



## SAFETY, HEALTH AND ENVIRONMENT

DRDGOLD's policy is to comply with all relevant statutes and to strive to achieve best practice in terms of occupational health, safety and environmental management. DRDGOLD recognises the right of every worker to a safe and healthy working environment, and, acknowledging its broader responsibilities as a corporate citizen, endeavours to enter into constructive partnerships with the communities within which it operates



**SAFETY, HEALTH AND ENVIRONMENT SOUTH AFRICA**

**DRDGOLD SA SAFETY**

Regrettably, five people died in work-related incidents at DRDGOLD SA operations during the year. Falls of ground remain the principal cause, with seismic and gravity-related falls of ground each accounting for two fatalities. Seismic monitoring remains in place, and management has continued efforts to enforce support standards.

The communication of safety-related issues to employees and the development of a safety-focused mindset remain a priority. A new safety campaign, 'Before you work', has been launched at the Blyvoor and ERPM operations. The central concept of the campaign is that all workplaces must be made safe before work begins. Industrial theatre, with employees trained as actors, is being used at Blyvoor to reinforce safety-related communication, and the monthly 'hot-spot' visits by management and union representatives, involving a full safety audit of a specific workplace, have remained in place.

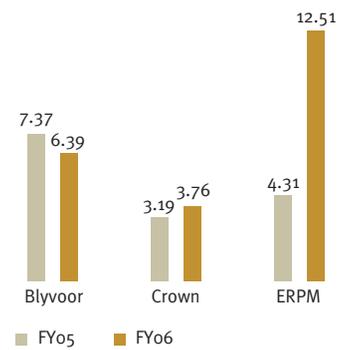
Blyvoor won the West Rand Mine Managers' Association Inter-mine Safety Competition for the eighth year in succession. The competition is based on Lost Time Injury Frequency Rates (LTIFR).

Immediately prior to the end of the last financial year, in June 2005, Blyvoor achieved 1 million fatality-free shifts. Blyvoor's No 6 Shaft recorded 1.7 million fatality-free shifts in January 2006.

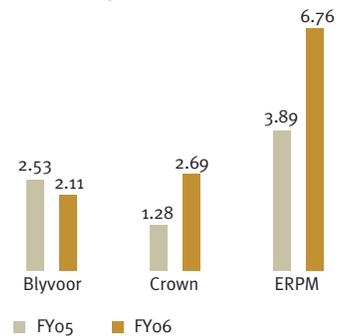
**SAFETY INDICATORS: OPERATIONS**

Blyvoor's rates show an encouraging trend, while the regression at ERPM is largely attributable to increased seismicity. Two reportable injuries took place at Crown, compared with one in 2005. Falls of ground remain the most common cause of accidents within DRDGOLD SA, accounting for 29% of reportable injuries, followed by materials handling at 23%. Joint health and safety agreements with organised labour are in place at all operations. All accidents are the subject of a comprehensive investigation leading to appropriate remedial action.

Lost Time Injury Frequency Rates



Reportable injuries (rates per million man hours)



**SAFETY INDICATORS DRDGOLD SA**

(rates are per million man-hours)	FY06	FY05
Lost-time injuries	10.81	9.55
Reportable injuries	3.81	3.44
Fatalities	0.216	0.25

## SAFETY, HEALTH AND ENVIRONMENT SOUTH AFRICA

### HEALTH

The provision of quality primary health care to all employees remains a priority, with secondary health care offered where a suitable infrastructure exists. Health care services at the three operations (including occupational health and medical surveillance) are outsourced to reputable service providers.

Lifestyle forums, comprising representation from management and organised labour, have been established at all operations. Topics selected for focus include health-related issues such as tuberculosis (TB) and HIV/AIDS.

In terms of occupational hygiene, a baseline hearing audit at all operations is planned for FY07. Detailed measures to be adopted will depend on the findings of the audit, but will include optimal use of personal protective equipment (PPE), possible use of electric drills and sound attenuation in the work environment.

### Blyvoor

At Blyvoor, health care provision has been outsourced to Healthshare Health Solutions (Healthshare) since 1 December 2005. Services offered to employees, the cost of which is subsidised by the mine, comprise primary health care through two mine clinics, and secondary and tertiary health care services through the Sir Albert Medical Centre in Randfontein.

Healthshare also manages Blyvoor's complete occupational health programme. This comprises the medical surveillance programme of initial, periodical and exit medical examinations, heat tolerance screening, the provision of therapy for TB, the keeping of statutory records and the submission

### Blyvoor: occupational health indicators for January – June 2006

Noise induced hearing loss (NIHL)	Diagnostic audiograms performed*	24
	Submissions for possible compensation*	9
	Number of cases compensated*	8
Tuberculosis	Monthly prevalence rate per 100,000 employees	1,694.33
Occupational Lung Disease (OLD)	Number of cases submitted to MBOD*	12

\*Denotes average per month

Note: record for previous year not available

### ERPM: occupational health indicators

		FY06	2002-06
Noise induced hearing loss (NIHL)	Diagnostic audiograms performed	44	
	Submissions for possible compensation	44	
	Number of cases compensated	21	
Tuberculosis	Number of new cases	13	318
Occupational Lung Disease (OLD)	Number of cases submitted to MBOD	9	84

of compensation claims to the Medical Bureau for Occupational Diseases.

The issue of HIV/AIDS at Blyvoor is managed through a combination of external and internal resources. Two week-long awareness campaigns, facilitated by Khomanani (a government-funded agency operating in the HIV/AIDS field) have been held on the mine, the first in October 2005 and the second in March 2006.

Voluntary counselling and testing is provided by Healthshare through the two on-mine clinics, which also provide ongoing counselling and appropriate medication to counter opportunistic infections for employees and

community members diagnosed as HIV-positive. The average monthly number of wellness clinic attendees during the second half of the financial year increased by 47% compared with the previous year.

The primary health clinic also administers the referral, where medically indicated, for anti-retroviral treatment (ART). Currently, 120 Blyvoor employees are receiving ART.

### Crown

All employees at Crown are covered by a medical aid scheme. An occupational health clinic, staffed by a full-time occupational health practitioner and part-time doctor, deals with medical surveillance, NIHL and TB. Medical



surveillance examinations in 2006 numbered 1 188 (2005: 924). Five cases of compensable NIHL were diagnosed during the year, the same number as in the previous year. Three positive cases of TB were identified, one more than in 2005. Dust monitoring measures remain in place, and no high dust counts were received during the year.

**ERPM**

Health care at ERPM is outsourced to Life Healthcare. Primary health care is provided through an on-mine clinic. The occupational health clinic, staffed by a doctor and four nursing sisters, has recently been relocated to the shaft area to provide employees with immediate access before or after work. The scope of work of the clinic has recently been expanded to include an HIV/AIDS wellness programme.

Codes of Practice regulating the management of thermal stress, noise and airborne pollutants have been completed at all three operations, and all required reports will be submitted to the relevant authorities. External consultants have been retained on all operations to advise on prevalent airborne pollutant levels, and have reported levels not exceeding 0.1 milligrams per cubic metre (mg/m<sup>3</sup>), which is well within industry norms.

**ENVIRONMENT**

During the year under review, the company has continued a number of initiatives, launched last year, designed to instil a degree of conformity in environmental management within the operations of DRDGOLD SA.

The Regional Environmental Co-ordination Committee, established in 2005 and comprising a representative from each operation, conducts a monthly audit of the environmental management standing of each operation.

The Environmental Management Programmes at the three operations will be updated by December 2006 to incorporate amendments made to the requirements of the Minerals and Petroleum Resources Development Act of 2002 (MPRDA).

The major environmental challenges facing the South African operations remain dust and water.

**Dust**

A dust monitoring programme, led by Annegarn Environmental Research, has been undertaken at all operations, to monitor dust levels against standards and alert operations to take remedial action.

Vegetation programmes for the rehabilitation of dormant tailings dams are in place.

	Side slope planted – hectares	Top surface vegetation
Blyvoor	2.7	5 hectares ploughed
Crown	11.5	
ERPM		13 hectares top surface vegetation. Top of 4 dam ridge ploughed for dust control
DRD Mine (discontinued operation)		41 hectares of top surface vegetation

Rehabilitation trust funds: R	FY06	FY05
Blyvoor	19 999 908	16 638 047
Crown	6 971 959	6 364 549
ERPM	5 303 273	1 573 680
West Wits*	13 003 804	12 158 975
DRD*	15 105 045	14 087 986
Total	60 383 989	50 823 237

\*Discontinued operations



## SAFETY, HEALTH AND ENVIRONMENT SOUTH AFRICA

### **Water**

Water quality and discharge volumes are monitored and quarterly reports are submitted to the Department of Water Affairs and Forestry (DWAF).

At Blyvoor, major storms early in 2006, with rainfall reaching levels not seen for a century, resulted in slime spillages. Steps to prevent further spillages have been put in place.

Water management audits are conducted in compliance with regulations, and desilting of return water dams to separate clean and dirty water has continued.

At all operations, consultative forums with local communities are in place to deal with matters of concern regarding dust and water pollution. At Blyvoor, a Wonderfontein Action Committee has been formed with representation from local communities, relevant government departments and a number of local mines to rehabilitate the Wonderfontein Spruit, following the publication of a report by the Water Research Commission identifying potential radiation pollution.

### **REHABILITATION**

The National Nuclear Regulator has approved the demolition procedure for Blyvoor's uranium plant, and work is scheduled to begin shortly.

The demolition and rehabilitation of the old Blyvoor No 1 Hostel is under way, and the rubble is being used to fill the old No 1 Shaft. Two large sink holes have also been filled with building rubble and rehabilitated.



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DRDGOLD, in compliance with the provisions of the MPRDA, makes annual contributions to environmental trust funds to cover closure and rehabilitation costs. The total funding level has risen by nearly 19% in the year under review.

Concurrent rehabilitation is now under way at all operations. This has significant associated benefits: the final liability is reduced, and the associated cost is often less than the assessed value. For example, the Hercules Shaft area at ERPM was rehabilitated at no cost, making use of the recuperated value of the scrap steel and reducing the final liability by more than R2 million.

### SAFETY, HEALTH AND ENVIRONMENT AUSTRALASIA SAFETY

Regrettably, two fatalities took place during the year at Vatukoula in Fiji. No fatalities occurred at Tolukuma in PNG.

Tolukuma had a satisfactory first half of the year, with no lost-time injuries recorded. Six such injuries, however, took place in the second half of the year, resulting in a LTIFR of 2.58 for the year (FY05: 2.10).

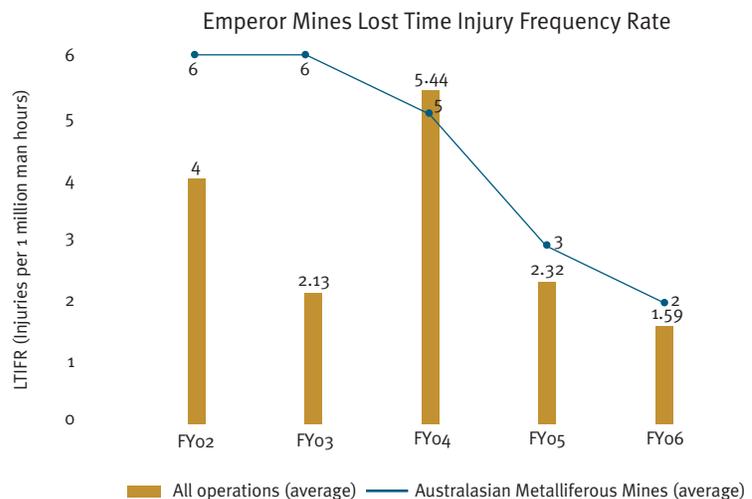
Vatukoula also returned a good safety performance over most of the financial

year. In May 2006, the LTIFR stood at 1.70 over a 12-month moving average. However, a collision between a man-carrier and a loader in the main Emperor Decline in June 2006 resulted in two lost time injuries, bringing the total lost time injuries for the year to nine.

Tolukuma recorded 782 380 fatality-free shifts during the year.

An exclusive review of all safety-related Standard Operating Procedures (SOPs) is in progress at Tolukuma and is scheduled for implementation in the second quarter of FY07.

The overall trend for lost time injury rates at the Australasian operations is positive, improving from an average of 4 in FY02 to 1.59 in FY06.



	FY06		FY05	
	Fatalities	LTIFR	Fatalities	LTIFR
Tolukuma	0	2.58	0	2.10
Vatukoula	2	2.21	3	2.27

## SAFETY, HEALTH AND ENVIRONMENT AUSTRALASIA

### At Vatukoula, environmental awareness programmes are in place for all employees, incorporating regular refresher sessions

These figures (which include data for Porgera, in which Emperor Mines has a 20% stake) compare favourably with the average for Australian metalliferous mines.

At Vatukoula, an extensive programme to reinforce safety standards and procedures was undertaken during the year and 90% of the hourly-paid workforce has received repeat induction training in safety and work standards. A communication campaign, with a different theme each month (for example good housekeeping or hazard identification) is under way. The training department carries out regular audits to monitor good housekeeping and safety standards in the workplace. Sub-standard work practices are stopped on the spot by the audit team and reported to the Operations Manager. A workplace health and safety representative has been appointed. Dedicated safety officers have been recruited for each underground location, and shaft safety team leaders, reporting directly to the production manager, have been appointed at all shafts. The underground support pattern for development and longwall stoping has been reviewed, with improvements where necessary.

#### HEALTH

Improving the health and well-being of its workforce is an integral part of Emperor Mines' approach to business.

In the case of Tolukuma, this commitment is demonstrated in the direct health services the mine provides and through the ongoing health awareness and education programmes it has undertaken.

Direct services include the Community Aid Post and the mine-based medical centre. The aid post, in Tolukuma Village, is staffed by two community health workers. The medical centre, located within the camp, is staffed by two fully qualified doctors and two health extension officers. More than 11 000 patients were treated at the two facilities between January and December 2005.

Staff from the aid post and medical centre carry out a quarterly outreach programme, visiting the more remote communities by helicopter.

The illnesses most commonly treated at the aid post and medical centre are malaria, pneumonia and diarrhoea.

Comprehensive medical examinations are in place for employees, on appointment and annually thereafter. These examinations include screening for tuberculosis, typhoid and HIV.

A health education programme, featuring on selected topics such as HIV/AIDS, tuberculosis and Sexually Transmitted Infections (STIs) is currently being developed and is scheduled for implementation during the course of the next financial year.

More serious cases are referred to the hospital at Port Moresby. A helicopter evacuation service is in place for emergencies.

At Vatukoula, a medical facility offering primary health care services operates on an outpatient basis. A volunteer counselling service is also available, dealing with such issues as substance abuse and STIs. HIV/Aids counselling and testing services are available in Suva, the capital city, some four hours' drive away.

Monthly visits to the clinic in FY06 averaged 1 215, with peaks reflecting seasonal outbreaks of influenza or of water-borne diseases during the wet months. All new recruits are medically examined upon engagement.



## Terracing and re-vegetation at the waste dump appears to be successfully enhancing plant establishment and growth

### ENVIRONMENT

Emperor Mines is committed to managing the impact of its operations in an environmentally responsible way throughout all its exploration, mining and processing activities. Environment Management Systems are based on ISO 14001 Standards. The company's Environmental Policy is reviewed every three years and updated if required.

Tolukuma complies with all monitoring guidelines as stated in the Environmental Management and Monitoring Programme. It has valid water use permits and complies with existing monitoring strategies. Compliance results are reported annually to the PNG Department of the Environment and Conservation.

Among other positive developments during the current year, geochemical and water quality monitoring performed at Tolukuma by DY Environmental Consultants (PNG) Limited in December 2005 on the Auga-Angabanga River system reported findings within compliance. Mill tailings analyses by the Australian Laboratory Services (ALS) in Brisbane reported filtered metals, ammonia, cyanide, conductivity and total suspended solids to be within compliance criteria. Terracing and re-vegetation at the waste dump appears to be successfully enhancing plant establishment and growth.

Following a number of aquatic surveys conducted by Hydrobiology (Pty) Limited, a control site is being established to review integrated data.

At Vatukoula, Environmental Awareness Programmes are in place for all employees, incorporating regular refresher sessions.

During the year under review, planning began for an in-depth environmental survey into possible pollution sources within the Lololevu Creek catchment area. The plan includes a proposal to review the tailings discharge monitoring programme.

Documentation regarding significant environmental risks is partially complete. Data collection began for a research project regarding the arsenic content of waste material, and periodic environmental audits of all surface work areas have been carried out.

Four environmental incidents were reported at Vatukoula, of which the two major ones related to a fish stress incident at the Lololevu Creek and a pinhole pipeline failure along a section of the Toko tailings pipeline. All reported incidents were thoroughly investigated to determine the cause and to implement appropriate action to avoid future recurrence. In terms of regulatory requirements, all incident reports are forwarded to MRD (government regulators) for information.