

"It's extremely important that everyone knows what their job is in an emergency, and it's a good idea, as a quarry manager, to spread the load. Don't take all the responsibility on yourself because when the shit goes down, it's very bad."

WATCH THIS SPACE!

It was hazard management on the hoof when Jim Bernhard, engineering manager for the Auckland Motorway Alliance, took a question from the floor during a presentation on emergency management at the conference.

There are, he told delegates "way too many" trucks hitting the Penrose motorway bridge, despite a system that identifies over-height vehicles and activates illuminated warning signs. This prompted a woman from the audience to ask whether the early warning system also alerts pedestrians on the bridge when an over-height vehicle is approaching. Bernhard, momentarily stunned into silence, acknowledged that it doesn't but quickly added: "Give us a couple of weeks. We'll figure something out."

UK: LONE WORKER DROWNED

A UK water supply company replaced its lone work system after an employee drowned in December 2013 while working alone at a sand filtration unit at Falmouth's treatment plant.

IOSH Magazine reports South West Water was fined £1.8m (Truro Crown Court, 18 April 2017). It has since fixed all observation grids in place and fitted them with 'cat flap' opens for access to the sand filters. It replaced the 3-hour polling-based lone worker system with a Twig alarm featuring a panic alert, an automatic man down detector, GPS tracking, and multiple SIM cards to pick up the strongest signal.

EAP AVAILABILITY RISES

The latest Wellness in the Workplace survey conducted by Southern Cross Health Society and BusinessNZ has found the availability of employee assistance programmes has risen significantly since the previous survey in 2014.

For smaller businesses surveyed – those with up to 50 staff – the proportion with an EAP programme more than doubled, to 32 percent.

The survey covered 109 organisations in the public and private sector covering 93,000 employees. It revealed the three main causes of absence are:

- non-work related illness or injury;
- taking time off to care for a family member or dependent due to illness or injury; and
- non-work-related injury.

The average rate of absence per employee was 4.5 to 5 days per year.

INJURY REPORTING DISMISSAL

An Invercargill production worker dismissed for allegedly not appropriately reporting his injury or the hazard which caused it has been awarded \$34,140 because his employer had failed to investigate the matter thoroughly, and because the employee had in fact reported his injury and the hazard to a colleague because his supervisor was away.

Stuff reports the Ballance Agri-Nutrients employee slipped through a gap in the walkway alongside some tanks and hurt his knee on an angle iron.

NEWS WRAP

- An extensive alert warning quarry and mine operators of the risks of mobile plant unintentionally entering water has been issued by the regulator. The alert contains details of two fatal and five near-miss incidents (WorkSafe NZ, July).
- The regulator has withdrawn its approval for SCUBA cylinders manufactured from aluminium alloy 6351 because of the risk of catastrophic failure. Two serious harm incidents last year involved such cylinders, one in Australia and the other in Indonesia (WorkSafe NZ, July).
- A forestry worker received serious leg injuries when he was struck by a log at a logging site near Tinui (Stuff, 28 July).
- A woman's arm was amputated at the elbow when she was caught in machinery on a farm near Matamata (Stuff, 31 July).
- A liquor store manager in Mt Albert, Auckland, has been injured by violent robbers for the second time in less than a year (*NZ Herald*, 3 August).
- A man received a serious leg injury when his quad bike rolled down a hill near Whakamarama. He was only discovered seven hours later (*Waikato Times*, 7 August).
- A forestry worker suffered pelvic injuries when he was run over by his own ute on a steep track in a forest north of Dargaville (Stuff, 8 August).
- The regulator has issued an alert regarding safety nets used in construction after being notified of several instances where nets have failed and workers have been injured, some seriously (WorkSafe NZ, 9 August).

PROSECUTION REPORTS

Miller Food Ltd, t/a Remarkable Tortillas

The Queenstown business has been charged under the HSW Act after an employee lost three fingers when his arm was trapped in a tortilla press machine (Stuff, 3 August).

National Aluminium Ltd

Accepted an enforceable undertaking under the HSW Act after a labour hire worker at its Hamilton site became caught in an insufficiently guarded rotating shaft, fracturing his ankle and suffering friction burns. The undertaking anticipates expenditure of at least \$129,114 and includes providing ICAM training for 22 staff and a further 32 franchisee managers, presenting at three industry conferences, putting staff through NZQA H&S training, producing H&S resources for SMEs in the Waikato, and reparations to the victim (10 July 2017).

SAFEGUARD says

National Aluminium's enforceable undertaking is the third so far accepted by WorkSafe, but these three may represent only the first trickle of an eventual flood. We understand the number of undertakings about to be accepted is approaching double figures, with another dozen or more lurking in the wings, well advanced. If true this will please Professor Warren Brookbanks, who argues in the July/Aug edition of Safeguard that enforceable undertakings should be the primary enforcement tool wielded by the regulator, with prosecution reserved for the most egregious cases.

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Did injury cause heart attack?

A man with severe coronary heart disease whose chest was crushed after he fell into an unguarded machine died in hospital from a heart attack the next day, a chain of events which required the judge in the subsequent court hearing to have to determine the likely causation: did the man have a heart attack and fall into the machine, or did the crushing weight on his chest cause the heart attack?

The man, H, was an experienced machine operator with Sullivan Packaging Ltd in Christchurch. One day in September 2015 he arrived at work late and was observed to be coughing and generally unwell. A roller wheel had broken on a plastic forming machine in the previous shift and he offered to fix it. He turned the power off at the control panel and used a thumbscrew to prevent one of the two platens from falling; however he didn't do the same to the other platen.

Prosecuting, WorkSafe said that while working on the machine the unsecured platen descended on H in a controlled fashion, trapping him inside the machine. His chest was likely to have sustained a weight of 80kg. Workmates pulled him clear of the machine, unconscious, and he was taken to hospital by ambulance. He died the next morning from a heart attack.

Investigating, WorkSafe found multiple failures around machine guarding, not just with H's S15 machine but also with two other Illig machines. It laid two charges, one relating to H's machine, the other to the Illig machines.

The company had no standard procedures, documented or informal, to lock out or de-energise machines while maintenance was performed. There was a hazard register but it was well out of date. Regarding H's S15 machine, WorkSafe said the company could have established lockout procedures with associated isolation devices and user training, and established a system to identify new and existing hazards.

The other charge related to two Illig machines, which had disabled interlocks on the doors – a situation the company admitted it knew about. The interlocks had been disabled because machine vibration would trigger them. In 2007 an employee

had been injured when he opened a door and slipped, crushing his hand in the moving parts. The interlock had been disabled earlier and a prohibition notice was issued requiring the interlocks to be reinstated.

Following this most recent incident a further prohibition notice was issued and the interlocks have since been reinstated.

Regarding the first charge, Judge T J Gilbert noted H was found to have significant coronary artery disease "such that he was at risk of dropping dead at any point". The prosecution said H's heart attack was caused by being crushed in the machine; the defence said it was possible he had a coronary event and fell into the machine, in which case it could not be said that the company's failures contributed to his death. Three pathologists gave evidence. The one who conducted the post-mortem considered the chest compression caused by the platen was unlikely to have caused H's death, and that it was more likely he had a heart attack and fell into the machine.

Two other pathologists took the opposite view: that the heart attack was brought on by the accident.

Judge Gilbert said he was inclined to agree with the prosecution view – that H's heart attack was brought on by being trapped in the machine – but that it could not be proved beyond reasonable doubt as an aggravating feature and had to be set aside.

Regardless, he said, if there had been no safety failures on the machine the prospect of H becoming trapped "would have been very much reduced".

He fined the company \$26,000 on each charge with reparation of \$20,000 (Christchurch DC, 7 June 2017).

DIPLOMA COURSE APPROVED

Students will be able to commence work on the first NZQA-approved level 6 diploma in health & safety from the beginning of next year, now that the long running targeted review of qualifications (TROQ) for all tertiary level H&S courses is complete

Both the Employers and Manufacturers Association (EMA) and the Southern Institute of Technology (SIT) will be offering the approved NZ Diploma in Workplace Health and Safety Practice in the 2018 academic year, and will also offer a couple of additional papers for graduates from previous diploma courses that will bring their qualifications into line with the national diploma.

The EMA's health and safety portfolio manager, Craig Garner, told Safeguard that the graduate profile for the new diploma aligns quite closely with that of the association's existing diploma programme, but some minor changes are being made and these will be submitted for NZQA approval shortly.

"We would like to get the new programme under way as soon as possible, but when you're dealing with a 300-page document, the expectation is that NZQA will ask for explanations around some things," he says. "As a result it's likely the approval process won't be completed until the end of this year."

He expects a large number of those who have completed the previous diploma course to upgrade their qualification to a national diploma, and says there won't be a lot of extra work needed.

"We are currently designing a couple of additional assessments that will bridge the gap," he says.

SIT programme operations manager Chris Montgomery told Safeguard that graduates from its diploma course will need to take two additional workplace management papers if they wish to obtain the national qualification, and students currently working towards a diploma will have the choice of completing the existing programme or transitioning to the new course.

"We are supporting students through the change to ensure they are making appropriate and practical choices concerning their studies," he says.

NZISM national manager Greg Dearsly says that in the past the institute's accreditation scheme has not been able to recognise the H&S diplomas on offer in New Zealand because they have not been NZQA-approved, but holders of the new diploma will be recognised as graduate members of both NZISM and IOSH.

ENGAGING CEOS IN HEALTH

An upcoming six-month project on noise-induced hearing loss will be used to identify clear actions companies can take to tackle a pervasive work-related health issue, and also to encourage organisations to take a similar exposure approach to other health risks.

Speaking at an online seminar organised by the Health & Wellness Leaders Network last month, Francois Barton said

NIHL offered a tangible, intervention-oriented health challenge common to all industry sectors.

The executive director of the Business Leaders' Health & Safety Forum, Barton said the NIHL initiative would run from October to May next year. The idea is to focus on a particular issue – noise – but then challenge chief executives to ask: what would this risk approach look like for other health issues?

"We want to frame noise as a do-able thread in a broader picture."

Business leaders, he said, almost always talk in terms of wellbeing rather than work-related health, partly because wellbeing initiatives are viewed as "more palatable" to invest in due to their positive benefits. By comparison, investing in controlling asbestos exposure, for example, was often viewed as a negative because it was costly, it slowed things down, and the benefits were hidden.

Barton made it clear that investment in employee wellbeing projects was good, but only if the organisation has already invested in eliminating or minimising its work-related health risks which could kill its people or leave them seriously unwell.

"When I talk to CEOs the top two issues are drugs & alcohol, and mental health," he said, describing these as issues reflecting people's broader mental state when they come to work – that is, how their health affects safety at work, rather than work's effect on their health.

"It's a ripe place to improve the quality of their discussion so we can get a more risk-based conversation."

Chief executives, he said, are action-oriented people who appreciate tangible interventions at a tactical level. The trick is to build health and wellbeing into an organisation's existing agenda rather than presenting it as something complex to be added on. "We are often afraid of the big. Distil complexity into chunks. Think big and start small."

Barton challenged the notion of 'fitness for work' because it unintentionally puts the emphasis on the worker and ignores complex issues such as the work environment and hours of work. He proposed a better phrase was 'fitness of work' because it acknowledges these complexities and promotes better conversations.

Concluding with a discussion about wellbeing programmes, he said many companies use them more as a staff engagement tool than as an attempt to tackle specific risks. "Wellbeing programmes can be nicely packaged and clearly branded, but there's scope to make them more systematic and risk-focused."

BEYOND PAPER CUTS

"There's a whole lot of crap around safety. We need to focus on the things that kill people – not slips, trips and falls, and

bloody paper cuts."

Wayne Scott, new CEO of the mining and quarrying industry's national health and safety council, MinEx, introduced himself and his straight-up approach to H&S management when he spoke to delegates at Quarry NZ, the annual joint conference for the Aggregate and Quarry Association and the Institute of Quarrying, in Auckland last month.

As he took the podium Scott was at pains to point out that, although he has long been working in Australia, he is "Pukekohe born and bred."

He made it clear that, in his view, the industry – both here and in Australia – needs to improve its management of the four critical risks which contribute to most fatal accidents: falls and being struck by falling objects, collisions ("I think we do traffic management very poorly"), engulfment and entanglement ("It astounds me that we still have people getting caught in conveyors in 2017"), and energy release, which includes things like hydraulic pressure and electricity.

He expressed frustration that safety management too often focuses on risk minimisation without addressing the underlying issues.

"Having stupid little flags on your utes and hi-viz clothing is not going to stop drivers being killed. Just keep people out of the way of the fricking things that could kill them."

He urged his audience to focus on major risks, and look for controls that would actually prevent accidents.

"Risk management is generally done poorly in our industry, and it's because of all the shit you have to fill out – the paperwork and risk assessment models and all that stuff.

"For effective risk management you need to get down into the dust with your people to talk about the hazards that could potentially kill them, and what you can do about them."

In an environment where a large number of managers from small quarries are struggling to pass the compulsory certificate of competency assessment, he urged the industry to take ownership of the training and competency process.

"This isn't the realm of [industry training organisation] MITO, WorkSafe, or high schools or anyone else.

"We, as an industry, need to stand up and be on the front-foot. Because we know the game, and are in the best position to train managers and supervisors, and to help WorkSafe understand what competencies a CoC should provide.

"We need to help our people who can't help themselves."

EMERGENCY ROLES

In a second presentation, on emergency preparedness, Scott reminded his audience that although most response plans focus on large events, smaller incidents – machinery or vehicle accidents, and even medical emergencies – should also be considered.

The first fatal incident he encountered – a 19-year-old electrocuted at a New South Wales quarry where he was supervisor – showed him the need to consider the wider workforce, as well as those directly involved.

"There were 50 blokes on site that day, and I reckon about 40 of them just ran about like mad things because their mate was down and they didn't know what to do.

"We had all the documentation, all the emergency response stuff, we did an annual rehearsal of an emergency – but we weren't prepared for losing one of our own."

He acknowledged that the shock of having a death on site is something "you're probably never going to be prepared for", but urged his audience to think about how to manage others on site when an emergency occurs.

It was a lesson he put to good use when, as a Queensland mine inspector, he was called to an incident where a drill rig had overturned and was hanging over the edge of a quarry, with the driver trapped inside.

"I told the quarry manager to get every bit of heavy machinery on site, and every chain they could find and – as long as they could do it without getting close to the face – hook them onto the rig and try to anchor it.

"I knew full well those chains were never going to hold it if it decided to go, but it was about getting the people doing stuff."

He also made it clear that physical injuries are not the only form of serious harm that can result from emergencies.

"One of the guys who saw the accident happen was a mess – in the foetal position when I got there.

"The guy who was trapped in the cab – hanging there for 90 minutes before we got him out – was very good on the day, but he went to pieces the next day and had a number of emotional issues. He got back to work eventually, but he wasn't in great shape."

As well as preparing formal emergency response plans – "I like them to be one page ideally" – he urged his audience to talk with staff about who will do what if a critical incident occurs.



Safeguard Climate Survey

Engage . Understand . Improve

"The insights revealed were extremely valuable for developing meaningful responses to some hidden workplace physical, mental, and social H&S issues."

Dave Williams, QHSE Manager, GEA Process Engineering

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