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TAKES SAFETY TO THE NEXT LEVEL





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# CONTENTS



#### **A FAMOUS EXPRESSION**

"I love it when a plan comes together!" Hannibal Smith's famous quote is appropriate now in our industry, says ROBIN JONES. 22



#### IN WITH THE NEW

This year, Africa's leading occupational safety and health exhibition, A-OSH Expo, went bigger and better at the Gallagher Convention Centre in Midrand, Johannesburg. 26



#### **READY TO FACE THE** FIRE?

The Braampark Office Park in, Johannesburg, is an example of the inability of companies and employees to effectively prepare for and deal with fires. 36



#### LET THEM LIVE LONG

It has been proved that constant exposure to petrochemicals increases the risk of cancer and other illnesses in workers. 38



#### **SLEEP IS GOOD FOR BUSINESS**

Fatigue and sleep deprivation is hazardous and can affect the performance and productivity of employees. 40



#### A BURNING ISSUE

We find out how to manage chemical burns, which are often serious because the chemical continues to burn for as long as it remains in contact with the body. 42



#### THE LADIES' WAY

Inequality in the workplace is still real, but has there been progress in terms of gender discrimination in the workplace? 44



#### **NO CUTTING CORNERS WITH PPE**

Is personal protective equipment an acceptable victim for company budget cuts? **50** 

#### **COVER STORY**

**HSE Solutions** aimed to be a one-stop shop at A-OSH 2017. Find out more on P24



#### DECLII ADS

	KEGOEAKO
P2	Editor's letter
P6	News
P10	Sharman on Safety
P14	Safety Culture
P16	Safety from the Heart
P18	Legally speaking
<b>P20</b>	Risk perspective
<b>P22</b>	News from Saiosh
P52	Subscription Form

Cover photograph provided by Tarryn Burger

Published alternate monthly by Published alternate monthly by Charmont Media Global Unit 17, Northcliff Office Park, 203 Beyers Naude Drive, Northcliff, 2195-P O Box 957, Fontainebleau, 2032, South Africa

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lectric cars appear to be The Next Big Thing. As recently as 2005, the number of electric vehicles (EVs) was still measured in hundreds. However, according to the International Energy Agency, there were 1,26-million electric cars on the world's roads by 2015 and around two million by the end of last year. A further one-million EVs will be sold this year.

Despite Donald Trump (who wouldn't know climate change if it punched him on the nose), the Americans are embracing EVs like never before. EV sales in America rose 49 percent in the first quarter of 2017, versus a 38-percent increase in Europe.

In Norway, one in three new cars is an EV meaning the country has the highest per capita EV ownership on the planet. The land of the trolls and the Netherlands, its equally green European counterpart, aim to eliminate fossil-fuel cars by 2025.

EVs are also selling faster than rice in China (well, almost). According to EV-volumes.com, some 351 000 EVs were sold in that country last year. That's 85 percent up on 2015, making China by far the largest market for New Energy Vehicles, as they are called there.

So, how does South Africa compare to its global counterparts? Rather dismally, I'm afraid; only about 500 of the seven-million vehicles on our roads are EVs. There are numerous reasons for this situation.

The first is cost - an EV is significantly more expensive than its fossil-fuel counterpart.

The second is availability of electricity; we're still all paranoid about load shedding. Range is a third concern; we have what's commonly referred to as "range anxiety". A fourth reason is the charging time; we're accustomed to pulling into a fuel station and having someone else fill our vehicles' tanks in minutes.

Bearing all these factors in mind, I decided to set myself a challenge. I opted to drive for one week on electrical power alone. My steed of choice was the fully-electric, zero-emission BMW i3 with a Range Extender (RFX)

This quirky little Beemer has both a 650 cc twocylinder petrol engine with an output of 28 kW and an electric motor with an output of 125 kW, which means that it's not a crisis if you do run out of electricity.

Incidentally, the car is produced in an extremely green fashion; it's made in Leipzig, Germany, and it uses 70-percent less water, 50-percent less energy and 100-percent renewable electricity for production compared to a conventional BMW.

Speaking of going green, BMW South Africa is in the process of rolling out solar carport charging, but I used "dirty" electricity during my week - meaning I wasn't exactly saving the planet.

So, how did it go? Quite well, actually - but it's a



level with the ground floor. It is, however, more than that ...

It's a place where you can enjoy a sundowner after a hard day's work, a place where you kuier with friends and discuss whatever is on your mind, or where you cuddle up with a good book on a glorious day. It doesn't have to be a physical place, built out of bricks and mortar either ...

Charmont Media Global has its very own CyberStoep, where all these activities are happening digitally. This website aims to entertain as a flock of journos review, give their opinion and write about absolutely anything and everything under the sun.

This "diversity" is exactly what sets the Stoep apart from other lifestyle websites; here there is no topic too controversial, place too far flung or product too scarce that it can escape our Stoep's chitchat.

CyberStoep may well be the perfect platform for your brand to reach a wide range of readers, educate and influence them to become loyal clients. With the addition of the weekly CyberStoep newsletter that will be sent to a large database of subscribers each week, the traffic is set to increase dramatically over the next few months.

#### Catch more at www.cvberstoep.co.za

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# WORKPLACE SHEQ MADE EASY



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whole new way of life. You need to think of an electric car like a mobile telephone - meaning you need to charge it daily. The actual driving experience is blissful; masses of torque are available immediately, meaning acceleration is nothing less than superb. It's a spacious, very comfortable and ultra-stylish vehicle, too.

However, there's no getting away from the range limitations. The i3 is meant to be able to travel 170 km on electric power alone, but I never achieved this. Accordingly, I had to charge it each day.

Every morning when I arrived at my office, some 15 km from home, I started charging the i3. This method of charging takes seven hours and 45 minutes (assuming you want a full charge from empty). I'm seldom in the office the entire day, meaning I couldn't rely exclusively on this charging method.



It would be ideal to charge the i3 overnight, but I didn't feel comfortable with running the cord out of my kitchen window to my parking bay (I worried that the cord could be damaged by other motorists in the apartment complex).

I live in Sandton and I searched for charging stations in my area (my i3 told me that there weren't any close by). That's strange, because I know there's one at Melrose Arch. I popped in on a Sunday and left the i3 on charge for an hour and a half while I shopped. At the end of that charge, I had sufficient electrical power to drive 71 km.

Probably because I was so determined not to use petrol, I found myself eyeing the dashboard constantly. I did my level best to drive economically. However, all too often I was told that the electric range was insufficient (this happened every second day and I was only travelling in and around Johannesburg). Having said this, I always found a power socket in time ... so I achieved my goal of driving for one week on electrical power alone.

Would I want the i3 as my regular car? Yes please; it would suit me just fine. Will more South Africans buy an EV? I doubt it. Goodness gracious, South Africans don't even refuel their own cars! Expecting them to charge their cars each day is simply a bridge too far.

How sad. 🔊





# The Egoli Gumboot You Love, **Just Better!**

Wayne's popular Egoli 1 gumboot range has undergone a nip-tuck, giving rise to Egoli 2. It's the same reliable gumboot you've come to love and trust, only more attractive and much more comfortable.

With improved SRA level slip resistance, adjustments to the upper and a reduction in the calf-slap, the Egoli 2 gumboot range delivers a good looking, comfortable boot designed to work as hard as you do!



#### Egoli 2 - Metaguard - F1392, F1393

- PVC uppers for optimum flexibility and abrasion resistance
- PVC / Nitrile sole for durability and protection against fats, oils and chemicals
- Integrated metatarsal compliant to ISO 20345; 2011
- The cleated sole design provides SRA level slip resistance and maximum soil release
- Available in STC (F1392) as well as STC &Midsole (F1393)
- EVA/Supaline insole with Poron inserts for enhanced comfort and arch support comes standard

#### Egoli 2 - Knee Length Boots - F1360, 1370, 1380

- PVC uppers for optimum flexibility and abrasion resistance
- PVC / Nitrile sole for durability and protection against fats, oils and chemicals
- · The cleated sole design provides SRA level of slip resistance
- Available Without STC (F1360), STC (F1370) as well as STC & Midsole (F1380)
- EVA/Supaline insole with Poron inserts available as an optional extra with Knee Length Boots









## PROACTIVE SAFETY MEASURES

The EIE Group - which specialises in distribution, rental and value-added services in the industrial equipment market - has a reputation for safety, value, innovation, quality and best-in-class efficiency.

However, the EIE Group has faced a number of issues that made safety operations and audits a challenge. Last year marked a change for the business when a presentation by OVS Solutions, the Africa Licensee of Rapid Global Africa, posed an effective solution to the EIE Group.

#### LESS REACTIVE, MORE PROACTIVE

Being a large-scale operator, the brand found incident reporting to be unsuccessful, due to staff size and reporting procedure failures. With the help of Rapid Global Africa's Rapid Incident software, an effective solution was found.

Today, incident reporting on a national level can be completed efficiently, thus eliminating the "grey area" in reporting that presents a hindrance for many businesses.

As a result, the EIE Group has seen a substantial increase in reported incidents. Furthermore, coherent near-miss reporting methods have

contributed to a decrease in injuries of staff while on duty.

The implementation of Rapid Incident software has also saved time and reduced the job functions of safety officers by at least half.

#### **AUDITS MADE EASY**

Additionally, the EIE Group incorporated Rapid Audit into the company, which has been a highlight for the SHEQ officers in their respective regions, who no longer need to generate and conduct

audits manually.

With real-time ease of use on a mobile device, reports and results are generated and can be downloaded as a PDF, filed where necessary, or sent on to whoever requires them.

## READY TO USE IN 45 MINUTES OR LESS

With Rapid Global's new business development executive, Raymond Moussa, driving the implementation, those further down the management chain were also able to use the software after a short training session. A user-

friendly interface has also resulted in many employees using the software on an increased basis.

#### A PLAN FOR CONTINUOUS EXCELLENCE

Completed implementation is not the end of Rapid Global's service efforts. The team has been actively engaged with the EIE Group to see how Rapid Global solutions can continue to improve processes. Through these engagements, the EIE Group is looking at expanding the use of Rapid Global solutions to encompass more areas of the business.



## NOSA ACQUIRES DIVISIONS OF LEXISNEXIS

The National Occupational Safety Association (NOSA) recently announced the acquisition of the Occupational Hygiene (OH) and the Occupational Health and Safety (OHS) divisions of LexisNexis Legal and Professional.

NOSA is a prominent member of the Micromega Holdings Limited (MMG) group of companies. Greg Morris, CEO at MMG, says: "The acquisition of these divisions provides NOSA with an experienced team of health and safety consultants, along with expanding NOSA's footprint in the occupational hygiene sector."

The transaction will position NOSA as one of the leading providers of occupational hygiene services in South Africa. It will also allow it to expand its client base and build on its reputation as one of the largest providers of occupational health and safety services in Africa.

Greg Brown, executive director at LexisNexis, says: "While the OH and OHS training and consulting businesses have delivered an excellent value proposition to the company's customers, the divisions no longer fit with its strategy to provide leading legal information and compliance solutions.

"We are pleased to have found a natural owner in the form of NOSA, which will retain all key OH and OHS staff as well as the course material and intellectual property relating to this part of the business. This will ensure our customers will receive the same level of expertise, service and relationships that they enjoyed at LexisNexis."

Morris concludes: "NOSA has made a number of acquisitions over the past 18 months, which have allowed the company to expand its product offering into food safety, e-learning training and laboratory services. These acquisitions have also enabled NOSA to provide a holistic service to its extensive client base, along with a product range that underpins NOSA's international growth strategy."



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## **MODULES**

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> Improve processes and systems **Get SHEO Done.**

### ARE YOUR RESTROOMS REALLY CLEAN?

While the appearance of cleanliness and the pungent aroma of bleach gives us a sense that the toilets we use at work are sanitised, studies show this is not necessarily the case...

A report by Crisis Science reveals that public restrooms (even "clean" ones) are contaminated by enteric bacteria (bacteria of the intestines). According to the report, the most contaminated areas in public restrooms are the toilet, floor, sink and sanitary-napkin disposal unit.

E. coli was most commonly isolated at the sanitary-napkin disposal unit, the drain in the sink basin, and inside the urinals. Mops used to clean restroom floors contained coliform bacteria, but not E. coli. Coliform and E. coli bacteria were found everywhere but on the top of the urinal, including being detected on the paper-towel dispenser, trash-bin door and paper-towel lever.

John Coetzee, CEO at Green Worx Cleaning Solutions, says: "All sanitising active ingredients used in toilet and urinal sanitisers are required to be in direct contact with the organism for a minimum period of time depending on the organism it is intended to kill.

"This is an absolute scientific fact. Simply spraying the sanitiser on the toilet or urinal (which is then flushed away) does not meet the minimum time required, and the product is diluted, further decreasing its efficacy."

Green Worx Cleaning Solutions focuses on green cleaning and sanitation consulting and solutions, pollution control and environmental remediation products. It supplies environmentally responsible biotechnology products based on the use of natural microbes and enzymes.

Coetzee conducted a urinal challenge, pitting traditional sanitising agents against green cleaning products that utilise enzymes and live, good bacteria to do the dirty work. "By incorporating a



selected blend of highly active bacteria cultures, that are both non-volatile and non-corrosive, harmful organisms found in toilets and urinals were eradicated," confirms Coetzee.

"The active bacteria in these products grow at a faster rate than the harmful bacteria, and use the organic waste as a food source. This means they actually digest the harmful bacteria, leaving nothing behind," explains Coetzee. "The live agents spread around the area of application, rather than remaining only where the chemicals have been applied."

According to an article released by Cleanlink, training is also essential: "The science of cleaning is important in all custodial applications, but it should be particularly prioritised in restrooms, where a unique and potentially dangerous mix of germs, bacteria and pathogens lurk.

"Cleaning and disinfecting restroom hot spots - including door handles, sink and counter areas, toilets and urinals, and floors - requires constant vigilance and attention to detail by properly trained staff."

Achieving a safe, sanitised space is crucial to occupants' health and that of custodial and janitorial workers. "When nature offers a solution that cleans more effectively, is healthier than exposing staff to chemicals, and offers the added benefit of being environmentally friendly, it seems to be the only logical choice," concludes Coetzee.





## TAKING OCCUPATIONAL HEALTH CLINIC MANAGEMENT INTO THE FUTURE

It's time for clinics to change their buying habits when it comes to sourcing equipment. Since the implementation of the Occupational Health and Safety (OHS) Act, and the responsibility that it places on employers to perform medical surveillance and retain records, there has been a slow, but steady, shift towards outsourcing these services to occupational health clinics.

or an occupational health clinic to be profitable it needs return customers; it needs to build up a history and a relationship with the customer. This needs to be based on efficiency, service. trust and added benefits

Once a clinic has established all these aspects of service delivery, it then needs to consider how to manage its customers and all the associated records.

The common practice has been for clinics to source their audiometry, vision and spirometry equipment from one or more suppliers and rely on the individual sets of software that come with those devices.

Once the clinic realises that it needs a better management tool and it turns to software solutions, it's often too late, as not all software can integrate with all hardware. It is then often left with no choice but to continue with the chaotic, paper-intensive systems that it employed when it was less busy. This is the "top down" approach - source the hardware first and efficient management systems second.

There is, however, a better way of equipping a clinic with the right hardware and software to manage customer expectations, while increasing patient throughput. This is the "bottom up" approach - which is to sort out the management systems first and let that help you decide on your equipment.

Deep Red Technologies was established in 2004 when its founder, Richard Pfab, realised a need

for specialised audiometry software that would deliver accurate and comprehensive results. African Management Software (AMS) was born, and has grown from strength to strength over the past 13 years to become the leading turnkey solution for medical surveillance management for occupational health clinics in South Africa.

AMS integrates seamlessly with a wide variety of audiometers, spirometers and vision screeners. Patient and medical records are retained together with computer-generated documents, which are saved on the system, or through Deep Red's new Cloud (or private Cloud) solution.

With remote reviewing capability and legal electronic signing of certificates, the costs and time wasted by travelling to and from occupational health clinics can be eliminated.

Watch out for AMS Online (coming soon) where customers can log into their profiles and download their own employee certificates via the internet, without having to phone the clinic every other day to obtain records.

It's the new way of setting up a clinic, or taking an existing clinic into the future. Once the management systems are set up through AMS, the hardware that best suits the clinic's needs can be selected.

For more information on AMS, call Grant on +27 83 453 4052 or drop him an e-mail at grant@deepred.co.za. 👀



y work as a consultant in leadership and culture often takes me to some far-off places. With personal experience in more than 100 countries, travel has become part of my everyday life. The packing and re-packing of bags, endless airport queues, taxi hops to the hotel, saccharine hotel receptionists and sprints to catch the last aeroplane home are all part and parcel of my working life. The ensuing jetlag is managed with double espressos and in-flight napping.

Over the last few weeks I've been thinking more about my travels – particularly what I've learned from my encounters around the globe, and specifically about how this knowledge can help us improve safety culture and performance wherever we are on the planet.

#### IS THE WORLD GETTING SMALLER?

Back in 1873, the delightfully eccentric Phileas Fogg attempted to journey around the world in just 80 days, in order to win a bet placed by his friends. The story, as told by Jules Verne, was quite an adventure for Fogg and his sidekick, Passepartout, as they came to learn local customs and practice, while sidestepping language barriers with British humour and a sincere smile.

In 1889, American journalist Nellie Bly set out to mirror Phileas Fogg and completed the same journey in 72 days. Her experience resulted in a book with the tagline: "A novel and fascinating game with plenty of excitement on land and sea".

#### **OR FASTER?**

In America, the very first transcontinental railway line was created in 1869, practically uniting the States through steam power. Mass transit then really took off. In 1903, James Sayre took his turn, circumnavigating the globe using only public transport, in just 54 days.

#### OR SLOWER?

In 2001, aged just 24, Alastair Humphreys left England to cycle around the world. He returned four years later having completed an epic 46 000 miles across 60 countries. A feat that renowned British Polar explorer Sir Ranulph Fiennes called "...out of the ordinary. In today's world of dashing up Everest in less than a day and best-selling books about threemonth motorbike rides, Alastair's journey stands out as amazing. It was probably the first great adventure of the new millennium. Alastair's journey was an oldfashioned expedition: long, lonely, low-budget and spontaneous. It was a life on the road rather than a whirlwind break from home."

Perhaps we need to go more slowly? Last weekend, on returning home to Switzerland (from yet

another week working away with clients) I discovered my little village was hosting an energy conservation event. Wondering if that meant I could have the weekend with my feet up, I sidled along.

There I learned about an incredible feat of energy efficiency. Last year Swiss adventurers Bertrand Piccard and André Borschberg completed the first circumnavigation of the globe with no fuel. They flew 42 000 km over a period of 16 months in a solarpowered aircraft to promote the use of renewable energies.

#### AROUND THE WORLD, AROUND THE WORLD

You may be familiar with the French electronic duo Daft Punk. Their catchy anthems have taken dancefloors around the world by storm. In fact, their tune Around the World hit the top spot in dance charts around the globe when it was released - despite it having only one line (can you guess what that line is?) repeated 144 times.

It is, however, another tune of the same name that does it for me. In 1999, the Red Hot Chili Peppers sang:

> "All around the world. We could make time. Rompin' and a stompin', 'Cause I'm in my prime. I know I know for sure, that life is beautiful around the world"

As I write this article, we are already 121 days into the year - just like that. A review of my diary tells me that I've been in 12 different countries on four continents. This is technically no Guinness Record, but I've certainly been around the world.

Travel beyond your own country to anywhere in the world and you'll quickly notice the differences between your usual location and where you end up. For example, anyone who has ever visited Germany, Tanzania, Russia or China (four of the countries I've been in the last month) will certainly have their own souvenirs of the experience.

Each country is quite unique - and often easily stereotyped. Is every culture really that different, or are there some common aspects?

#### "VORSPRUNG DURCH TECHNIK" OR "IT'S ALL COOL, MAN"?

After touching down at Berlin's Tegel airport, to conduct a culture assessment for clients, my driver was already waiting at the agreed location. He was smartly dressed, the iPad in his hand clearly displaying my name and he promptly whisked me to the car - an immaculate executive sedan (German,



of course), which took off like a controlled rocket launch

I was unpacking my bags in the hotel 25 minutes later, after a serious though uber-polite check-in that took no more than two minutes: they were expecting me and everything was ready for my signature and a swipe of the credit card.

I had an opposite experience the previous week in Tanzania. I nervously covered every inch of Dar Es Salam airport searching for my driver before he wandered along 30 minutes later with a shrug of the shoulders, a tattered, badly handwritten sign and a beaming grin. We crawled through potholed side streets in the back of a beat-up taxi until I fell out at my accommodation.



Staff at the international-brand hotel seemed surprised by my arrival, though 15 minutes later they managed to get enough information from their computer to allow me to gain a keycard for a room, accompanied by warm smiles and elaborate finger-twiddling, elbow-pulling and fist-bumping handshakes aplenty.

Arriving in Russia at -20°C, I received an equally cold reception from the driver and hotel staff. They were matter-of-fact as they focused hard on getting the job done as quickly as possible. The stereotypical Russian no-nonsense style may come across as frosty, uncaring or disinterested to some, but as a regular visitor I understand that it's way more about not interfering, or being seen as too friendly in a false

Not so in Shanghai, however, where the hotel staff seemed more interested in playing a round of Candy Crush on their mobiles and giggling at this two-metre white giant than getting me to my room. Shanghainese typically don't want to offend, but see little wrong with tapping out a text message, or giving priority to their discussion with colleagues while the hotel guests wait their turn.

So, as organisations get bigger and the world gets smaller, what does all this mean for safety?

#### THE CHALLENGE OF CULTURE

If we strive to go beyond the immediately obvious stereotypes such as German efficiency, effervescent French language, Italian masculinity, Japanese mindfulness, British humour and the American desire to "go large" with everything, what do we find?

Culture is often referred to as "the way we do things around here". While some may prefer a deeper definition. I think this simple approach is useful as it sums up just how all-encompassing a concept it is.

Following the Chernobyl disaster in 1986, where 31 people lost their lives, the Advisory Committee on the Safety of Nuclear Installations defined safety culture as "the product of individual and group values, attitudes, competencies and patterns of behaviour that determines the commitment to, and the style and proficiency of, an organisation's safety programmes".

In China an attitude of pragmatism and persevering behaviour exists, and relationships have priority over tasks as people seek to fulfil obligations to family, teams and society before anything else. While delivering our safety leadership programme there, I focused hard on a "journey to excellence" underpinned by personal commitment, collaboration and core values to meet local cultural needs.

In Tanzania, a traditional approach dominates, where absolute truth is a core value, rapport is key and stability is critical. In the latter it's like Germany, though Germans have a low dependence on others, preferring to excel as individuals. There, inequality is minimised, and - like in Tanzania - change comes through evolution and superiors are easy to reach (rarely so in China or Russia). Recognising individual contribution, such as great safety behaviours, and continuous improvement helps in both countries.

In Russia and China people are highly dependent; hierarchy is needed and superiors are often inaccessible. Perseverance and hard work are behavioural norms (as in Germany), though in China relationships will always come before hard sweat. Values include self-discipline, honesty and respect.

Change in these countries, as history underlines, comes through revolution: forget about incremental improvement here; think big, act fast, communicate clearly and drive a step-change in safety.

While the Chinese and (most) Africans tolerate ambiguity, Russians and Germans alike detest uncertainty - hence my efficient airport transfers and hotel check-ins - the need for due process, contractual obligations, laws and rules manifest in a desire to make the future as predictable as possible.

Contrast this with Tanzania where "pole-pole" - pronounced pollay-pollay and meaning "nice and easy" or "take it slowly" - is the most-uttered phrase wherever you go. There's an inner urge to work hard and showing emotions is accepted (you'll know when someone is pissed off in both countries).

So, in terms of safety, emphasis should be on defining principles for behaviour and defining plans and procedures.

#### **SAME-SAME, BUT DIFFERENT**

And so, finally, we return to Switzerland – from where I write this article. The Swiss are often stereotyped as neutral-standing time-perfectionists who eat a lot of cheese. And that's pretty much true. Interestingly

though, they have a lot in common with South Africans - a high sense of masculinity, manifesting as strong ambition, decisiveness and admiration for achievement.

In both countries the focus is on teamwork (especially rugby), trying to avoid conflict and seeking to gain consensus and harmony. Safety improvement in both countries can come through a blend of robust (but sensible) rules and processes and through respecting order and hierarchy. There is also a need for space to work and for a balance between personal emotions and the inner urge to work hard.

I need to be at the airport in an hour and my driver has just knocked at the door. Thoroughly efficient, and as regular as (Swiss) clockwork, he'll probably even have a selection of Swiss chocolates waiting in the back of the car for me to keep me going as I begin yet another journey around the world.

This time, though, I'll be welcomed with a bear hug, an exclaimed question ('Howzit!'), and, if everything goes lekker, a braai with plenty of Mrs Balls *sterk blatjang* on the side. It's funny that, no matter where I travel on this planet, some things remain as core values for everyone. SN



Sharman on Safety is based on ideas and concepts from Andrew Sharman's new book: From Accidents to Zero: a practical guide to improving your workplace safety culture. Andrew is an international member of the South African Institute of Occupational Safety and Health (SAIOSH) and the Chief Executive of RMS - consultants on leadership and cultural excellence to a wide range of blue-chip corporates and non-government organisations globally. More at www.RMSswitzerland.com.

# MIND YOUR OWN BUSINESS

## What your MBA should have taught you about workplace health and safety

Andrew Sharman and Judith Hackitt get under the skin of how and why many leaders tend to complicate matters by compartmentalising different types of risk.

"Managers feel baffled by the complexity of OHS systems and regulations. What this

book says will come as a breath of fresh air to them "

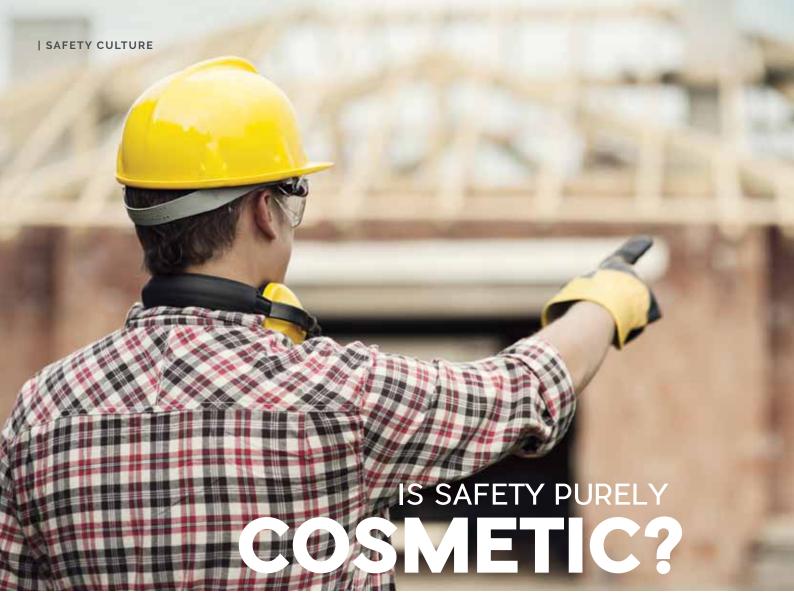
"Given the background and credibility of the authors, managers should see this as a strong signal to look again with confidence at their leadership in safety."

Andrew Sharman & Dame Judith Hackitt DBE

MIND YOUR OWN BUSINESS

What your MBA should have taught you about workplace health and safety

Professor Andrew Hopkins, sociologist and best-selling author of Learning from High-Reliability Organisations and Failure to Learn.



While facilitating a recent safety maturity assessment, BRETT SOLOMON had a most interesting and revealing experience

efore we began with the assessment, we were required to attend a company induction programme. The typical safety issues were highlighted; including personal protective equipment (PPE) requirements. The company had two sites, and on arrival at the first one we were required to do a sitespecific induction.

The second site had three operations and we attended a short safety briefing for each one. The day before we were to assess the third operation, the safety manager casually mentioned that orange long-sleeve reflective shirts were mandatory. This was not mentioned in any of the induction sessions, nor was it a prerequisite at any of the other operations.

Under any other circumstances I would have complied. However, as part of my assessment I deliberately wore a yellow reflective shirt to see what would happen. Just in case, I had brought an orange reflective shirt with me.

Upon my arrival at the entry gate, the safety manager for that operation remarked that he wasn't sure if my shirt would be acceptable. I was disappointed that he was not more assertive. As he was the safety champion, I was hoping for a more definitive response.

Shortly thereafter, the safety manager for all three operations arrived. I explicitly brought it to his attention that I was wearing a yellow shirt, but also mentioned that I had an orange shirt in the car. Instead of asking me to exchange shirts, he smiled and told me that as I was with him there was no need to worry.

"There is always an exception to the rule," he said. I was dismayed by his mindset. Once through security, we met the GM and then attended a safety meeting. one raised an one raised objection to my shirt.

I spent the rest of the day with the plant manager. We started off with a plant-specific orientation, including PPE expectations and, surprisingly, there was still no mention of my yellow shirt.

After about an hour of walking around the plant, we entered the geology laboratory. While I was being introduced to the staff, one of the ladies asked the manager why I wasn't wearing an orange shirt. I immediately thanked her for her willingness to challenge me. Finally, someone had spoken up.

Suddenly, it became an embarrassing situation. Instead of letting me quickly go to the car and retrieve my orange shirt, they insisted I wear an orange reflector vest over my yellow shirt. How silly can you get?

Two hours later, a contractor joined us for lunch.

Pandemonium broke out as the reflective stripe on his pants did not have an orange band above it. The same plant manager who had overlooked my incorrect PPE became very vocal.

He said: "Here we take safety very seriously and don't compromise on the rules." He then threatened to ask the contractor to leave the site. I sat and watched this hypocritical commotion with amazement.

What a classic learning moment. Personally, I believe that if there is a rule or procedure in place it must be followed. I should never have been allowed to enter the gate, full stop. As soon as the safety manager made a concession for me, I knew the company's safety culture wasn't as robust as it should have been.

following procedures that have little or no bearing on their actual safety.

I also wonder how many people are being disciplined for breaking pointless rules that simply don't make a difference when it comes to keeping team members safe. I am not promoting the violation of procedures, what I am challenging is the necessity and effectiveness of some of the rules being used.

The worst example that I have come across is a manager who insists that a crew, who work at heights, wear their harnesses all day - even when in the office. I have always felt sorry for electricians, who, for some unknown reason, are required to wear padded gloves, despite the fact that slim gloves are available



When managers don't insist on the very standards they have put in place, two detrimental things happen. The first is it sends a message that management doesn't take safety seriously; it is something that can be compromised. Managers then shouldn't be surprised when their people take shortcuts because they have inadvertently implied that it is acceptable.

The second is it causes a rift between managers and their teams. Workers become disheartened by the fact that their leaders are inconsistent, and feel it is unfair that they aren't held to the same criteria.

This experience made me question what we really value. Is it keeping people safe or complying with rules? I wonder how many workers are

There are so many similar examples like this that cause workers to feel safety rules are a farce. This reinforces the resentment towards managers and the safety department. Is this what we want?

We need to be asking ourselves whether our rules are appropriate to the risks. If not, why are they in place? What do we actually care about?

If adhering to a rule will prevent someone from being injured, are we vigilantly insisting that everyone complies? Are we leading by the proverbial example? Then, are we willing to change, or even remove, rules or procedures that don't make sense? Are we caught up on insisting on trivial matters, like the colour of a reflective shirt, that will in no way improve one's safety? SM



Brett Solomon is the CEO of The Kinetic Leadership Institute and is a recognised leader in combining neuroscience, change management and leadership theory to drive cultural transformation processes. Brett specialises in neuro-leadership, especially when it comes to understanding what drives human behaviour and how to influence it. He has been involved in numerous safety culture change initiatives in throughout South Africa, Australia, Canada and Saudi Arabia.



fter conducting the two-day visit, my colleagues and I arrived at the airport to catch our fight back to Europe when we were informed that the flight would be delayed; due to the cold weather conditions.

Around 30 minutes later, we were given the good news that the aircraft was ready; we could board and be home in Vienna in time for the weekend. All went according to plan as we settled in, buckled up and the aircraft took off.

After we had reached our cruising altitude, the dinner service commenced. However, when ordering our drinks we were informed that, due to the extremely cold weather conditions, the wine was frozen. We quickly fixed the problem by placing the miniature wine bottles in the on-board kettle. Later we had a similar problem with frozen cheese and grapes. This time, however, the kettle was not an option.

During the flight my mind wandered back to the challenges we have had with extreme weather conditions while in Russia during the past twelve years.

These memories reminded me how employees face challenges each and every day, and how it is important for leaders and safety professionals to engage with them to find solutions to provide a safe working environment for all, where everyone returns home safely at the end of each shift.

#### **ENGAGING AND UNDERSTANDING THE BARRIERS IS KEY**

I remember conducting my first couple of visits to

the logging camps in 2015, during which we were concerned that employees were wearing woollentype boots (called valenkis) and camouflage overalls when harvesting the trees.

Over time, we implemented a rule that required all employees to be issued with (and wear) safety boots with steel toe caps and brightly coloured overalls. By doing this we believed that we had reduced the risk of injuries.

However, during each of the following visits, we noticed that the employees kept using their valenki boots, or at times would wear the safety boots only when we were visiting the sites.

Eventually, during one of the visits to the logging operations, I sat down with a couple of employees to discuss the issue. I was informed that the extreme weather conditions resulted in the steel toe caps freezing their toes and making them uncomfortable.

By sitting with them we realised there was good reason for them failing to adhere to our requirements of wearing safety boots. As a result, the team searched for a more suitable boot with lining and toe caps made of a different material. Once these were issued, the employees adhered to the rules and finally the risk of foot injuries was reduced to an acceptable level.

#### **BEING PRACTICAL WITHOUT INCREASING THE RISK**

Some years ago, while running another large project in Russia, we experienced extreme weather conditions with temperatures as low as -30°C. Rules and procedures had to be developed and agreed on





to make it possible for people to work safely under these conditions

I recall some of the challenges we faced, including: cranes freezing, icicles hanging off scaffolding, snow and ice-covered platforms and walkways, and people having to erect metal structures and equipment with little protection from the cold.

This forced the project and safety teams to engage with the employees and contractors and to identify and agree on practical solutions to the problems. As a result, this project was completed without any serious

the barriers that are faced and to agree on safety methods of conducting a task - than those who are faced with the challenges when conducting their

It is clear that by engaging with the relevant persons when developing systems, methodologies, standards and procedures, the process takes much longer. However, doing so ensures buy-in to the new requirements and quicker rollout and implementation, as well as greater success in reducing the risks and preventing injuries and incidents.

Once we, as leaders and safety professionals, have a





#### THE KEY TO SUCCESS IS OBTAINING UNDERSTANDING AND BEING PRACTICAL

To ensure maximum impact, leaders should engage with the employees and contractors who are faced with the everyday challenges in their daily tasks; including extreme weather conditions, routine or nonroutine activities, complicated work and congested

Who better to talk to - in order to understand

clearer understanding of the specific barriers, together with the first-line managers and employees, practical options can be identified to conduct the work safely. More importantly, we can obtain buy-in and thereby have a better chance of employees and contractors following the agreed standards, procedures and safety rules.

It is also important for the people conducting hazardous work activities to understand the risks and the reasons why safety professionals want them to follow the safety rules and procedures.

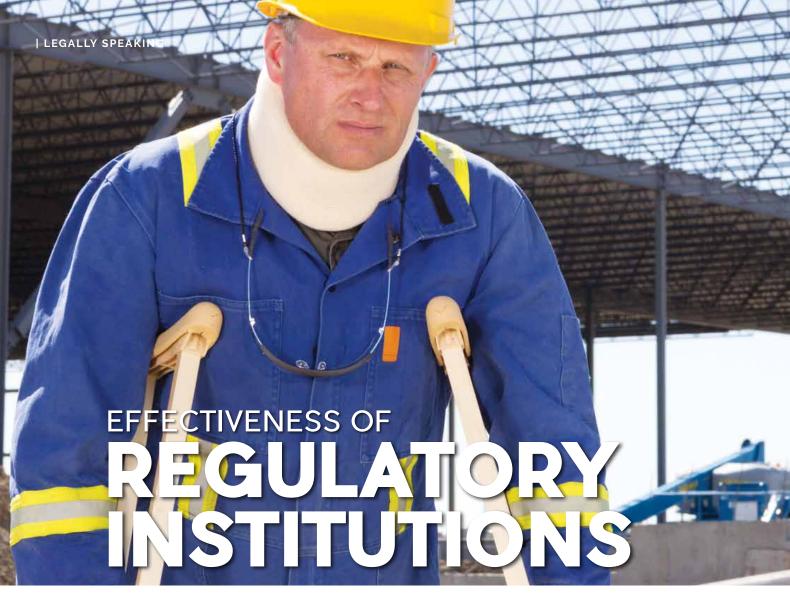
During my first visits to the logging camps, the employees were happy to wear camouflage overalls. Once we explained the risks and importance of being visible when working in the forests - especially during harvesting activities - they were more than willing to change to the brightly coloured overalls.

To be successful in our efforts in reducing risks and preventing incidents, we should ensure engagement with all relevant parties to improve understanding and obtain agreement of the risks levels.

In addition, we should develop practical control measures to reduce the risks to an acceptable level and create an understanding of what the consequences could be if the agreed controls are not implemented and adhered to. 🕥



Brian Darlington is the group head of safety and health for the Mondi Group, based in Vienna, Austria. He has filled the role since 2012 and is responsible for safety and health in more than 30 countries. Brian started working at Iscor before joining Mondi in 1987, working in Gauteng. In 2000 he transferred to the Kraft Division in Richards Bay. During 2005, Brian transferred to Europe, taking up the position of business unit SHE manager, responsible for SHE in paper mills in Austria, Hungary, Israel, Slovakia, Poland, South Africa and Russia, as well as forests operations in South Africa and Russia.



Claiming workmen's compensation can make for a minefield of problems, some of which require taking legal action

ne of the advantages of workmen's compensation is that the injured employee can receive compensation inexpensively and quickly; in theory that is. Essentially, an employee should get compensation if injured on duty.

The injured employee is not an expert on workmen's compensation, so compensation should not be dependent on his or her ability to understand the system - which should be user friendly and driven largely by the fund itself.

In the private sector, claims are usually settled quickly. For example, a leading insurer put a system in place where a motor accident claim can be settled within an hour. In America, a new insurer called Lemonade has been launched. It looks like the Uber version of insurance. When using this system, an insurance claim is settled electronically within minutes.

Workmen's compensation claims do not go through the courts. They are settled in what is called administrative law. Today these systems are generally referred to as regulatory systems.

If workmen's compensation did not exist, the injured party would have to approach the courts and use the common law for recourse. This is known to be particularly inefficient. There is no such thing as a claim being settled within minutes - years is a better

measure and millions of rand in legal fees is the norm when claims are settled through the courts. The legal system is basically a non-starter for high-volume workmen's compensation claims.

Workmen's compensation is not the only system to bypass the courts. In a recent American article, a judge pointed out that the public has less and less recourse to the courts. In fact, few have their proverbial day in court.

Increasingly, because of the prohibitive costs involved when courts are approached, individuals are attempting to solve issues themselves without the assistance of lawyers. This is generally not very successful.

Another reason why fewer and fewer matters are being resolved by the courts is the rise of regulatory institutions such as the one governing workmen's compensation. It is, therefore, important to get a feel for whether or not these institutions are successful.

This is not easy to assess since - unlike court judgments where some are published and are increasingly becoming available on the internet - little information exists about the settlement of disputes within regulatory systems.

There are, however, indications that all is not well within the regulatory system. A recent case indicates that an injured employee has spent over 50 years trying to get compensation.



In another instance, so many claims have not been settled that judgements in execution have been granted against the institution and executed. Employees working for that institution have complained that they cannot work on the judgements, because their computers have been attached by the sheriff!

In another case, the head of the institution has been found guilty of contempt of court for falling to comply with a host of court orders.

With this background in mind, the case of John Molefe versus Compensation Commissioner 2007 TPD is insightful. Molefe was a truck driver and on February 15, 1996, while driving on duty, he was shot in the upper right arm in a hijacking incident.

This is interesting because some may doubt whether being deliberately injured in a criminal incident is an accident. Well, that matter was settled a long time ago... Being injured in an intentional criminal incident while on duty qualifies for workmen's compensation.

So, in this case there should not have been a problem. That the shooting took place was not in dispute; that he was injured was not in dispute; and that he was entitled to compensation should also not have been in dispute.

While Molefe was in hospital, his employer gave his wife some money. From the available facts it seems that this was one of those "settle within an hour" incidents - so what went wrong? First, his employer reported that he had not been injured on duty. It is not clear why the employer did this, but, the result was that the claim was rejected.

When Molefe returned to work, he was unable to drive a truck and, therefore, became unemployable. He was thus entitled to claim for total disability. He found out only in April 1997 that his claim had been rejected. He approached an attorney to assist him and his claim was finally admitted on October 15, 2001, from which it can be seen that several years had passed. It can also be seen that he would not have been compensated had it not been for the assistance of the attorney.

The easy, inexpensive, user-friendly system had failed. Had the matter been dealt with correctly, he would have received temporary total disability payments, which would have assisted him greatly another failure of the system.

He applied for the temporary total disability payment, which was rejected on the basis that these payments were made only if the employee was receiving active medical treatment (whatever that may be).

Workmen's compensation is a statutory scheme. A person is entitled to compensation if the law says so. The law, which granted compensation to this man, says nothing whatsoever about receiving active medical treatment. The commissioner had inserted that exclusion. It also appeared that this was a general limitation applied to any application. In other words, hundreds, or even thousands, of other employees may also have faced the same limitation.

The issue thus became whether the exclusion is unlawful? A meeting was arranged with the commissioner and it was accepted that the limitation was, indeed, unlawful. It turned out, however, that the commissioner continued with this policy of unlawful exclusions. The matter was thus taken to court.

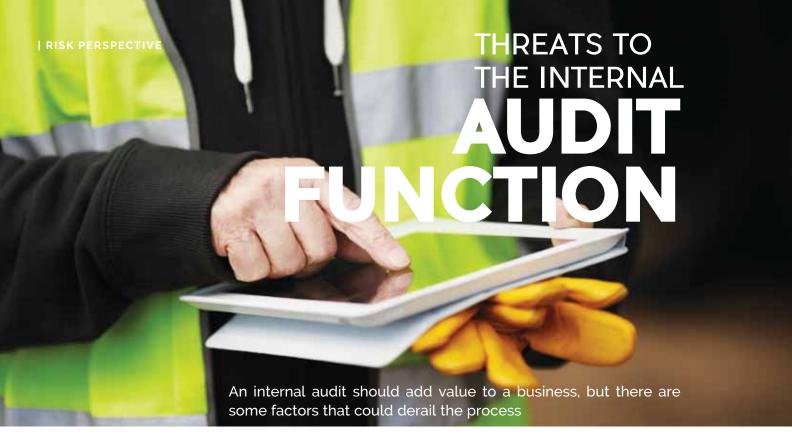
The judge found that no provision exists in the legislation to restrict the rights of injured employees to receive compensation. The court therefore ruled that the practice of limiting compensation to periods where employees receive active medical treatment is unlawful. The court also ruled that the failure to make monthly payments is unlawful.

The troubling aspect of this case is that the judge was simply ordering the commissioner to comply with the law. One would have thought that the commissioner would be the expert on this particular law.

One wonders how many other statutory bodies do not comply with their empowering statutes. This is troubling indeed!



Legally Speaking is a regular column by Albert Mushai from the school of Economics and Business Sciences, University of the Witwatersrand. Mushai holds a master's degree from the City University, London, and was the head of the insurance department at the National University of Science and Technology in Zimbabwe before joining the University of the Witwatersrand as a lecturer in insurance.



very internal audit function wants to be seen as a value-adding stakeholder that provides assurance on key controls as a result of significant risks confronting the organisation. In pursuit of this noble positioning, it is worth identifying some of the threats that could derail and impact on the internal audit function

#### **AUDIT PLANNING**

Determining the magnitude of the audit exercise ensures that serious issues that could occur later are not overlooked. This is one of my anxieties as an auditor.

When planning an audit, it is possible to initiate a risk-based audit (RBA) approach. Phil Griffiths, founder and CEO of Business Risk Management, affirms that this approach "is designed to assess all the key activities, risks and controls and, therefore, major areas of concern should be identified"

It is good practice for auditors to develop their own audit planning checklist of key items that are needed, or have to be reviewed prior to the audit. This might include, but is not limited to, reviewing past audit reports and assessing whether there are any repeated control failures.

The non-cooperation of management in dealing with opportunities for improvement in their respective functions should not be underestimated. When planning for an audit it is, therefore, important to learn as much as possible about those being audited.

The PwC 2016 State of the Internal Audit Profession study posed an interesting question: "Is your internal audit function optimally aligned with other assurance functions?" Changes in an organisation's structure can indicate the level of assurance that might be required. If a change in the management structure was due to lack of proper governance and controls, resulting in significant losses or opportunities, this should be taken into account when planning for the audit.

#### **IDENTIFICATION AND PROVISION OF RESOURCES**

Availability and effective use of resources plays a significant role in achieving the audit objectives. For example, inadequate time allocated to planning of risk-based audits will impact on identifying important internal and external aspects that impact on business operations.

Here's an example. When planning to audit an organisation's supply chain function, although it is vital to assess the overall performance of the supply chain process, the auditor should perhaps start by looking at any risks that were - or could be - caused within the value chain as a result of supply chain activities. This insight requires more time and, in some instances, technical knowledge of the business.

When selecting audit team members, the collective capabilities of the team and their impact on the effectiveness of the audits to be conducted should be taken into account. In nutshell, financial resources, availability of auditors and relevant technical experts, as well as costs associated with travelling and accommodation, all need to be considered.

The achievement of audit objectives might be impacted by different risks within or outside the internal audit function. However, the challenge for personnel managing the function is to continually identify additional risks beyond those related to audit planning and resources. SM



Hope Mugagga Kiwekete is a managing consultant at the Centre for Enterprise Sustainability. He has practiced as a management systems consultant, trainer and auditor in different multicultural environments, which entailed environmental, occupational health and safety and quality management in various industry sectors in east and southern Africa and Asia. He is a Certified ISO 9001 Lead Auditor with the Southern African Auditors Training Certification Authority (SAATCA) and a member of the SABS Technical Committees for Quality Assurance, Environmental Management and Occupational Health and Safety Management Systems.





# Wayne PU Gumboots Safe, Durable, Comfortable

Wayne is the largest gumboot manufacturer in South Africa, and a proud member of the BBF Safety Group.

Wayne's range of premium PU gumboots are designed specifically to provide greater resistance to harsh acids, oils and chemicals that are present in some industrial environments.

Our PU gumboots also last up to three times longer than PVC boots and are lighter in weight, thereby enhancing the comfort to the wearer.





"I love it when a plan comes together!" This quotation was made famous, after some wild event, by Hannibal Smith from the TV series The A-Team. It's also appropriate now in our industry, says **ROBIN JONES** 



keep "borrowing" this quote on occasions when I think it is appropriate... I want to use it now because Saiosh has just launched another benefit for members.

As part of the professional registration process, Saiosh runs very successful continuing professional development (CPD) workshops in five major centres across South Africa. These are well attended and the top speakers help to keep members informed about the latest developments in the field of occupational health and safety (OHS).

Unfortunately, many members are not located in the major centres and travelling to them is costly. Saiosh investigated ways to ease that problem and provide greater cover for all members. We have achieved this by introducing webinars for our more than 8 500 members.

A webinar is a seminar, or other presentation, conducted by a presenter over the internet to an unlimited number of participants. To take part, all participants need to do is to connect via a computer or smart device.

In this way, Saiosh is now able to communicate with a much larger number of members, no matter where they are situated. At the start of each webinar there will be a short tutorial explaining how to take part and interact.

Saiosh will be hosting webinars on a range of topics relevant to members. By the time you read this article, a webinar will have been held on the official comments submitted to the Department of Labour (DoL) on the Draft Ergonomics Regulations, which were published by the DoL in January 2017.

The public was given 90 days to submit comments. Saiosh created an online platform where members could post their comments. A circular to members asking for comments initiated a very good response. It was, therefore, decided to submit a reply to the DoL and the South African Institute for Occupational Hygene (SAIOH) joined with Saiosh.

A very comprehensive document was then delivered to the chief inspector of the DoL. The Master Builders Association, which represents the construction industry, joined the Saiosh and SAIOH teams and added its support for the thoroughness of the report to the chief inspector.

At the same time, a newsletter was sent out to all members, bringing them up to date on the results of the request for comments, as well as the finished report. Within a couple of hours of sending out the newsletter, the comments document was downloaded by more than 5 000 people!

This number was still climbing at the time of writing, as only 50 percent of members had opened and read the newsletter at that stage. These statistics are proof of the value that Saiosh adds to its members and the broader OHS fraternity.

Where will we be going in the next issue? We have seen developments from the Mine Health and Safety Council, which is looking to expand its OHS programmes.

Meetings have been set up with the Department of Higher Education to discuss finding different categories for skilled professionals, and the path that the Department needs to take to ensure that all those future professionals are ready when they are needed.

The Quality Council for Trades and Occupations is also looking at the new qualification for OHS

Wow! It just keeps getting better and better; as Hannibal Smith would say: "I love it when a plan comes together!" Su



Bosch's products may be "invented for life", but that doesn't mean the human species is the company's only concern

aving endangered species from extinction is an ongoing effort that requires the commitment of those directly involved with the task, as well as government, the authorities, corporates and industry.

With this in mind and an eye on our planet's future, Bosch South Africa has joined a range of eminent South African companies in sponsoring equipment for an initiative to conduct research into the snow petrel and the near-threatened emperor penguin in Antarctica.

The snow petrel is one of only three birds that breed exclusively in the Antarctic. As there is an adult population of approximately four million birds, it is classified by the International Union for Conservation of Nature (IUCN) as a "least-concern" species.

However, the picture regarding the emperor penguin is not as bright; the IUCN has recently listed it as "near threatened". A Woods Hole Oceanographic Institution study in January 2009 found that emperor penguins could be pushed to the brink of extinction by the year 2100, due to global climate change. This bird is endemic to the Antarctic region.

In November 2016, Craig Blanckenberg from Solutec, a solutions provider based in Cape Town, set sail for Antarctica onboard the SA Agulhas II. He is working alongside a team of scientists investigating the status biology and ecology of these bird species. Blanckenberg will travel to various international bases to conduct his research.

This is Blanckenberg's second trip to Antarctica, having sailed originally in 1992 on the SA Agulhas I to the South African National Antarctic Expedition (SANAE) base, while working for Sea Fisheries.

A number of companies have been supportive of Solutec's latest venture by sponsoring equipment for this vital mission.

"We are an environmentally aware and socially responsible company, and therefore this sponsorship represents an important contribution on the part of Bosch to the sustainability of the planet and its future generations," says Campbell Mhodi, senior brand manager for Bosch Professional Tools and Measuring Tools.

"As a leading provider of power tools, accessories and measuring tools, with a strong focus on innovation and ongoing product development, Bosch is proud to be associated with this unique endeavor," Mhodi comments

Apart from Bosch, sponsors include Western Digital, NSSL Global, Canon and GoPro.

"We extend our sincere gratitude to all of these companies for supporting small business in South Africa, in addition to the invaluable research being carried out on the frozen continent," Blanckenberg concludes.

The Bosch Group is a leading global supplier of technology and services. Its strategic objective is to deliver innovations for a connected life and create technology that is "invented for life", with products and services that are innovative and spark enthusiasm.

The Bosch Group's operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. Bosch employs roughly 389 000 associates worldwide and 59 000 associates in research and development at 120 locations across the globe. SM



As a representative of the internationally acclaimed personal protective equipment (PPE) manufacturer, Honeywell, at A-OSH Expo 2017, HSE Solutions set out to be the one-stop PPE shop at the event

tephen Burrow, GM at HSE Solutions, says: "As a company we have grown to the extent that we are now capable of providing clients with anything from head protection to disposable work wear. We recently looked into providing a range of five different Honeywell safety boots to a customer and we already have a container at customs ready for delivery.

"In terms of hearing protection, HSE Solutions represents what is probably the most well-known brand in the world; the Howard Leight range, which is a Honeywell product. It has disposable and re-usable products for hearing protection across various industries.

"We know that no ear canal is the same, and a 20-year-old male's ear canal won't look the same when he is 50. Therefore, we came up with a solution to enable workers to try on different sizes small, medium and large - to see which size works the best for them."

HSE Solutions and Honeywell have made 3D

designs and moulds for the Fusion, Fusion Small and SmartFit earplugs. "We can now go to workers on site and see which of the three fits best. We know the dangers of under and over protection, which is why it is important for each person to have a set of earplugs that is comfortable and does the job well," says Burrow.

HSE Solutions' selection of Honeywell head protection also offers apparel for every environment. "We've got spectacles and goggles for every job, both indoors and outdoors, which provide antiscratch or anti-fog capabilities - we have it all," notes Burrow.

"The other headgear that we are focusing on is arc-flash equipment, which has a hard hat with a visor. This is generally for people who work in arc-flash or industrial environments, as well as for those who work in the confines of a welding environment, but are not actually doing the welding themselves," explains Burrow.

In terms of welding equipment, HSE Solutions markets two brand portfolios: Optrel and Honeywell.



"The Optrel brand of welding equipment products is popular on an international scale. Optrel focuses strongly on automated darkening helmets and supplied air units. While the Honeywell welding equipment is not as advanced as that of Optrel, it covers the basics and is still very reliable," says Burrow.

HSE Solutions is looking forward to new releases from Optrel and Honeywell by the end of the year. "At the moment none of the manufacturers want to give away any of the product details," says Burrow.

The company's replication of a mining environment attracted a lot of attention on the stand. It was used to display a variety of the combinations of the PPE that work well in a mining environment. One of the products was the Fenzy Bio-S-Cape system.

This is a compressed-air emergency-escape breathing device designed to offer easy donning and optimal respiratory protection. It is contained in a bag for carrying which, when opened, automatically triggers the supply of breathable air from the cylinder. An alarm whistle indicates when





With regard to its disposable work wear range, HSE Solutions is focusing on the Mutex 2 and Mutex Light, which are made of polyethylene and polypropylene. "They are in big demand for environments with airborne dust, or splashing liquids. The fabric is water resistant with 65 grams per cm of fabric weight. This makes the range quite light, but capable of resisting tears that result from moving around in confined spaces," explains Burrow.

the air supply is about to run out. "It provides up to a 15-minute supply of oxygen to enable the worker to exit the danger zone," explains Burrow. "It is a disposable unit, but it can be serviced, repaired and replaced. It is very popular and is doing extremely well in the market."

Other than providing these top-of-the-range products, HSE Solutions offers some value-added services. "We offer training on how to keep glasses clean and how to store and clean gloves. Our more advanced training demonstrates the differences between gloves and what they can and can't do," savs Burrow.

"We have a mobile care centre for our reusable respiratory masks, where we swop out any worn or damaged components. We also sterilise and clean the equipment, which allows it to be reused several times," he adds.

"We believe most of the visitors at A-OSH are already customers, but most don't know about everything we do and offer," says Burrow. "We put a lot of effort into our stand to show the full range of our products and to demonstrate our level of competence to both new and existing customers."

Burrow concludes: "We benefit tremendously by partnering with Honeywell, as its initiatives go above and beyond the client's safety. We base our work on this and we'll continue to do so. We are there to satisfy the customer's every safety need." SM



ompared to 2016, pre-registrations for the three-day A-OSH Expo (May 30 to June 1) increased significantly. "We don't yet have the number of feet through the door, but we know that this is the most exhibitors and square metres that we have ever had," says Joshua Low, A-OSH Expo event director.

"This was also the first year that the South African Institute for Occupational Safety and Health (Saiosh) conference, which runs alongside A-OSH, was sold out two months before the show. (See page 30 for more on the Saiosh Conference.)

"With all the new occupational health and safety (OHS) regulations - ranging from ergonomics and climate change to waste-management services - we felt we needed to focus more on the OHS industry this year, whereas previously we focused more on the security industry," says Low.

The event featured more than 90 exhibitors that specialise in products and services catering to the OHS industry.

Select PPE's goal at A-OSH this year was to create awareness of its new Pride range. "We will be launching our Pride range soon," says Marishka van der Schyff from Select PPE. "We started with spectacles and gloves and we are introducing safety footwear in June. Although some of these products are already available, we will launch the range with its three categories - economic, intermediate and premium - at the end of the year."

Drager is known for being involved in gas detection, but this year at A-OSH it wanted to create awareness about its data management services. "We displayed



our X-dock calibration device and management system," says Chris Vertue, marketing manager at Drager.

"Many companies no longer want to see only the number on the screen when gas is detected. They also want to collect data to prove the success of the safety systems in place, or find out whether they are inadequate," says Vertue.

Grant Lawless, sales manager at Pienaar Bros., says: "We took part in A-OSH because we need to keep reminding people that the company is an industry leader and what it can do for their businesses.

"We recently introduced the Steel Blue safety boot range from Australia. It's a good-looking boot that has received a lot of interest. We also displayed our polycotton Inyathi work wear range, which comes in two different styles."

Afrisupply's key focus at the Expo was to make people aware that it manufactures 90 percent of its spill-kit products.

"Because of the current exchange rate, we recently decided to start manufacturing our own polyethylene intermediate bulk containers (IBC) as well as fourdrum spill decks. This is more cost effective than

demonstrate that we are the only manufacturer in South Africa that has eight brands and a united sales team to give customers the correct safety boot for the right application."

Alco-Safe has been exhibiting at A-OSH since its inception. "We keep going back because it is the show that is most relevant to our products," says Rhys Evans, Alco-Safe director.

"We have a new stand-alone product, called Alcontrol, which was designed as a self-testing





breathalyser that can be mounted on a wall or fence outside the place of work. Workers can voluntarily go to the Alcontrol tester and test whether they have alcohol in their system. This product can be connected to cameras that will identify the workers who fail the test and lock them out of the workplace," says Evans.

Low concludes: "Our team has already started with the arrangements for A-OSH Expo 2018 and we already have some stands booked. We will once again be putting more focus on the OHS industry to make sure that companies and experts are up to date with new industry laws and developments." 👊

importing them. We are currently the only company in the country manufacturing these products locally," says Salika Singh, sales and marketing consultant at Afrisupply.

The A-OSH Expo provided the opportunity for BBF Safety group to reinforce the fact that it is the largest safety boot manufacturer in South Africa. Ndlela Mazibuko, BBF Safety group sales manager at BBF says: "We also wanted to create awareness that our sales team has been restructured to include product consultants who can advise customers on buying the right boots for the right applications."

Vanessa Ronald, senior brand manager at BBF Safety, says: "By exhibiting at A-OSH we are able to



# 123 YEARS OF **CARING FOR LIVES**

This year, Rand Mutual Assurance (RMA), a new exhibitor at the A-OSH Expo, celebrated its 123rd birthday at the event

omfundo Mcilongo, GM for sales and marketing at RMA, says: "I visited A-OSH last year and knew then and there that RMA had to be there in 2017. As workplace injury compensators, we need to meet with SHEQ managers to hear what kind of initiatives they have in place to prevent workplace injuries."

Mcilongo adds: "A-OSH provides an opportunity to get information from clients, as in this environment people talk about their challenges and needs. These are the 'golden nuggets' that help us to develop our

RMA staff member, Bereng Letsie (far right), with A-OSH delegates at the RMA stand.

products and services to suit the needs of our clients.

"We were very happy to see so many of our existing clients who came to visit us at our stand and tell us how they are doing, and what new developments or plans are in the pipeline for SHEQ management in their companies. We also had government officials visit us to discuss possible future projects, and we saw a lot of new faces."

The company introduced a few new products, which are extensions of its core product -Compensation for Occupational Injuries and Diseases (COID), under the national COID Act of 1993.

"We have noticed that there are a few gaps in the COID coverage, and we have created new products to fill those gaps," explains Mcilongo.

"For example, in Germany you are covered from the moment you leave for work until you get back home. In South Africa you are only covered while you are at work. At RMA we have now included the option of additional cover for the journey to and from work."

Another new RMA product provides coverage for injuries sustained as a result of violent strikes, protests or riots. "During these events, sometimes people, who are not part of the strikes, or protests, get injured," explains Mcilongo.

"If you are on your way to work and you have to pass an area where a protest is taking place, someone could break your vehicle's window and you could get injured by a shard of glass. In circumstances like these, RMA will cover your injuries."

In terms of COID, RMA used to cover those workers employed outside the country for up to 12 months, but it recently extended this policy to provide complete income replacement, permanent disability and life cover for the full duration of the project outside South Africa.

"We are also currently exploring collaborations with companies to put injury-prevention systems in place. Although our products provide compensation to workers when the prevention systems fail, it is, however, the safety of the workers that is of primary importance," says Mcilongo.

"That's why we have a discount reward system whereby a company's premium is lowered if over the years it can prove that its prevention systems work, or if it can show that it focuses on the safety training of workers by providing study material in the workers' language of choice."

With COID, RMA has different types of cover for different worker categories, such as mining and metal workers, but it also provides value-added services. "We provide safety training for our clients and we educate them about their benefits, which are carried over to their spouses and children if they were to pass on," says Mcilongo.

"We are not only in the business of compensation, but also in the business of compassion and care. We want to be there for our clients and their families when they are affected by an injury. We have been there for them over the last 123 years, and we will continue to be there in the years to come," she concludes. SM



# **FALL PROTECTION:**

## ONE SIZE DOESN'T FIT ALL...

When you think of falling, you think "pain". However, in some industries, a fall can result in a whole new level of pain and injury, and can even result in death

o two falls are the same, which is why 3M looks at the "Science of Safety" and not just overall fall safety.

This was a key theme at the company's stand at A-OSH 2017.

"We went for an interactive approach to showcase a total solution to the market, rather than a product offering. The Science of Safety is about promoting long-term behavioural change," says Shivani Pillay, marketing manager, 3M Personal Safety Division.

"At 3M the Science of Safety gives customers options to select the most suitable product for the specific purpose. Utilising the company's industryleading breadth and depth in personal protective equipment (PPE) also helps to optimise protection and fit. The idea this year for the exhibition was to embrace the three pillars of 3M Science of Safety, which are selection, training and fit validation," Pillay adds.

Scientific solutions are based on scientific facts about various dangers, and the science of falling has been studied over many years to determine actual impacts of various weights falling from different heights, as well as the ability of the available fallprevention equipment to reduce impact.

As new processes are set up in construction, mining and other industries that present different risks of falling, 3M continues its research and development into new materials that offer better shock absorption, portability of connection devices for harnesses, and fast and effective fall rescue

Weight is a huge factor determining the extent of injuries. It therefore makes sense that the less weight a worker is carrying, the fewer injuries he or she may

incur when falling, or breaking the fall.

Today, full body harnesses are exceptionally light and redistribute the body's weight across the whole body from the shoulder area all the way to the hips and legs, immediately reducing the prospect of shoulder and neck injuries.

"Ergonomics is taken into consideration when designing harnesses. At A-OSH the availability of virtual reality assisted visitors to understand the impact of a fall without the correct equipment, as well as effectiveness of fall-protection equipment when working at height," says Anderson Cilliers, market segment leader, 3M Fall Protection...

3M products conform to numerous international standards, including the National Institute for Occupational Safety and Health (NIOSH), the South African Bureau of Standards (SABS) and global health and safety standards.

Because 3M's worker and health safety strategy is designed to help workers return home safely and lead healthier lives, the company conducts proper training with every customer that requires it. It also ensures that the products purchased for fall safety are fit for purpose, regardless of the industry in which they will be used.

"When it comes to safety at heights, we go to great lengths to ensure the product is one that has been researched and tested for maximum efficiency. The Science of Safety utilised by 3M can support customers in the selection, training and validation of their PPE, which can lead to a more effective health and safety programme. Our support is flexible, which means our services can be tailor-made to an organisation's unique needs," concludes Cilliers. 🔊



Proper safety management can prevent injuries to employees while saving companies money. MARISKA MORRIS reports from the annual South African Institute for Occupation Safety and Health (Saiosh) conference

aiosh hosted health and safety professionals from across the globe at its seventh Saiosh Conference this May. The conference was held at the Gallagher Convention Centre alongside the A-OSH exhibition. Topics of discussion ranged from the cost-saving benefits of implementing safety, the importance of risk assessments, new legislation that is being introduced and the legal implications of health and safety.

While the topics were varied, the key focus of the conference was to highlight the importance of safety. This theme was introduced in the first keynote address by Aggie Moiloai, inspector general at the Department of Labour (DoL). Her address looked specifically at the revisions being made to the current Occupational Health and Safety (OHS) Act

Moiloai said the DoL was motivated to revise the Act as some of the policies were not applicable to South Africa, and to address the gap in regulations regarding technological innovations, such as robotics. Revisions to the Act are set to be presented to cabinet soon.

Moiloai noted that there is still time for amendments and input and she urged the industry to participate in the amendment of the bill, but also to ensure companies comply with health and safety regulations.

"Safety is everyone's business," Moiloai said. She noted that there is a lack of staff in the department with only 150 health and safety inspectors, which results in a lack of visibility.

A few delegates commented that some inspectors behave unprofessionally when conducting an inspection. While there are guidelines for the behaviour of inspectors, Moiloai admitted that not all inspectors comply with them. She urged the industry to report any unprofessional conduct by inspectors.

Robin Jones, president of Saiosh and chairperson of the conference, added his voice in support of the department. "The DoL is not the enemy. It is providing the framework from which we establish our safety structures in a company," said Jones.

He did, however, urge the DoL to impose heavy fines to enforce compliance with health and safety laws. He added that, with the lack of available inspectors, it is important for organisations to selfregulate safety, which can save costs.

Thelma Pugh, former managing director at Federated Employers Mutual Assurance Company

(FEM), emphasised the cost-saving benefits of investing in the correct health and safety procedures and equipment. Pugh presented a case study of a business that paid R1,1 million after an employee fell through the warehouse roof.

Expenses included hospital, pension and repair costs. Pugh estimated that health and safety equipment and skills training would have cost the company around R14 000. She noted that only three

percent of profits are needed to implement health and safety procedures in a company, while close to 30 percent of profits are

**OPPOSITE:** Raynard Looch, Klass Looch Associates THIS PAGE, CLOCKWISE:

Brett Solomon, CEO - The Kinetic Leadership Institute; Graham Parker, president - IOSH (UK); Waleed Hussein Jawadi, safety and environment prevention division manager -Saudi Electric Company; Khalida Suleymanove (left) and Rakesh Maharaj, ARMSA Consulting UK.

important," Pugh said.

Like many of the presenters that followed, Pugh emphasised the need for a safety culture in business, especially among managers. "Health and safety is not a sum, but a commitment. It's like getting your face tattooed. It takes serious commitment," Pugh concluded.

Along with the announcements surrounding the revision of the South African OHS Act, Christo Nel,







spent on accidents with a fivepercent increase in running costs.

The majority of expenses for companies following an accident are uninsured or hidden costs, such as a loss of productivity, or the cost of training a new skilled employee to replace the injured person. It is not sufficient to simply supply equipment and training. "Too often in the health and safety industry, individuals don't take care of their own lives, which is why supervision is so





general manager of safety at the Dubai offices of Uvex, explained the new international standards for hand protection, which came into effect last vear.

Other speakers included SHEQ MANAGEMENT contributor Brett Solomon, who introduced a new approach to safety management, and attorney Raynard Looch, who spoke about the various ways companies can be prosecuted under the OHS Act.

"Companies are required to disprove some probabilities under the OHS Act," Looch said. "While the companies are not considered guilty,

"We want to make you better. We want to help your employees," Parker commented. This is exactly the opportunity the 2017 Saiosh Conference offered its delegates.

#### **HONOURING YOUNG AND OLD**

Saiosh also held its 2017 annual dinner and awards ceremony at the Gallagher Convention Centre, following the conference.

This prestigious function was attend by top industry professionals, conference delegates as well as representatives of the various Saoish conference

> sponsors - which included FEM, Dromex, Uvex and the SHE Group.



#### **CLOCKWISE:**

Person of the Year Moses Pudikabekwa (left), and former Saiosh president Robin Jones: Student of the Year, Tatho Mamabolo, and Robin Jones; Thema Pugh and Robin Jones; Saiosh CEO, Neels Nortie, and Robin Jones; new Saiosh president Sanjay Munnoo.



they need to provide sufficient evidence that they were not negligent with health and safety regulations."

Graham Parker, president of International Occupation Safety and Health (losh), in the United Kingdom, highlighted the importance of making safety a priority and the role played by losh.

"We have ongoing discussions with the Institute of Directors to make them understand the importance of having a safety professional within the senior management team of their organisations," Parker said.

"Safety professionals are not only able to assist with protecting employees, but could also save the company money. Some of the top experts in the industry are losh members and offer their expertise to businesses to assist in improving safety management," he added.

Tatho Mamabolo was named the Student of the Year, while Moses Pudikabekwa received the Person of the Year award. Thelma Pugh was presented with the Saoish Wall of Fame award. At the function, Saiosh also inaugurated its new president, Sanjay Munnoo

Outgoing Saiosh president Robin Jones gave a moving retirement speech and reflected on his more than 40 years in the field of occupational health and safety. Although it was a formal function, it had a festive atmosphere and attendees enjoyed a three-course meal and live entertainment by the duo group Bad Penny.

The Saiosh team dedicates this story to the memory of Robin Jones, who passed away at the time this issue was going to print. The staff at SHEQ MANAGEMENT wish his family, friends and colleagues strength in this difficult time – ed. 🐿

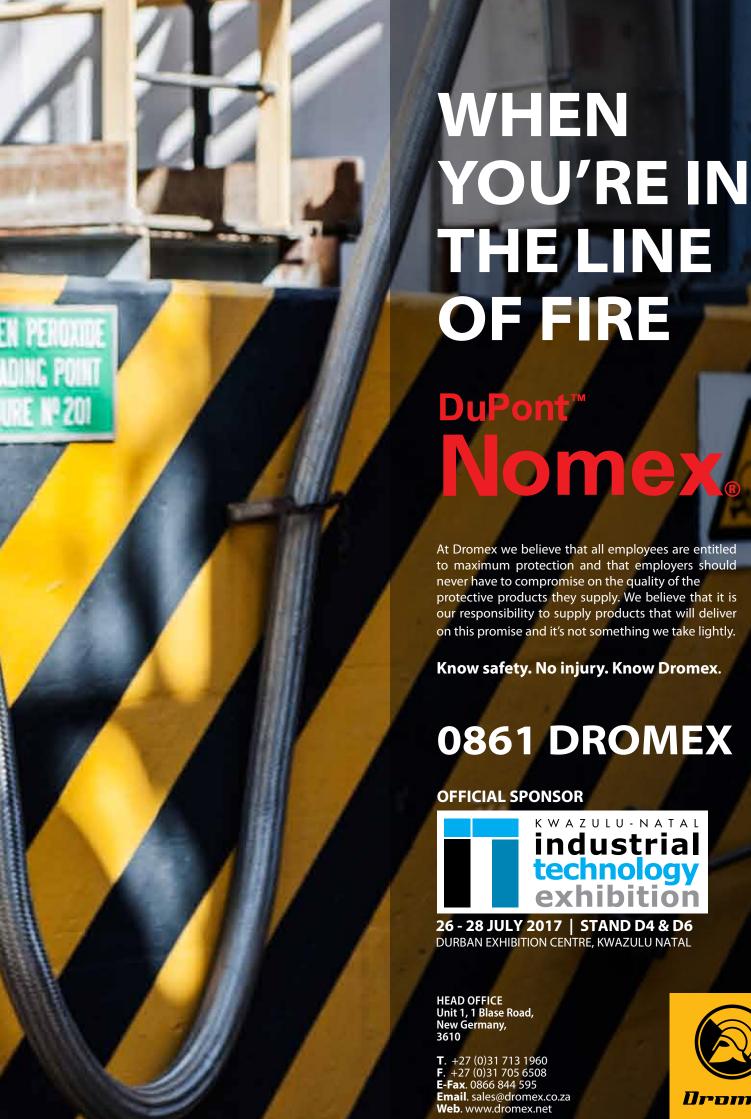


# www.saiosh.co.za



Saiosh is recognised by the South African Qualifications Authority (SAQA) as the Professional Body to register Occupational Health and Safety Professionals in South Africa in terms of the NQF Act, Act 67 of 2008.









It is important for both big and small businesses to be prepared for a fire with a proper escape route, training and alarm systems. MARISKA MORRIS investigates

n April, a fire broke out in Braampark Office Park. in Braamfontein, Johannesburg. While no one was injured, ASP Fire CEO Michael van Niekerk says this fire is an example of the inability of companies and employees to prepare for and deal with fires effectively.

One of the first challenges companies face is acquiring the right equipment. According to ASP Fire – a fire-risk assessment company – equipping a building with fire extinguishers and fire-hose reels is the cheapest and most effective way to address the risk of a fire.

Every building in South Africa larger than 250 m² is required to have at least one fire-hose reel per 500 m² or part thereof. A fire hose is also required on every floor of a building. In addition, one 4.5-kg

dry chemical powder fire extinguisher is required per  $200 \, \text{m}^2$  or part thereof.

"Such fire-safety equipment is obviously useless if no one in the office knows how to use it, or if the location of the equipment is not clearly marked," Van Niekerk notes. It is important to ensure all staff receive regular Level One firefighting training, so that they are capable of managing a fire emergency, even in the absence of the appointed fire marshal.

Automatic fire-detection and alarm systems are essential to alerting employees of a fire. Regular emergency evacuation training also needs to be conducted to identify any possible flaws in the evacuation plan. *Eyewitness News* quoted an employee who worked in the Braampark Office Park:



EVAC+CHAIR® is the only SIMPLE, SAFE AND EFFECTIVE stairway emergency descent for the disabled, injured and mobility impaired.

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"We got stuck at the emergency door, which we couldn't open."

While no one was hurt during the incident, proper inspections and evacuation training could have drawn attention to the faulty emergency door. ASP Fire notes that safety training should ensure that everyone knows the escape route, all the emergency exits are clearly marked and emergency doors are not obstructed or blocked in any way.

According to Van Niekerk, local fire safety and emergency services bylaws state that an emergency evacuation plan needs to be drafted for every building in South Africa, and that these need to be practised at least once or twice a year. Yet, despite emergency planning, most companies still rely on good firefighting services, which can be a challenge in Africa.

Suraksha Mohun, product marketing manager at safety equipment company MSA Africa, experienced the lack of resources and infrastructure in firefighting services in Africa while in Kenya to provide training on MSA equipment.

"They do not, for example, have access to essential, let alone premium, firefighting equipment, or even compressors with which to fill SCBA systems. Apart from the obvious danger of first-degree burns, the long-term effects of smoke inhalation can result in numerous respiratory illnesses such as lung cancer," says Mohun. These firefighters often use buckets of water to extinguish fires.

MSA Africa and non-profit organisation Africa Fire Mission donated an energy-efficient Bauer compressor, which can be used to fill self-contained breathing apparatuses (SCBAs), to firefighters in Machakos Country, Kenya.

While South African fire services also struggle with the affordability of equipment, a lack of knowledge and poor infrastructure, legislation ensures that they provide better services than those found in many other African countries.

"Fortunately, South African legislation ensures compliance within the safety industry. In some other regions of Africa, there is no legislation to enforce compliance and therefore the provision of safety is taken lightly, or is not a prerequisite," says MSA Africa.

Companies should be prepared for a worstcase scenario by acquiring the right equipment, implementing an evacuation plan and providing a safe environment for staff, or they risk the same fate as Braampark Office Park. SM

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It has been proved that constant exposure to petrochemicals increases the risk of cancer and other illnesses in workers. ANLERIE DE WET investigates how companies protect their workers from the side effects of these hazardous chemicals

plethora of studies have found that petrochemical workers have a substantially increased risk of getting lung cancer, respiratory diseases and genitourinary illnesses.

Mike Zinn, marketing manager at Skyriders which specialises in industrial rope access - says the company works in close collaboration with its petrochemical customers to ensure that, in terms of health and safety and environment awareness, the highest standards are maintained at all times.

"These are particularly hazardous environments." but we have the necessary expertise and experience to deliver a world-class service that minimises downtime and boosts productivity," says Zinn.

Before being allowed out in the field with petrochemicals, all Skyriders employees complete comprehensive training programmes.

"The team receives detailed induction training for the general petrochemical environments. Once on site, the plant owners facilitate site-specific induction - depending on their operations and products," explains Zinn. "If we are applying a certain corrosionprotection product, the team is trained by the product supplier on various aspects of the product and the material safety data sheets."

The petrochemical industry represents a particularly hazardous environment in terms of potentially toxic and sometimes explosive materials. Although training is essential to keep these workers safe, there are some things that only personal protective equipment (PPE) can prevent.

Mercia Maletswa, SHEQ manager at Cargo Carriers, says the company's truck drivers, who transport petrochemicals, are given safety training in product handling and dangerous goods.

"The training includes how to handle the product, dangers relating to it and the appropriate emergency response. We also equip all drivers who work with petrochemicals with flameproof overalls, goggles, gloves and safety shoes," explains Maletswa.

Zinn notes: "Because toxic chemicals are present on many of these sites, PPE must be both flameproof and acid-resistant. It must also be clearly marked to enhance visibility, and should include complete face and head protection.

"The project and safety-management teams at Skyriders conduct a thorough risk assessment to determine the specific PPE requirements, which can differ depending on the area where the team will be working with petrochemicals."

The strict adherence to safety standards has thus



far prevented staff from Skyriders and Cargo Carriers from falling ill.

"By having the latest technology and skilled personnel available, together with the relevant certification, Skyriders has successfully tackled major projects in the petrochemical industry in South Africa," boasts Zinn.

"Skyriders has ISO 9001, OSHAS 18001:2007 and ISO 14001 certification, which is mandatory in this sector. In addition, major petrochemical players conduct their own thorough audits of safety procedures and processes at Skyriders before awarding the company any contracts," he adds.

Maletswa says: "The procedures which are utilised at Cargo Carriers ensure that drivers are not exposed to petrochemicals. The loading and offloading of petrochemicals takes place in an enclosed system.

"At the loading point, dome covers are closed and loading pipes are joined with vapour recovery pipes, which transport fumes back into the system. The customer connects the delivery hose when offloading, and if spillage occurs a specialised contractor is called."

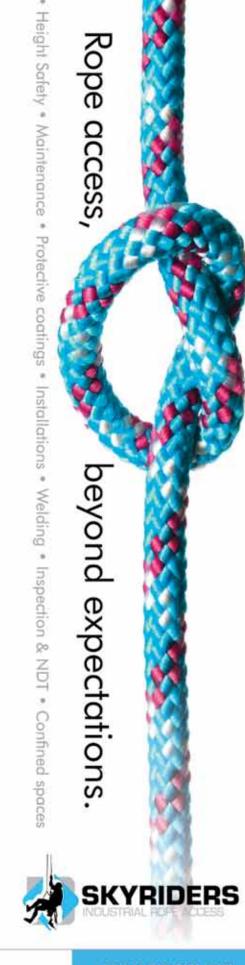
Staff at both Skyriders and Cargo Carriers are obliged to undergo annual medical examinations.

Zinn elaborates: "The teams working in the petrochemical environment have to attend comprehensive annual medical examinations. At certain plants staff are tested before the project commences and after its

He adds: "All the employees at Skyriders have complete medical aid, which is paid for in full by the company."

Maletswa concludes: "Although the medical tests don't include testing for cancer, the examinations will detect some of the symptoms related to it."

Medical cases related to petrochemical exposure have decreased significantly over the decades, which is probably as a result of increased awareness of the dangers of exposure. Su



















merican research organisation Rand Corporation published a research brief in April entitled: Why Sleep Matters. In the brief, it noted that the United Kingdom loses up to 1,56 percent of its gross domestic product (GDP), or US\$ 50 billion (R657 trillion), due to fatigue among workers. Canada loses up to 1,35 percent, while Japan suffers a 2,92 percent decline in GDP.

"These figures could be drastically reduced by making small changes to how long individuals sleep. For example, if the working-age population went from up to six hours, to between six and seven hours of sleep per night, each nation could save over half of the economic losses caused by fatigue," Rand Corporation says.

Fatigue caused by sleep deprivation results in absenteeism or a lack of productivity. According to Rand Corporation, on average, employees who sleep

for less than six hours a night are approximately 2.4 percent less productive.

#### WHAT CAUSES SLEEP DEPRIVATION AND FATIGUE

The causes of fatigue include long working hours and laborious tasks. Mental health problems among workers can, on average, lead to 17 minutes of sleep loss, while being overweight or obese can mean two to seven minutes of lost sleep. A lack of exercise, smoking and musculoskeletal conditions also cause sleeplessness.

Sleep deprivation becomes a vicious cycle. It can cause weight gain, hypertension, diabetes and depression, notes American risk management company Fatigue Science. Fatigue also reduces concentration by 23 percent and memory function by 18 percent. Tasks become nine percent more difficult and a worker's ability to cope with stress decreases.

The commute to work also greatly affects sleep. On average, employees, who travel 60 minutes or more to work, sleep for 16 minutes less than their peers. Unrealistic time and work pressures can cause up to eight minutes of sleep loss.

Factory workers are some of the most vulnerable as they spend long hours standing and performing repetitive tasks, which can cause musculoskeletal disorders (MSDs) - specifically those related to the lower limbs. These disorders affect the muscles, tendons, ligaments, nerves and other soft tissue. Although these diseases initially manifest as mild discomfort, this can quickly become acute pain.

Prolonged periods of standing can damage joints, lead to swollen legs, foot disorders (such as Achilles tendonitis) back, hip and neck pain and can slowly diminish elasticity in soft tissue.

#### **HOW TO ADDRESS FATIGUE**

Anti-fatigue matting can assist in preventing fatigue among factory workers and limit the possibility of injury. The cushioned surface of the matting encourages foot movement, which assists with blood circulation and reduces the chances of MSDs. The mat allows the body to mimic the movement of walking despite being in a static position.

Coba Matco undertook market research in 2015, which found that 75 percent of companies using antifatigue mats saw an improvement in the well-being of staff, 54 percent found the mats helped to reduce pain, while 44 percent felt the mats had increased productivity.

"Some 23 percent of companies confirmed that absenteeism had been reduced as a result of antifatigue floor mats," Coba says. The company notes that MSDs are a global concern.

"In South Africa, research suggests that MSDs account for 40 percent of all chronic conditions and 54 percent of all long-term disabilities," Coba notes. The company has a range of anti-fatigue mats that can benefit companies and their employees.

Other preventative measures to address sleep deprivation, according to the Rand Corporation's brief, include encouraging employees to adopt healthier sleep-related habits through specific programmes or reward systems, brighter office spaces and nap rooms or nap pods, which allow employees to nap when they become fatigued. This, in turn, promotes productivity and helps improve profit margins. So, to have employees sleeping at work is actually beneficial to the company. SM

#### How to Improve Floor Safety in the Workplace





#### Taking slips seriously

Across South Africa, slips in the workplace are a real concern. It's not just sprains and bruises. Slips all too frequently result in bone fractures, and in the most extreme cases, fatalities. Slipping is especially dangerous if the individual falls onto a sharp or moving object, or comes into contact with hot surfaces, or chemicals.



#### What are the causes?

Contaminants on floor surfaces are very often the culprit. This can be water, ice, oil, grease, chemical spillage, etc. It is not just spilt liquids that make floor surfaces dangerous. Swarf, powders and other dry debris can act like marbles on a floor surface. Uneven and poorly maintained floor surfaces can also cause both slips and trips.



#### What can be done?

Floor safety should be evaluated frequently, with regular risk assessments. Carefully consider any risks. Initiating preventative measures, such as the installation of Anti-Slip tapes, Matting or Flooring can dramatically improve safety underfoot.



Chemical burns are often serious, because the chemical continues to burn for as long as it remains in contact with the body. St John South Africa explains how to manage them

urns are injuries to the skin and tissue caused by heat, radiation or chemicals. The severity of a burn is determined by the depth (degree of the burn), amount of burnt body surface (percent of body area), body area that is affected and the age and physical condition of the person.

Chemical burns are considered "critical", as they can be life threatening, or cause permanent disability or disfigurement. In critical burns, all the major systems of the body can be affected; not just the burnt tissue.

Common complications include shock, infection, breathing problems (caused by the inhalation of fumes or smoke) and swelling. Burn victims must seek immediate medical help so that the extent of the injuries can be properly assessed.

A corrosive chemical or poison will keep burning while it is present on the skin, resulting in redness, itching and blisters. The faster the chemicals can be removed from the skin, the less tissue damage there will be

#### **CHEMICAL BURNS TO THE SKIN:**

- First ensure that you wear gloves! Assess the nature of the chemical spill and the extent of the "danger zone". Get a bystander to cordon off the area and report the incident to management.
- · Remove the chemical from the body by flushing the area with large amounts of cool water. If the chemical is a dry powder, first brush off loose particles with a cloth. Do not delay flushing to remove clothing; rather do so while flushing the area.
- · Remove items that may become constricting, due to swelling or blistering - such as rings.
- Continue flushing for 15 to 20 minutes. Loosely cover the burn area with a clean, fluff-free, preferably

- sterile dressing. Make sure securing tape does not touch the burnt area. If the burn area is large, use a clean sheet or tablecloth.
- · Arrange for medical help and provide first aid for shock. If the casualty begins to feel an increased sensation of burning, flush the area again for another ten minutes.

Do not use chemical neutralisers, such as vinegar, soda or alcohol, unless advised to do so by a medical doctor.

#### **CHEMICAL BURNS TO THE EYES:**

Corrosive chemicals, whether solid or liquid, can permanently injure the eyes. Casualties normally suffer intense pain and are very sensitive to light.

- Put on protective gloves.
- · Sit or lay the casualty down. Tilt the head back and turn it slightly to the injured side. If only one eye is injured, protect the uninjured eye.
- · If the chemical is a dry powder, carefully brush it off the skin away from both eyes.
- · Flush the injured eye with cool water. Gently keep the eye open with your fingers. Flush for at least 15 minutes. Ensure the uninjured eye is not contaminated; if the casualty's own hand is being used to protect the uninjured eye, ensure that it is free of and protected against chemicals.
- · Don't waste time trying to remove contact lenses. If flushing the eyes doesn't wash the lenses out, have the casualty remove them and throw them away.
- · Cover the injured eye with a fluff-free dressing. If both eyes are injured, cover the more seriously injured eye. Cover both eyes only if the casualty is comfortable with it, as not being able to see at all adds to the stress of the incident.
- Get medical help immediately. Give ongoing casualty care until help arrives.

#### **INGESTED OR INHALED CHEMICALS/POISONS:**

All poisons may affect consciousness, breathing and circulation. Poisons that have been swallowed usually cause nausea, abdominal cramps, diarrhoea and vomiting. They can discolour the lips, cause burns in or around the mouth, or leave an odour on the breath

- If you suspect the casualty has swallowed a poisonous substance, contact the Poison Information Centre (PIC) on 0861 555 777.
- Do not give fluids (dilute a poison) unless told to do so by the PIC.
- If the casualty is conscious, wipe any poisonous or corrosive residue from their mouth and face and rinse out the mouth.
- Never induce vomiting except on the advice of the PIC, as this may cause more damage.

Poisons that have been inhaled may cause problems with breathing. Symptoms include coughing, chest pain and difficulty breathing. Prolonged exposure to natural gas or carbon monoxide can cause headache, dizziness, unconsciousness, stopped breathing and cardiac arrest.

- Assess the possible presence of a poisonous gas or vapour. Ensure your own safety – it may be best to wait for professional rescuers.
- Inhaled poisons should be cleared from the lungs as

- quickly as possible by moving the person away from the source to fresh air.
- If the casualty is unresponsive, call for medical help immediately. If breathing is not present, begin cardiopulmonary resuscitation (CPR), starting with chest compressions, ensuring an open airway and rescue breaths, or compressive-airway breathing (C-A-B). Use a face mask or shield with a one-way valve
- If the casualty vomits, keep the airway open by clearing out the mouth and putting them into the recovery position.
- If the casualty goes into convulsions, prevent them from getting injured.
- · Get medical help.

If you work with chemicals, make sure you use the correct personal protective equipment, are aware of safety procedures and know the specific first aid for the chemicals used in your workplace. The material safety data sheet (MSDS) for each chemical contains this information.

The Workplace Hazardous Materials Information System (WHMIS) is used to identify hazardous materials in the workplace and to help employees protect themselves against these real dangers. WHMIS includes labelling products with supplier labels and workplace labels.

#### Workplace accidents happen - First Aid will make the difference

Workplace accidents will happen. When your employees complete a comprehensive **St John First Aid** course they will be able to:

- recognise when first aid is needed
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Saving Lives – at Work, Home and Play



ot too long ago this article would have revolved around whether women should be allowed to work at all. Society has, however, come a long way in recent years, and today it's not unusual to see women succeeding in every industry. There is, however, still a lot of work to be done before all is equal in the workplace. Thankfully, there are better structures in place to enable this process.

Nandisile Thoko Mpumlwana, deputy chairperson of the Commission for Gender Equality (CGE), understands the obstacles and frustrations that so many women face in the workplace on a daily basis.

Mpumlwana holds degrees in education from the University of South Africa and the University of Natal, Pietermaritzburg. She was also awarded a Master's degree in the fields of curriculum development and teacher education by Michigan State University in the

She has dedicated her life to teaching and the

promotion of education and has a keen sense of social justice. She is also a shining example of what can be

"One of the first things I like to remind people of is to never take for granted how far we have come and how much we have already achieved. Whenever I feel a bit frustrated or demotivated, and feel as though we're not getting anywhere, I look at the incredible progress we've made in South Africa. That's what keeps me going," she says.

A key point Mpumlwana makes is that the South African Constitution supports justice and equality for all, and the CGE focuses on all types of discrimination, not only that relating specifically to women.

"For many years, and with good reason, the focus at the CGE was mainly on women, but these days we also provide support for the lesbian, gay, bisexual and transgender (LGBT) community. Our evolving society demands true equality for all, and that is very inspiring."

Mpumlwana has the following advice: "The first



thing we should all do as women is to support each other. That doesn't mean women who are not qualified for a specific job should be promoted; it means women should help and teach one another. Lift as you climb - don't break each other down."

Mpumlwana says that there are so many opportunities going to waste. "There are numerous preferential procurement programmes in various industries, but many women aren't aware of them, or are too shy to make use of them. There are also tenders that are put aside specifically for women. Talk openly about quotas and stop feeling shy or embarrassed to bring it up in the workplace," she advises.

#### **INEQUALITY HIDES IN THE DETAIL**

While South Africa has made impressive progress in addressing gender inequality in the workplace, there's no denying that there's still a huge gap. There are many reasons why qualified women are still being sidelined. One of the most frustrating is that often the basic tools to get the job done simply aren't designed with female workers in mind.

Dr Spo Kgalamono, occupational medicine specialist at the National Institute for Occupational Health (NHLS), explains that most workplaces are still set up to accommodate only male workers.

"It's all in the detail. We work in a world where everything from the standard office chair to earthmoving equipment is designed for use by the 'average male'. So, even if a woman passes all qualifications with flying colours, she still may not be able to do the job as well as her male colleagues simply because her work environment makes it impossible for her to do so," she says.

It's a biological fact that men are generally bigger and stronger than women, but, in today's world of advanced machinery, very few job roles require a person to spend all day physically handling heavy objects. Most industries make use of constantly evolving technology and equipment to make these tough jobs easier.

"The problem is that women are not taken into account in the design of such equipment, so in the end it doesn't necessarily make the job easier for them at all. In fact, it can hinder and endanger them. It is, however, a really easy problem to solve if all players are committed to designing and providing equipment that can be operated by both genders," says Kgalamono.

While she agrees that nobody expects this to happen overnight, she says it is frustrating how little progress has been made in this area.

One of the most common and glaring examples of inequality is in the area of personal protective equipment (PPE). According to Kgalamono, research conducted by the National Health Laboratory Service (NHLS) showed that only nine percent of women employed in the energy sector have PPE that is specifically designed for women.

In this case, the problem doesn't necessarily rest with the availability of PPE designed for women - it seems to be that many employers either aren't aware that these options are available, or they subscribe to the "one-size-fits-all" philosophy.

So, yes, gender inequality is still present in the South African economy and it's going to take a lot of hard work to get it eradicated completely. The good news is that small changes can make a big difference. For example, employers who ensure that their female staff are supplied with the correct equipment are likely to see a big improvement in productivity.

This is also a perfect time for industrious women to play a key role in the future of the South African workforce. Kgalamono encourages all women who face challenges of discrimination in their workplace to become a part of the solution.

"We need more women involved in the planning and design of work environments and equipment. We need to speak up, get creative, and start coming up with solutions that work for us," she concludes. SW



he rail sector has a need for skills development. Maphefo Anno-Frempong, CEO of Transport at the Transport Education Training Authority (TETA), believes there are several possible solutions.

The rail industry is an interesting environment, comprising only a few companies that are headed by large players such as the Passenger Rail Agency of South Africa (Prasa) and Transnet. The sector is currently suffering from a dire lack of funding. While the rail levies currently bring in roughly R200 million, this is not nearly sufficient to cover the needs of the industry.

"If a skills development organisation approached the TETA with a training proposal requiring funding of R100 million, it would unfortunately have to be rejected due to a clear lack of funds," says Anno-Frempong.

"The skills gap has arisen because of a lack of funding, and a damaging perception in South Africa that education and skills training are 'soft' expenses, which can be cut in order to save costs. The TETA cannot close the skills gap on its own, and requires all role players in the industry to help," she adds.

"Companies in the rail industry are only paying one percent of turnover to the Skills Development Levy (SDL), whereas other sectors, such as aerospace, road passenger transport and road freight, pay anywhere from ten to 30 percent."

"Over the years, the TETA has supported many skills-development programmes, and has built up an extensive list of beneficiaries that it has supported. These include skills programmes, internships, workplace experience programmes, bursaries for adult education as well as training and bridging courses.

"To decide which programmes receive priority, a process is followed to ensure those sectors most in need receive funding. The skills-development programmes that apply to the rail industry are prioritised," she explains.

There are several challenges facing the industry as it is constantly undergoing changes and conducts its business in a dynamic environment. Local organisations are facing competition and are cutting

costs - a common trend among all sectors. In other parts of the world, however, training is held in the highest regard and is never the target of budget cuts.

"There is a distinct need for skilled labour, but, at the same time, expenditure on the training of these employees is being cut to save costs. This is an unsustainable situation, as the need for the skills outstrips the support being provided to the training programmes that supply these skills.

"Companies often train in house and use employees as trainers to save costs, or get international trainers, which are very expensive. The fields of science, technology, engineering and mathematics (STEM) are vital, but those graduates are very quickly snatched up by other industries," Anno-Frempong says.

This is where the assistance of Skills Education Training Authorities (Setas) is required to help students improve skills and get involved in the sector.

"There is a skills mismatch in the transport sector between the skills required and the skills available. In terms of tertiary education, there is a concerning scarcity of rail-specific degrees. In general there are far fewer general transport-related degrees than other degrees in the STEM fields," notes Anno-Frempong.

In addition, graduates are often not work ready, despite having academic qualifications. Many companies volunteer to give practical training to graduates, but are faced with unrealistic expectations about prospective salaries.

Another issue is that employers often look within their organisations for new recruits, making it difficult for new entrants to get a job in the industry.

"The TETA cannot solve the problem on its own, neither can the Setas, but, working together with employers, private colleges, technikons and universities, a solution can be reached," says Anno-Frempong.

Although there is no clear-cut remedy for the problem, the TETA suggests that the Setas work with other education institutions to create relevant qualifications, that a pathway from school to university to employment is created, and that those providing education and skills programmes and businesses work together to avoid unnecessary duplication.

Corruption is the number one risk to South Africa, with unemployment in second place, according to the Institute of Risk Management of South Africa's (IRMSA's) Risk Report. MARISKA MORRIS learns more

orruption and unemployment are the top risks for the country, according to the third edition of IRMSA's Risk Report. Terry Booysen, co-founder and executive director at the Corporate Governance Framework (CGF) Research Institute, notes in the report that a significant portion of the annual procurement budget is lost to corruption.

"While it is very difficult to accurately state how much corruption has cost South Africa, experts seem to think it could be as much as 20 percent of the annual procurement budget, which tallies to approximately R25 billion a year," he says. This, in turn, affects the government's ability to deliver services and provide new employment opportunities.

Unemployment in South Africa is at approximately 27 percent. The United States Central Intelligence Agency (CIA) ranks South Africa 27th among countries with the highest unemployment rate. The country outranks Lesotho (28 percent), Swaziland (40 percent) and Zimbabwe (95 percent). Among employed South Africans, 47 percent earn below the proposed minimum wage of R3 500.

"Companies need to instil awareness in the business community of the need to reform and accelerate skills training," says James Hall, consultant at In On Africa (IOA). He proposes that the private sector can contribute in terms of skills training programmes and learnerships.

Kris Dobie, manager of organisational ethics at Ethics Institute, notes: "Corruption can also cause political instability and weak government institutions, which translates to lack of clear policy direction and weak implementation of policies."

PricewaterhouseCoopers (PwC) published a report on economic crimes titled: Global Economic Crime Survey. Half its South African respondents believed they were likely to experience bribery and corruption in the next two years, with 15 percent stating they have been asked to pay a bribe. This report notes that South Africa is the country with the highest reported economic crime.

The most common forms of economic crime in South Africa are asset misappropriation (68 percent), procurement fraud (41 percent) and bribery and corruption (37 percent).

Procurement fraud occurs most often during the bidding and payment process. The most common fraud found in the area of human resources is the submission of false qualifications (68 percent).

Dobie suggests that, in the private sector, collective action is needed to address corruption. "Industry partners should join forces against corruption and promote ethical standards," he says.

The IRMSA suggests that companies remain versatile so they can easily adapt to the challenges of predicting and managing risks such as corruption.

"Flexibility is a key requirement for South Africa – and for organisations operating within its borders – to remain resilient and thrive in an ever-changing context and associated risk landscape," the IRMSA notes. SM

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When the quality of a product isn't up to scratch, the marketing department has to deal with the complaints from customers, while the real fault lies with those responsible for product quality during the manufacturing process. ANLERIE DE WET finds out why it is important to have the right people in these positions

ey players in the engineering industry recently took Minister Thulas Nxesi, his Department of Public Works (DPW) and the Engineering Council of South Africa (ECSA), to court alleging that the appointment of the new ECSA council – which was appointed by Nxesi in July 2016 – was unlawful. ECSA is responsible for registering the quality standards of engineering practice and training.

The South African Institution of Civil Engineering (SAICE) is heading the legal charge on behalf of 14 engineering associations, collectively representing more than 50 000 members.

Manglin Pillay, SAICE CEO, says people without industry knowledge have been appointed as council members and that this will affect the quality of engineers and projects undertaken in the country.

"By undermining the quality of oversight of engineering practitioners in South Africa, the entire pipeline of engineering infrastructure services, manufacturing and production will be at risk," says Pillay. "This could potentially result in the health and safety of the public being placed in jeopardy."

Having the right people in positions overseeing quality is also essential in other industries. Glen Greenwood, service deputy manager at Panasonic South Africa, says it is imperative to have the right

people in positions overseeing product and service quality in every industry.

"Product and service quality lead to customer satisfaction, which, in turn, breeds customer loyalty. Business is built on what a brand offers. Any negative perceptions or experiences with a product or service quality will undoubtedly adversely impact the brand," says Greenwood.

"Having the right people will build trust, reinforce quality, build brand identity, increase loyalty and ultimately increase revenue and market share."

He says Panasonic has a strong culture of providing quality products and service internationally. To ensure that Panasonic South Africa upholds these standards, employees have to meet specific criteria in terms of qualifications, experience, passion and drive.

"Instances of quality failure could have potential negative effects such as damaging trust, destroying brand identity, decreasing brand loyalty and, ultimately, decreasing the company's revenue and market share," explains Greenwood.

Many companies worldwide measure their product and service quality by using the International Organisation for Standardisation's (ISO) specifications, which provide world-class specifications for products, services and systems to ensure quality, safety and efficiency. It is, however, essential to have the right staff in place to ensure that quality expectations become a reality.

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With the possibility of another credit rating downgrade looming, economists are predicting that there could be tough economic times ahead. ANLERIE DE WET finds out if personal protective equipment (PPE) is an acceptable victim for companies' inevitable budget-cuts

company's responsibility for the safety of its employees should remain ever present. Christo Nel, director sales and marketing in Africa for Uvex, says companies shouldn't cut their PPE budget during difficult economic times, because the safety of people should never be compromised.

"Quality PPE is essential for the protection of workers, and by cutting PPE budgets companies are essentially unable to implement and maintain a proper health and safety programme that will ensure the safety of their workers," says Nel.

Ndlela Mazibuko, group sales manager at BBF Safety, says: "Quality PPE serves as a dual protection to both employees and employers alike. In the event of an accident as a result of inferior PPE, the effects on the wearer can be dire and can result in injury and loss of earning potential.

"This can directly affect their own livelihood, as well as that of their families. It can also be costly to a company in terms of legal costs and a loss of productivity."

Nel says: "It is completely unacceptable for companies to cut their PPE budget. Every economy, whether challenging or not, is built on the health and safety of its people. A balanced approach needs to be taken to manage costs, and this cannot be done

by risking the safety of the people who need to build the economy."

According to Nel, the annual costs of occupational injuries can place a serious financial burden on companies and harm the growth of developing economies. By employing the correct PPE strategy, companies can still maintain and control their budgets without risking the safety of their people.

The manufacturing of certified, quality PPE is a highly specialised and knowledge-intensive industry.

"When companies cut their PPE budget, they generally buy less expensive PPE, but this may cause additional problems. Too often this ends up having an adverse effect. PPE expenditure can rise due to increased product waste and higher cost-in-use products," Nel adds

Mazibuko believes that when budget cuts are looming, companies replace PPE less frequently



and look for cheaper products. "Unfortunately, when companies react this way they are looking only at the short-term costs. High-quality PPE costs more because the product is typically developed from superior quality components, thereby making it more durable and ultimately longer lasting," he says.

Nel notes that small businesses often resort to making their own DIY PPE, while adopting the "it won't happen to me" mindset. "This never ends well and mistakes are usually realised too late," he says.

Just like thousands of others, Mazibuko has seen the ridiculous videos and photographs on the internet of people wearing DIY PPE.

"I think the worst that I have seen are individuals wearing sunglasses while welding. However, the increase in the importance of workplace safety, including stricter legislation, has had a positive impact of these practices," says Mazibuko.

Nel strongly urges companies not to resort to this dangerous behaviour. "The manufacturing of certified, quality PPE is a highly specialised and knowledge-intensive industry. Researching, developing and manufacturing the right PPE requires years of

expertise, experience and specialised machinery," he explains.

Mazibuko adds: "Without a huge capital investment into highly technical machinery, it is unlikely that an individual could produce a product worthy of ISO certification."

Mazibuko concludes: "One of the frightening things that we witness on a daily basis is inferior footwear products. Claims made about their quality cannot be substantiated when they are tested, such as steel toe caps that fail impact tests and inferior polyurethane soles. The unfortunate thing with these types of failures is that they will only be realised in the event of an accident. We strongly recommend that companies find a trusted supplier for their PPE."

Nel agrees that the risk is real. "Occupational diseases and injuries are permanent and some of the risks are life threatening. This is not about budgets and nameless employees, but about protecting people's livelihoods and their families," he says.

These PPE experts strongly believe that good quality certified PPE, supported by a well-implemented health and safety programme is not a luxury, but an absolute necessity.

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The recycling sector accounts for only ten percent of the waste industry, yet it can help unlock resources worth R17 billion. MARISKA MORRIS finds out more

urrently, the waste industry is estimated to generate revenue of R15 billion. While municipalities are responsible for household waste, the private sector manages most of the commercial and industrial waste. Interestingly, recycling makes up only ten percent of the waste industry, which leaves ample room for growth.

In its 2017 Market Intelligence Report on the waste economy, Green Cape notes: "R17 billion worth of resources could be unlocked if 100 percent of the identified 13 waste streams could be recycled." These streams include: metal, animal waste, wood, paper, chemical and medical waste, glass, plastic and e-waste - which refers to discarded electronics.

The National Waste Information Baseline estimates that around 108-million tonnes of waste was generated in South Africa during 2011 alone. An estimated 65 percent of waste can be recycled, but a lack of funding makes it difficult for government to capitalise on the benefits of recycling.

According to the report, municipalities in the Western Cape spend more than R1 billion just to meet disposal service delivery goals. A further R1 billion will be needed to implement alternative waste-treatment infrastructure in order to achieve a 20 percent diversion rate by 2019. Government therefore needs to look to the private sector for assistance.

Paper and metal recycling are the strongest sectors in the waste industry. Around 1,7-million tonnes of paper is produced, with 68 percent (or 1,2 million tonnes) diverted from landfills. Up to 80 percent of metal waste is diverted. The metal sector's success is due in part to the international demand for metal.

By law, only 30 percent of recycled metal needs to be resold to the South African market and most of the scrap metal is exported. While the government is attempting to introduce amendments to the current

legislation, which will force more of the material to stay in the local market, Green Cape believes this will not make a drastic difference.

"It is unlikely that this issue will be resolved in the short term, as there is a technology gap between South Africa and the global market, which can offer higher prices for scrap material and process it at a cheaper rate," it notes in the report.

The weakest performing sector is e-waste. Of the 322 000 t of e-waste produced, only 38 000 t, or 12 percent, is diverted.

Part of this sector's underperformance is due to the exporting of e-waste. In an interview with ITWeb. chairman of the e-Waste Association of South Africa (eWasa), Keith Anderson, notes: "Because South Africa does not have the required technology to process e-waste on a large scale, it is being exported. The other reason is the exchange rate."

South African e-waste companies earn more revenue by exporting the waste as they are paid in foreign currencies. This results in the country losing valuable resources like metal. While the sector is underperforming, it also offers opportunities for growth. According to Green Cape, there were only two large e-waste recyclers in South Africa in 2009. By 2016, there were more than 20 companies.

"This is a sector that can generate significant growth, as an eight-percent increase in e-waste diversion can result in a market potential of R22 million," Green Cape comments. To encourage recycling, government introduced the National Pricing Strategy for Waste Management (NPSWM) last year.

"The NPSWM recognises that there is currently an under-pricing of waste services," Green Cape notes. With the support of the government and legislation, it is possible that the private sector could generate billions of rand while making a huge contribution to saving the environment - one computer, bottle, piece of plastic or paper at a time. SM

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