Health and Safety

Employees underground at the Wesselton Shaft, Kimberley Underground. A focus on health and safety underpins everything we do at Petra.
Overview

» We consider the safety of all Petra people as our top priority.

» Our approach to managing safety centres on a process of continual hazard identification, risk assessment, instilling awareness into the workplace culture and enforcing adherence to control mechanisms.

» Our aim is to create a zero harm working environment and to foster an engaged, healthy and productive workforce.

Achievements

» Significant improvement in safety policies and performance.

» All underground pipe mines achieved OHSAS 18001 re-certification.

» Our Company newsletters focus on wellbeing issues relevant to our employees.

» Finsch won Best in Class MineSAFE Award for the diamond sector.

» Williamson won an award for Occupational Safety and Health in mining.

Challenges

» Breaches in safety rules and non-adherence to procedures.

» HIV/AIDS is a significant risk to our workforce as well as to the long-term health of our host communities.

» Lifestyle-related health conditions, such as diabetes and hypertension, affect employee wellbeing.

Objectives for FY 2015

» Continue to improve on our health and safety performance.

» Maintain OHSAS 18001 certification.

» Maintain compliance levels with appropriate health and safety standards, legislation, company and other requirements.

» Maintain awareness of the shared responsibility and accountability for health and safety amongst all employees, contractors and the community through communication, training and development.

» Drive continual improvement in health and safety aspects, by keeping abreast of industry trends, research and development.
Our approach

Strategy
Our safety strategy and management approach is focused on improving our ability to proactively prevent harm to our people.

We follow a risk-based approach as depicted by the Petra Diamonds HSE Risk Management Process which entails continual hazard identification, risk assessment and instilling awareness into the workplace culture. Our principal safety risks relate to trackless mobile machinery, electrical switching, supported and suspended loads, underground flooding and fall of ground.

The root cause of accidents remains breaches in safety rules and non-conformance with work procedures. The remedial process is focused on retraining, improving first line supervision and enforcement of existing controls.

Zero harm
The aim of creating a ‘zero harm’ culture is driven by a continued process of reviewing all operational tasks, identifying and responding to all associated risks and aligning existing safety principles and control standards with constant evolving operational demands.

Management and review
All our operations have structured safety management plans with clearly defined objectives and tasks, measured by means of scheduled quarterly operational reviews and internal Company compliance, assurance and performance (“CAP”) audits. These measures, categorised as leading indicators, provide a clear way for management to identify lagging indicators and thereby prioritise assistance to specific operations in need of remedial attention.

Leadership
The essence of leading from the front is the only way to change behaviour and attitude and to foster a culture where employees at all levels of operations feel empowered to engage freely on safety matters.

An ongoing aim is to ensure that management at all levels of supervision (leaders) regularly visit operations, are actively involved and play a visible role in daily activities. All our operations have therefore increased their focus on visible felt leadership (“VFL”).

The following elements are renewed focus areas, in need of further development to strengthen our leadership component:

» first line supervision;
» accountability;
» planning;
» change management;
» incident management;
» contractor management; and
» risk management.

Benchmarking and compliance
We have adopted the OHSAS 18001 international management system principles as the elements for the company HSE management framework. The underground pipe mines maintained their OHSAS 18001 certification further to an independent third party audit conducted by PwC in FY 2014. The Williamson open pit mine has not been subject to formal certification as yet, but its processes and systems are based upon such international standards and the mine maintains a very high level of safety performance.

Petra has adopted Mining Occupational Safety and Health (“MOSH”), an initiative of the South African Chamber of Mines (“CoM”) to improve health and safety standards across the industry through the identification, promotion and application of best practice. Through MOSH, we have implemented various best practice initiatives, which impacted positively on our safety performance.

What is OHSAS 18001?
OHSAS 18001 is an occupational health and safety assessment series for health and safety management systems. It is intended to help an organisation to control its occupational health and safety risks. It was developed in response to widespread demand for a recognised standard against which to be certified and assessed.

For more information visit petradiamonds.com/sustainability/health-and-safety/ohsas18001

What is MOSH?
The MOSH initiative was launched by the South African Chamber of Mines to identify leading practices in health and safety within the industry, and assist with the widespread adoption thereof. It primarily focuses on the ‘people’ issues that help to overcome resistance to adoption.

For more information visit petradiamonds.com/sustainability/health-and-safety/mosh
Performance
Petra generally performed well in comparison to international industry standards, particularly for underground operations.

Lost time injuries
The Group LTIFR improved by 52% to 0.32 in FY 2014 (FY 2013: 0.67) – for mine by mine performance, see page 61. This improvement can be attributed to targeted safety interventions; an increase of oversight in fatal risk areas of electrocution, trackless mobile machinery, supported and suspended loads; and the placing of the more labour-intensive Star and Sedibeng operations on care and maintenance.

Further to the success of FY 2013’s campaign to combat ‘Festive season’ behaviour around the Christmas period (which can encourage negligence and a general laxity of standards), we again ran a similar festive season campaign in December 2013. This garnered excellent results, with no LTIs recorded for the holiday period.

Fatal injury
During FY 2014, we very regrettably recorded one fatality at the Cullinan mine in South Africa, following an electrocution accident at an electrical substation at surface. Any loss of life is unacceptable and our sincere condolences go out to the family, friends and colleagues of the deceased. Two other employees were seriously injured in the incident, one of whom has made a full recovery and is back at work and the second is still undergoing rehabilitation treatment and is expected back at work at the end of the 2014 calendar year. The DMR investigation into the incident concluded that there was no evidence to indicate that any of the safety regulations were contravened and that no person could be reasonably held responsible for the accident.

For each incident resulting in loss of life or severe injury, a formal internal investigation is also conducted and the lessons learnt are shared with all operations in the Group. Necessary remedial actions derived from these investigations are also implemented at all sites of the Group to mitigate the possibility of repeat incidents or accidents.

The Group FIFR for FY 2014 was 0.01 (FY 2013: 0.00).

Medical care
South Africa
As part of Petra’s standard conditions of employment, all full-time, permanent South African employees need to belong to a recognised and approved medical aid fund, with the Company making a contribution towards monthly premiums. Although two preferred funds have been selected for employees to belong to, and favourable service and rates established with them, employees are allowed to belong to any recognised fund of their choice. This condition of employment aims to ensure that employees and their families are provided for medically in terms of primary health care, chronic conditions and trauma.

According to South African legislation, contract employees are also regarded as Company employees for the purposes of occupational health and safety. As it is not practical to expect these employees to conform to the standard Petra conditions of employment, they are referred to state medical facilities for care.

The provision of in-house medical services was in the past more or less standard practice within the South African mining industry. The more recent approach, which Petra has adopted, is to make use of outsourced private medical services, including occupational health service providers, to which Finsch was the exception. This approach is aimed at both supporting local medical service providers and reducing the Company’s involvement in and focus on operating non-core functions. In line with this philosophy, and in order to satisfy the regulations of the Health Professions Services Council, which prohibits payment of charges rendered by medical professional in service of a Company to accrue to the Company, the Primary Health Care Clinic at Finsch was privatised to the medical practitioners previously employed at the clinic. A process is ongoing to outsource the Finsch Occupational Health Centre to health network operator that specialises in the function of ensuring in fitness for duty.

The graph below indicates the number of medical screenings that were conducted monthly at Petra’s South African operations during FY 2014.

An area of under-reporting in previous years’ reports has been the prevalence of occupational diseases such as HIV/AIDS, tuberculosis and malaria, which was largely the result of non-reporting by external service providers on the understanding of confidentiality. In order to remedy this, standard service level agreements that include reporting of the required statistics have now been reached with all health service providers used by Petra.
Health and Safety continued

Performance continued

Medical care continued

South Africa continued

Wellness monitoring includes monitoring of certain conditions such as HIV/AIDS, hypertension and diabetes, amongst others, as part of both the medical screening programme and special drives ("Wellness Days") conducted at operations, in conjunction with partners such as Careways and the medical aid schemes to which employees belong.

The table below lists the number of employees identified with a chronic medical condition amongst Petra’s South African workforce; affected employees were part of a surveillance programme and received relevant treatment.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of employees affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>38</td>
</tr>
<tr>
<td>Hypertension</td>
<td>243</td>
</tr>
<tr>
<td>Asthma</td>
<td>6</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>4</td>
</tr>
<tr>
<td>HIV</td>
<td>2</td>
</tr>
<tr>
<td>Mental illness</td>
<td>0</td>
</tr>
<tr>
<td>Other conditions</td>
<td>177</td>
</tr>
</tbody>
</table>

Tanzania

At Williamson, subsidised primary health care is provided to employees, dependants and external communities by the Mwadui Hospital, which is owned and operated by the mine. The hospital is fully equipped for small to medium surgical procedures and includes a pharmacy, reproductive health facility, outpatient department, laboratory, X-ray and mortuary.

In addition, the hospital pilots various health programmes in conjunction with the Tanzanian Government and certain NGOs, including mother and child health, malaria prevention, VCT and ART. These services are provided free of charge to employees and their families, as well as community members. The programmes are financially supported by AGPAHI (Ariel Glaser Paediatric AIDS Healthcare Initiative), with infrastructural and services support from Williamson.

The employees at Williamson also benefit from the Social Health Insurance Benefit Scheme ("SHIB") that is part of the National Social Security Fund ("NSSF"). NSSF supports the Government’s efforts to increase access to healthcare services and provides medical support to the insured and his/her dependants. Williamson is in a fixed agreement with NSSF in terms of social securities and health benefits.

Williamson recently underwent a comprehensive occupational health screening for all employees and contractors, with a total of 612 screenings taking place.

The table below lists the number of employees identified with a chronic medical condition amongst Petra’s workforce in Tanzania:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of employees affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>13</td>
</tr>
<tr>
<td>Hypertension</td>
<td>17</td>
</tr>
<tr>
<td>Asthma</td>
<td>3</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>1</td>
</tr>
<tr>
<td>HIV</td>
<td>15</td>
</tr>
<tr>
<td>Mental illness</td>
<td>1</td>
</tr>
<tr>
<td>Other conditions</td>
<td>9</td>
</tr>
</tbody>
</table>

Employee wellbeing

The health and wellbeing of our people is imperative to the Group’s continued success. By encouraging a healthy, energised workforce, we are able to ensure higher productivity levels, thereby improving our performance. It also enables us to increase employee motivation and engagement and to cultivate an industrious workplace, whilst minimising absence. The promotion of employee wellbeing at Petra includes initiatives to increase awareness of stress, mental health issues, lifestyle-related conditions and to encourage a healthy lifestyle amongst our staff.

In addition to primary health care and occupational health services, Petra also offers employees in South Africa a comprehensive wellness care programme through the Careways Group. Careways’ services include lifestyle, psychological, financial, legal, and substance dependence counselling and assistance, and are offered anonymously and free of charge (within certain limits) to employees and their families. For more information on the services offered by Careways, please refer to www.carewaysgroup.com.

Information and advice regarding overall employee wellness, as well as the services offered by Careways, is included in a focused Company newsletter, ‘LiveSharp’, which appears monthly and is reinforced through other Company communication.

Occupational illnesses

Peta Group’s comprehensive occupational health Codes of Practice and corresponding policies cover a wide spectrum of conditions, and use leading indicators to prevent the occurrence of such illnesses, rather than focusing on lagging indicators for reactive response and reporting purposes.

Prevention of occupational illnesses is approached in terms of the overall HSEQ strategy to ensure both safe conditions and inculcate a culture of safe behaviour. Continual monitoring of employees’ health status, based on customised risk profiles, plays a key role in providing the leading indicators used.

Formal management–worker committees that provide input into occupational health and safety programmes are in place at all South African operations, while the mine’s HSE representatives at Williamson in Tanzania forward matters for consideration at the senior safety committee meetings via an internal system.

At Williamson we work in close cooperation with the Occupational Safety and Health Authority ("OSHA") that was established under Executive Agencies Act No. 30 of 1997 and is the custodian of Occupational Safety and Health Act No. 5 of 2003. The primary objective of OSHA is to ensure the creation and maintenance of ideal work environments which are free from occupational hazards that may cause injuries or illness. All workplaces are audited by OSHA on an annual basis.

Conditions related to noise-induced hearing loss ("NIHL"), respiratory illnesses, and injuries resulting from repetitive activities form the bulk of the occupational illnesses at our operations. As already stated, our approach is focused on prevention rather than cure, and is based on rigorous ongoing monitoring of individuals and workplaces, the provision of personal protective equipment ("PPE") in the case of NIHL and respiratory illnesses, and the implementation of relevant leading practices.

The number of employees who work in environments that require them to be medically surveyed on a regular basis is given in the table below:

<table>
<thead>
<tr>
<th>Environmental factor</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers and heavy machinery¹</td>
<td>635</td>
</tr>
<tr>
<td>Chemicals</td>
<td>30</td>
</tr>
<tr>
<td>Vibration</td>
<td>0</td>
</tr>
<tr>
<td>Radiation</td>
<td>14</td>
</tr>
<tr>
<td>Sewerage workers</td>
<td>31</td>
</tr>
<tr>
<td>Lead</td>
<td>10</td>
</tr>
</tbody>
</table>

¹. This environment also includes some of the other factors listed, e.g. dust and noise.
Performance continued

Occupational illnesses continued

In FY 2014, we recorded 18 new cases of occupational illnesses (FY 2013: 12), comprising one case of silicosis (further to the diagnosis of new contractors during their entrance medicals), two cases of chronic obstructive pulmonary disease (“COPD”) and three cases of occupational asthma. Of these 18 cases, seven required compensation.

Noise-induced hearing loss (“NIHL”)

With the operational environment lending itself to noisy work conditions and NIHL representing a significant portion of occupational illnesses, we are strongly focused on reducing NIHL. In FY 2014, 12 employees were diagnosed with NIHL greater than 10% shift from baseline, meaning that they may be due compensation from the Company depending on further investigation as to their cause of their condition.

Our approach to combatting NIHL consists of two parts – reducing noise in the workplace and protecting employees’ hearing against any remaining harmful noise levels.

Regarding the reduction of noise levels, elimination of noise at source is a very important element of the prevention of NIHL. For this reason, all ventilation fans are sound attenuated, with silencers placed before and after axial flow fans to ensure that noise emitted is below the maximum of 110dB(A). The majority of fans and other equipment that emit noise above this level have already been eliminated, and the aim is to eliminate any remaining non-compliant fans and other equipment as soon as practically possible.

The majority of Petra’s LHDs are fitted with environmentally friendly cabins (“envirocabs”), and the programme to replace all of the older LHDs without the envirocabs is progressing well. Whereas these envirocabs assist in filtering out noise, they also present benefits with regards to prevention of other occupational illnesses, as they are air-conditioned to ensure a more pleasant working environment, and serve to filter out dust and other airborne pollutants.

Focusing on employees most exposed to noise, we undertake regular testing of employees and contractors at risk of NIHL and investigate any shifts in which noise levels exceed set levels. In addition we have issued improved hearing PPE to affected staff and provided additional training.

In areas where the noise levels are higher than the threshold of 85dB, all employees are supplied with hearing protection, i.e. noise clippers or variphones, in order to prevent NIHL. To ensure comfort of use and increase the likelihood of usage, these are custom-made and fitted to each individual optimally.

It is recognised that employees often get exposed to noise outside of the workplace, e.g. when conducting noisy activities or hobbies such as wood- or metalwork. Ear plugs are therefore also supplied to employees when leaving the workplace to be used at home. This assists in extending awareness of hearing protection to outside of the workplace, with the aim to entrench it in daily behaviour.

Respiratory illnesses

Petra is considered a leader in its field with regards to the number of leading practices the Company has implemented in its efforts to combat respiratory illnesses.

Such leading practices include the implementation of dust extraction systems at the underground operations and the extensive use of environmentally friendly dust suppressants to improve air quality at our operations. These suppressants, alternated regularly with water, are sprayed on surface roads to eliminate the generation of dust. Similar suppressants are also being used in underground
workings to suppress dust and other airborne pollutants from being liberated into the atmosphere.

**Community**

The key community health issues that impact our operations are HIV/AIDS, tuberculosis and malaria. Although malaria is still the most common disease in Tanzania, it does not affect the operation negatively as the disease is mainly prevalent in the surrounding villages rather than at the mine itself. At Williamson the vector control programme has led to a very positive result.

**HIV/AIDS**

HIV/AIDS is a significant risk to our workforce as well as to the long-term health of our host communities. We have robust plans to manage this risk at our operations and are guided by the legal requirements in the various jurisdictions where our operations are located.

HIV voluntary counselling and testing (“VCT”) is offered to all employees by medical service providers, as well as during employee wellness drives. A total number of VCT tests conducted is not presently available, as these numbers were previously not disclosed by private service providers due to reasons of confidentiality, however, new service level agreements reached with these private service providers will place us in a position to report on these figures in FY 2015.

During FY 2014, a total of six employees were positively diagnosed with HIV across Petra’s South African operations, which may not be representative of the prevalence in the workforce due to the reasons provided above.

Initiatives to increase awareness and understanding of HIV/AIDS have continued throughout FY 2014. These included:

» campaigns at our operations to promote uptake of VCT amongst employees and dependents;

» provision of condoms; and

» educational and awareness programmes to dispel myths about the disease and fight discrimination.

Cooperation with trade unions and NGOs to improve the delivery of our HIV/AIDS treatment and prevention programmes continued at a number of operations.

**Tuberculosis**

We provide testing and counselling for tuberculosis at a number of our operations, in most cases through external service providers, due to the established link between HIV/AIDS and tuberculosis.

We recorded 38 new cases of tuberculosis at our operations during FY 2014, all of which have been cured.

**Williamson**

**Malaria**

At Williamson, malaria remains one of the key health issues and at present remains number one of the top ten most common diseases. It does not affect the mine productivity in general because the statistics account for total patient figures and therefore include the surrounding communities.

**Most common health problems**

The most common diseases are as follows:

1. Malaria
2. UTI
3. Anaemia
4. URTI
5. Pneumonia
6. Skin disease
7. Eye disease
8. Gynaecological disorder
9. HIV

These diseases are well monitored and programmes are in place in terms of monitoring and prevention. The main areas of occurrence are within the villages surrounding the mines rather than affecting our employees specifically.

Q&A with Patricia Nkuna, Chief Safety Officer at Finsch

**Have you always been interested in the field of HSE and how has your career progressed to date?**

As a child growing up near the Kruger National Park, I was always fascinated with nature and science. My interest in HSE was triggered at an early age when a woman from the Health Department visited our school to teach us about health and hygiene.

Having earned a diploma and degree in environmental health, I went on to study total quality and safety management and then worked in various HSE roles before joining Petra Diamonds in 2012, where I am the Chief Safety Officer at Finsch.

**How would you describe the importance of HSE in the mining industry and, more specifically, at Finsch?**

Having reliable and effective HSE systems in place is of paramount importance to any company but particularly in the mining industry. At Finsch, the safety team plays a vital role in designing, implementing and measuring the success of our health and safety programmes with the ultimate intention of achieving zero harm. Our main goals are to manage HSE risks proactively, to stress the importance of considering health and safety in everything we do and to reinforce the role played by all employees in effectively managing HSE in the workplace.

**What are your mission and objectives for safety at Finsch and how do you measure success?**

My mission is aligned to that of the Group – to continually improve safety throughout the organisation. My primary objectives are also in line with Petra’s guiding principles, in having a zero tolerance for any action that results in potential harm to employees and environment. My job is to enforce Petra’s health and safety policies and procedures and to ensure compliance with the relevant legislation.

In my line of work, success is measured by the absence of accidents and the commitment of all employees to take responsibility and accountability for their own health and safety.

**What part of your work do you find most rewarding/satisfying?**

We have done our job well when we have no accidents and each employee goes home to their families in the same state that they arrived at work. I also find it rewarding when safety systems that we put in place work effectively and when we all work together as a team. We all know that safety is not a one-man show; it requires the collective effort of every employee to make it work.

**What message do you have for young people who would like to pursue a career in health and safety?**

They need to have an interest and passion for health and safety and must have people skills. They then need to study towards a health and safety qualification at a university of their choice.