condition it could not be moved. Fire Service personnel in full HAZMAT gear pierced its sides and let the acid eat into the concrete floor as a means of neutralising it, before heavily diluting the residues with water.

The drums of sodium sulphite were taken outside, dissolved in water, diluted, and dispersed into the ground.

Polymer binding ash and dust into a spongy blanket about 20 mm deep.

What's next?

The Taranaki Regional Council is continuing its site assessment, under conditions could be infinitely more challenging than those that existed pre-fire. The HSE plan now runs to 12 pages.

In addition to the works described above, the Council has carried out extensive soil sampling to assess possible contamination by heavy metals and PAHs from the dumping of ash/clinker from the boilers when they were coal-fired. The ash was spread along the banks of the adjacent estuary. Council staff have also installing piezometers to sample groundwater for similar contamination and for the consequences of the leaked petrol.

The assessment is due for completion by May, after which the South Taranaki District Council and the Patea community will begin considering options for the site, including clean-up/rehabilitation plans.

Besides contamination issues, other complications include an ownership tangle that is yet to be resolved, with clean-up costs a related matter.

Gary Bedford is the regional council's director of environment quality.

Applying the polymer binder.

A deserved reputation

Methyl bromide's reputation as a highly poisonous substance is well known and well deserved, says the Department of Labour.

In New Zealand many different organisations have responsibility for different aspects of methyl bromide use, including the Environmental Risk Management Agency (on whether such chemicals should be allowed in New Zealand); public health authorities (on the implications on the health of communities); local government (on designating areas where chemicals like these can be used) and the Department of Labour.

DoL's focus is on ensuring that best practice is observed by the people working with methyl bromide. Workplace health and safety law in New Zealand requires place of work to take all practicable steps to ensure workers, and crucially, others in the near vicinity of al workplace, are kept safe and healthy.

Assessments

To this end, the DoL continues to undertake assessments of workplace best practice as it relates to the use of methyl bromide fumigation at New Zealand's ports. Site visits to ports look at compliance and ensuring good practice is followed, including the processes used, storage, signage, and emergency management procedures. Where relevant it has included environment monitoring within the boundary of the port and health monitoring of employees.

DoL has been conducting site assessments at Wellington's Centreport in relation to fumigations at the wharf. The assessments are continuing and the department will be working with those involved with methyl bromide use to ensure that reasonable steps are being taken to reduce the risk of harm during fumigations.

Significant changes for gas industry

In February 2008 the Environment Risk Management Authority convened test certifier workshops in Auckland, Wellington and Christchurch. A topic on the agenda was the crossover of jurisdiction and responsibility between ERMA and the Plumbers, Gasfitters and Drainlayers Board.

The registrar of the board, Phil Routhan, provided a thorough and in-depth presentation on the board's purpose, the legislation it administers, registration and licensing, along with matters specific to gasfitting such as certification of gas installations by licensed practitioners.

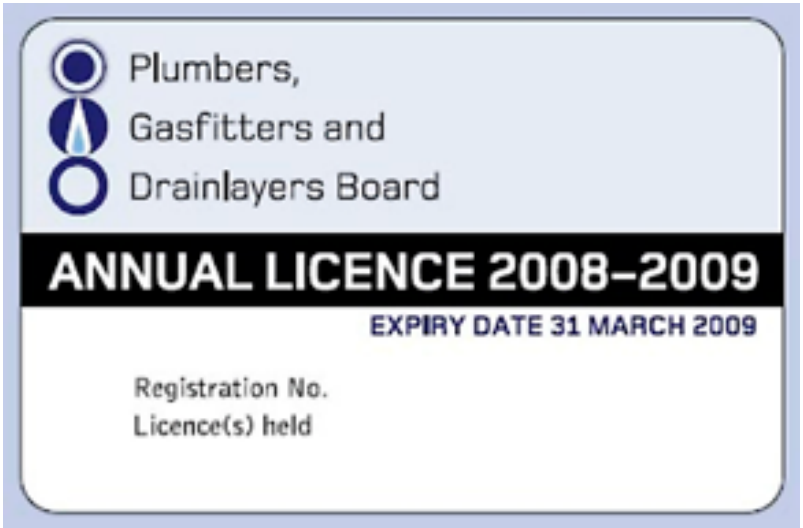
Test certifiers are called upon to certify bottled gas installations exceeding 100kgs and as such they are at the coal face of the gas industry determining compliance under the Hazardous Substances and New Organisms Act (HSNO). As Phil explained, test certifiers may, at times, encounter work which they consider may not be safe, or they may have reasons to believe that the work has not been completed by a licensed practitioner.

It is important that when a test certifier inspects an installation that they sight a gas certificate which will have details of the gasfitter who certified the work and the date the work was commissioned. (The owner of the installation must be provided a gas certificate by the certifying craftsman gasfitter).

If for any reason test certifiers are unsure if the work has been carried out by a licensed practitioner, they should not hesitate to ask the gasfitter to produce their current licence.

Test certifiers are also able to go to the board's website ('online services', 'search the register'), enter the person's registration number or the surname which has been provided to them – this will provide verification if that person is registered and holds an active licence. If there is any doubt at all, test certifiers are encouraged to contact the board .

Board staff have been instructed to assist test certifiers to obtain gas certificates (free of charge), with any technical matter surrounding the installation, or in determining who carried out the work.



2008/09 licence card

The board recognises the work that test certifiers undertake and that they play a significant part in ensuring that the gas industry is meeting compliance, particularly with respect to matters concerning health and safety.

As part of his presentation, Phil provided an overview of the new Plumbers, Gasfitters and Drainlayers Act 2006 that is soon to replace the current 1976 Act. With the introduction of the new Act there are a number of significant changes affecting the gas industry.

Overview

An overview of these changes:

- All installations under 15kg bottle capacity will be defined as gasfitting. Currently gas installations under 15kg storage capacity are not defined as such. A gas certificate will be required to be issued by a licensed practitioner for these installations.
- Gasfitting on ships, boats, caravans, vehicles and trains is included in the new Act (these are excluded from the existing Act). Under the new Act only a licensed practitioner will be able to undertake this gasfitting work.
- Employer licences are to be administered by the board. These licences are issued to companies that are large consumers of gas and have an approved gas safety management system in place for their employees. Currently employer licences are administered by the Secretary of Energy.
- As part of its disciplinary function, the board must implement and administer an infringement notice/system with fines being paid to the Crown. Currently a significant number of minor offences do not warrant the expense of an investigation and subsequent disciplinary hearing.

The board will be providing further information once the new Act has been fully enacted.

Phil Routhan

04 4942970. www.pgdb.co.nz

Woods new chair of ERMA

Richard Woods has been appointed chair of the Environmental Risk Management Authority for a three year term, replacing Neil Walter who served for five years.

Richard Woods has held a number of senior posts, most recently as CEO of the NZ Security Intelligence Service and prior to that has been an ambassador in several countries and a senior director for the Ministry of Foreign Affairs and Trade.

Current member Dr Max Suckling has been appointed the new deputy chair, on the retirement of Professor George Clark after over six years on the authority and Dr Val Orchard has been reappointed for a further three year term as a member.

New ERMA publications

Recent new ERMA publications include:

* Making an Application for Rapid Assessment to develop in Containment a Project of low-risk GMOs
* Making an Application to field test in Containment any Genetically Modified Organism under the HSNO Act 1996
* HSNO Thresholds and Classifications
* Interpretations and Explanations of Key Concepts
* IBSC Decision Form Checklist – Develop
* IBSC Decision Form Checklist – Import
* Application for approval to develop in containment outside of a containment structure any GMO or regeneration of a NO from biological material under s 40 with reference to s 44A of HSNO
* Information Sheet 49 – Code of Practice for Gas Cylinders of Composite Construction Designed to ISO 11119-1 Part 1
* Information Sheet 50 – Code of Practice for Flammable Liquids Tank wagons
* Information Sheet 51 – Code of Practice for Rotationally Moulded Polyethylene Tanks
* Information Sheet 52 – Code of Practice for the Management of Existing Stationary Container Systems at Timber Treatment Facilities

See www.ermanz.govt.nz/resources/index.html for copies of these publications, or contact ERMA New Zealand on (04) 916 2426.

Americans using ERMA website

Just over half the visitors to ERMA's website (www.ermanz.govt.nz) in January and February came from the United States. More than 160,000 visitors clicked onto the site making a total of 441,465 page views and 1.4 million hits from mid January –an average of more than 2500 visitors on any given day.

Of those checking out the site, 51.34% (82,383) were logging on from the US, with NZ users next on the list – 16.98% (27,249 visitors). Local web users were, however, spending more time on the site, with 476,969 hits coming from New Zealanders as against only slightly more from American users (493,411).

The third most frequent users were the Chinese – 17,268 visitors (10.76% of the total). Australians, however, made more use of the site than Chinese users, with just 4273 Australian visitors (2.66% of the total) making 79,418 hits (against 36,237 from China).

The most popular page, in terms of number of visitors, was the register search page (34,885 visitors) followed by the home page (27,241), the page displaying results from the home page search box (5,742), and the Hazardous Substances home page (5,440).

office@hazsafe.org.nz

Bay gears up for major spill

A spreading smear of more than 10,000 litres of oil only 3km off the coastline of Black Reef at Cape Kidnappers faced the Hawke's Bay Regional Council's emergency forces recently – fortunately, fighting the floating fuel was an exercise.

On-scene commander Ian Lilburn said the practice response was tricky and more time-decisive than usual as it focused on a stretch of coastline which was extremely sensitive. "There is the wildlife aspect and the accessibility factor of getting out there. There is also the issue of the tides."

The aerial side of the exercise was a helicopter-borne assault on the slick. Helicopters Hawke's Bay's Hughes 500 carried 400kg loads of dispersant (in this case water) to drop over the affected area. At the same time, shore teams moved into the Black Reef area to organise machine and hand-cleaning of the affected coastline.

About 50 people from the Hawke's Bay Regional Council, Department of Conservation, Massey University and Maritime New Zealand were involved in the exercise co-ordinated from the regional council's emergency response headquarters in Napier.

Firework failure tests required

by Anthony Lealand

I was once given a hard time by someone from a lighting crew, who said that the pyro crew could not get it right, there was always pyro failing. I asked him if he would feel confident if his lightbulbs were made overseas, never been tested, and finally after a long journey plugged into a lamp housing, still untested and then expected to work at the exact cue moment at the show.

I have forgotten his answer, but so much depends on the quality control of the people making the chemicals, the people manufacturing fireworks, the people who test these from time to time, the transport people who could subject them to damp and damage, that it is a wonder that we have as much quality control as we do.

It's not as if fireworks are like high explosive of which millions of tonnes are made each year. Very few chemicals go into high explosives and because of the huge quantities they can be subject to stringent analysis, and final testing. Somewhere around 100 chemicals are used in fireworks – items such as gums, resins and glues. The industry is very small and fragmented, and is frequently buying chemicals which, while a suitable choice for other industries, are not necessarily optimum for fireworks.

And when there is a problem with fireworks the analysis of the situation is complicated by the destruction of most of the evidence. An example is the multishot mine, which has ruptured some tubes and blown up. All of the tubes have been fired, so there is no residual composition for analysis.

Even if there was residual composition, one would have no idea if this was the same composition that was in the tubes that blew up.

Having visited a number of Chinese firework factories, the procedure for making these multishot mines is very interesting, as they have fine-tuned the operation to a remarkable degree. Thousands of the tubes are rolled, stabbed for the fuse fitting, and then plugged with clay.

Then fusing is strung through them, and then gunpowder is spooned into each one and they are fitted with a small wad. At this point they are mounted on the cardboard sheet and assembled with the fusing adjusted to suit the type of firing. For instance, it might fire single rows until the end when it might fire three rows at once.

These multishot mines then sit around until a request is made for a particular type, when they are loaded with the requisite product such as comets, whistles, stars or whatever takes your fancy. It takes little imagination to see that mixups can occur in the products inserted in the tubes.

All of which means we can never guarantee what is going to come out of the mortar, the multishot mine or fountain.

So, I believe the system of the firing hardware and the pyrotechnic product needs to be tested for all likely possible failure modes to ensure that safety distances are not compromised, or set unduly optimistically. I see this testing by the industry for the industry is very important to ensure public safety.

Anthony Lealand is CEO. of Firework Professionals Ltd.

anthony@firework.co.nz

Revised User Guide

The User Guide to Thresholds and Classifications under the HSNO Act was revised last month and is now available in hard copy.

Contact erin.maaskant@ermanz.govt.nz to order a copy. An electronic version and CD will be available shortly; please indicate if you would prefer a hard copy or a CD.

A list of the main changes to the 2001 version is also available from the website http://www.ermanz.govt.nz/resources/publications/htmfiles/ugtcholder.html

If you have any technical questions about the revised user guide, please contact info@ermanz.govt.nz

Give HSNO Act a chance

by Rex Alexander

One of the numerous tasks of ERMA New Zealand is to assess the effectiveness and level of compliance with HSNO, what people think of the regime and what impact it has on their lives.

It would be very easy for ERMA staff from CEO Rob Forlong to Scott Common, who does a tremendously valuable job on the end of the 0800 number, to get a distorted view of the reality out there. Being a compliance regime with associated costs and impositions, very few people are going to be passionately supportive of HSNO. Mostly the comment, and indeed often the statistics (at least for the moment), will be negative.

People's views can be that the legislation is overly complicated, prescriptive, costly to implement, another layer of red tape requiring endless documentation, right through to "the test certifier regime isn't working".

Out of step

Historically, the previous prescriptive legislation wasn't working; it was out of step with the changing nature of industrial and work practices as well as with society's expectations.

The better dangerous goods inspectors in territorial local authorities, under very competent, but rather sidelined OSH supervision, would put their necks firmly on the block and make use of that oft-quoted compliance tool in the regulations – "In the opinion of the Inspector" – and, for the landuse planner, the almost totally user definable controls in district plans. The reality was that industry and communities were not well served by this extremely variable administration.

The compliance costs that some in industries are now faced with, are because they never complied with the previous legislation. As a test certifier with hundreds of clients ranging from simple LPG cylinder facilities over 100kg (and initially 30% non-compliant) to multinational Fortune 500 companies, and as a director in a nationally-distributed test certification company with thousands of like clients, we are in a position to see the effects of, and the learning curve required by, industry to catch up.

And it is not just the repealed dangerous goods controls, but also the Toxic Substances Regulations.

Under the leadership of Andrea Eng, ERMA staff did a magnificent job on the transfer process to assign classifications and controls to the NOTs, as did Simon Buckland with his excellent work on the group standards.

We now have the legislative tools to ensure the hazards from the substances are managed responsibly across all risks and lifecycle phases consistently throughout New Zealand. Our experience shows that compliance today is hugely advanced on only a few years ago. Emergency callout statistics can be expected to reflect that improvement over time. This legislation has only barely started to settle in yet. Give it a chance!

We frequently hear that Gazette Notice No. 35 is too prescriptive and should be thrown out. GN35, in fact, allows the continuance in compliance of facilities approved (and compliant) under the old administrations.

The addition of qualifying subclauses inserted prior to finalising the Gazette, now gives companies who wish to take advantage of true performance-based legislation, the opportunity to submit codes of practice to ERMA for approval. These need not be books, but can be one page explaining how a specific variation in process meets the performance measures of HSNO.

Again, test certifiers working alongside industry can, and do, save more money than they cost the client through suggesting improvements, explaining the advantages the legislation allows, and refining processes to improve plant, personnel and environmental safety, while being obviously cognizant of any conflict of interest.

Yes, this legislation does require compliance on issues not previously, or not adequately, administered. To give one more example, in my opinion it is an absolute environmental responsibility for any company with liquid hazardous substance tankage or pipework to be able to prove the facility is sound, that what goes into the tank is used for its intended purpose and not lost to the environment. That is just good, financially prudent stock control and being a good corporate citizen looking after our environment.

Rex Alexander, M.I. Fire E, is Technical Director of Envirocom (NZ) Limited.

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(Reprinted from Perspective magazine)

Chemical database big success

ERMA's Chemical Classification Information Database is proving to be a big success, with the OECD planning to incorporate it into its eChemPortal – a global repository of chemical information.

The database (accessed through www.ermanz.govt.nz) has received more than 46,000 hits in its first three months.

The CCID is a database of chemicals classified by ERMA in accordance with the HSNO Act regulations. These chemicals have been classified using the best data available to ERMA at the time of classification. The purpose of the database is to provide information on chemicals to aid industry in the classification of formulated products.

http://www.ermanz.govt.nz/hs/compliance/chemicals.html

Judges handing out big H & S fines

by Trina Lincoln

In the past, fines for heath and safety prosecutions have generally been fairly low. But times have changed and now is the time to review and improve your health and safety policies to ensure you are not caught by the increase in fines.

Fines under the legislation have typically been in the order of $5000 to $20,000, with the average in 2006 and 2007 being about $10,000. This has left people in the industry bemoaning the low fines as they act as a disincentive for businesses to change their behaviours and do more to promote good health and safety practices.

When a decision needs to be made about obtaining new plant, committing to training, or changing employee behaviour protocols, the cost involved is an important issue and, when that cost is significantly more than a likely fine, some employers are tempted to put safety second.

In 2003, the Health and Safety in Employment Act was changed to lift the maximum fines by 500% to their current limits. After this change the Department of Labour tried to persuade judges to lift sentencing levels by a similar factor, but met resistance from both defence lawyers and judges. Since 2003, average fines have increased by only 66%, from about $6000 to about $10,000.

The Department of Labour is currently seeking to revisit this issue, and our experience in recent times shows that the suggested starting points for fines are up to five times the level of the fines in previous similar circumstances.

The judges are listening, as these examples illustrate:

- A major national construction company was recently fined $225,000, a record for the highest fine under the Health and Safety in Employment Act. The business continued to operate a defective crane to meet operational requirements despite knowing that the crane was unsafe, and there was a fatality when a cable on the crane broke and a concrete panel fell. This case was the first time a fine of over $100,000 had been imposed in New Zealand.
- Two large construction companies involved in a joint venture were convicted after an accident where scaffolding used on an Auckland motorway construction project was not secured over a weekend, and on a windy day the scaffolding was blown over onto a live motorway lane. The Court imposed fines of $40,000 and $30,000 respectively, despite no harm occurring. The judge said that deterrence is very important, and that a commercially meaningful fine for large corporations needs to be measured in tens of thousands of dollars.
- Even more recently, a construction company was convicted after one of its business units was responsible for an accident where a truck was working adjacent to a quarry face, but there was no regular checking of the stability of the ground. When the ground gave way, a truck fell 15 metres, and the driver survived only because he leapt from his cab. The District Court imposed a fine of $4000, as part of a $10,000 total penalty. The Department of Labour appealed, and the High Court concluded that 'In this area, especially where large companies infringe, penalties must bite, and not be at a "licence fee" level'. The High Court increased the fine by 400% to $16,000.

If you need any incentive to take health and safety seriously, the risk of a big fine should now provide it and we are well equipped to talk about how this change in approach may affect your business.

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other cases. . .

Monoxide poisoning

Talleys Frozen Foods Ltd has been fined a total of $110,000 for failing to keep its employees safe, ordered to pay reparations of $3000 to each of the 11 poisoning victims.

The company was judged to have failed to take all practicable steps to ensure that 11 employees were not exposed to carbon monoxide fumes when an LPG forklift was used inside its factory on June 19, 2006.

This is one of the highest total fines ever imposed under the Health and Safety in Employment Act.

Spray paint illness

A Motueka spray paint company has been convicted and fined $10,000 for failing to take all practicable steps to ensure the safety of one of its workers, and $5000 for failing to notify the Secretary of Labour of the serious harm the worker had suffered.

The penalty imposed took into consideration the company's ability to pay a fine. The employee was also awarded $20,000 as reparation.

The employee suffered severe physical symptoms after spray painting isocyanate-based paint without having appropriate personal protective equipment.

The employee went to hospital and was diagnosed with isocyanate pneumonitis and in the opinion of the doctor, was close to respiratory arrest. It was also confirmed that the employee suffered acute solvent neurotoxicity and occupational asthma.

Occupational asthma is the most prevalent occupational disease in developed countries.

NZ Institute of Hazardous Substances Management (Inc)

MEMBERSHIP APPLICATION FORM

1. Name: _____

2. **Employment**

Employer's Name: _____

Position and Contact Details:

Position Held: _____

Full or Part Time: _____

Other Duties: _____

Or: ☐ *Self-employed*

Business Name: _____

3. Preferred mailing address: _____

_____

_____

Telephone (Bus.) (0) _____

Contacts (Res.) (0) _____

(Mob.) (02) _____

(Facsimile) (0) _____

E-Mail: _____

Website: _____

4. I have previously been a member of the Institute ☐ Yes ☐ No

If NO: I am applying to be a ☐ Member ☐ Associate member

5. **Return to**: David Belton
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Wellington
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Email: david@nzcic.org.nz