

ENVIRONMENTAL PERFORMANCE



DRDGOLD acknowledges that its mining activities have an impact on the environment and on the communities surrounding its operations. Impacts are managed proactively in terms of management and mitigation measures contained in the Environmental Management Programmes (EMPs) in place at all of the group's active operations. Each operation has a concurrent rehabilitation programme that is reviewed, and for which a budget is prepared, every year. The aim is to mitigate environmental impacts and reduce closure liability. Except for Durban Roodepoort Deep (DRD) and West Wits, which are closed, all the operations have submitted revised EMP documents that are compliant with MPRDA requirements. DME approval is awaited.

Each operation has environmental specialists on the staff who report to the general manager of the mine and to DRDGOLD SA's environmental manager. The group has a Regional Environmental Co-ordination Committee which meets monthly to report on, discuss and implement appropriate action plans at all operations, with the aim of ensuring and maintaining a high standard of environmental performance at all times.

Numerous audits took place during the year under review. These were undertaken by:

- Malepa Holdings for compliance in following National Nuclear Regulator (NNR) procedures for the demolition of a uranium plant and in adhering to Government Notice (GN)

- 704 (guidelines for the use of water in mining and related industries) at Blyvoor, Crown and ERPM;
- Fraser Alexander for the control of stormwater run-off (two audits) at Blyvoor;
 - the Department of Water and Forestry (DWAF) – for a water use licence (site inspection) at Blyvoor;
 - NNR for compliance with a nuclear licence at all operations;
 - Fraser Alexander Technical – EMP performance assessments to check compliance with Regulation 55 of the MPRDA at Blyvoor and ERPM;
 - Celtis at Crown for EMP performance assessments;
 - Pro-Optima audits on environmental systems; and
 - Fraser Alexander, which carried out tailings dam annual audits.

COMPLIANCE

DRDGOLD is required to comply with a number of national and provincial laws as well as local by-laws. Some of the most significant laws are: the National Environmental Management Amendment Act 8 of 2004; the National Environment Management: Air Quality Act 39 of 2004; the Atmospheric Pollution Prevention Act 45 of 1965; the National Water Act 36 of 1998; the Water Services Act 108 of 1997; the Environment Conservation Act 73 of 1989; the National Environmental Management: Biodiversity Act 10 of 2004; the National Environmental Management: Protected Areas Act 57 of 2003; the MPRDA of 2002; the Mine Health and Safety Act of 1996; the Conservation of Agricultural Resources Act of 1983; the Heritage Resources Act of 1999; and the National Nuclear

Regulator Act 47 of 1999. A dynamic register, incorporating all applicable legislation, is maintained and updated every quarter. In this way DRDGOLD ensures continued alignment with amendments to existing laws as well as new legislation.

Measures to mitigate environmental impacts form a central part of the company's mining licence applications and permitting is in place at all operations in line with the relevant legislation.

The major environmental issues facing DRDGOLD are dust control and water management. There is a robust system in place to identify, quantify, monitor, manage and report on risks, and a risk register is maintained and updated quarterly.

MINIMISING POLLUTION

DUST

Dust is monitored at 158 monitoring points at all DRDGOLD operations (including closed mines such as DRD and West Wits) against the South African National Standards (SANS). These guidelines and the results from monitoring points at the operations are set out in the tables below.

Annegarn Environmental Research, a leading dust monitoring agency in southern Africa, monitors dust fall-out on the property of all operations (including DRD and West Wits).

| Level | Dust fall-out rate (mg/m ² /day) | Permitted frequency of exceedances |
|--------------------|---|---|
| Target | 300 | |
| Action residential | 600 | Three within any year, no sequential months |
| Action industrial | 1 200 | Three within any year, no sequential months |
| Alert threshold | 2 400 | None. First exceedance requires remediation and compulsory report to authorities. |

| Area | Monitoring points | Points monitored 2008 | <600 | Residential >600 <1 200 | Industrial >1 200 | % Compliance | % Non-compliance |
|---------|-------------------|-----------------------|------|-------------------------|-------------------|--------------|------------------|
| Blyvoor | 5 | 55 | 55 | – | – | 100 | – |
| ERPM | 24 | 288 | 269 | 19 | – | 93.5 | 6.5 |
| Ergo | 25 | 300 | 285 | 12 | 3 | 95.0 | 5 |
| Crown | 78 | 930 | 832 | 80 | 18 | 89.5 | 10.5 |
| DRD | 26 | 312 | 280 | 27 | 5 | 89.8 | 10.2 |

ENVIRONMENTAL PERFORMANCE [CONTINUED]

| ENVIRONMENTAL EXPENDITURE 2008 – R'000 | | | | | |
|--|--------------|---------------|--------------|---------------|---------------|
| | Blyvoor | Crown | ERPM | DRD/West Wits | Total |
| Consultants | 1 337 | 611 | 1 867 | 205 | 4 020 |
| Dust monitoring | 20 | 262 | 102 | 92 | 476 |
| Rehabilitation | 1 591 | 6 296 | 125 | 3 504 | 11 516 |
| Trust funding | – | 26 000 | 2 400 | – | 28 400 |
| Vegetation | 975 | 3 752 | 840 | 1 902 | 7 469 |
| Water sampling | 116 | 391 | 49 | – | 556 |
| Total | 4 039 | 37 312 | 5 383 | 5 703 | 52 437 |

Vegetation programmes for dormant tailings dams are in place at all the operations. During FY08, 25 hectares of top vegetation and two hectares of side slope vegetation were established at Blyvoor. The sides slopes of No 7 slimes dam were grassed and the top ridge ploughed – at a cost of more than R850 000 – to reduce the amount of dust being blown off. As No 1 slimes dam is kept available for back-up, the top has not been vegetated. However, it is ridge ploughed and a water spray system is being installed.

Some 25 hectares of vegetation were established on the side slopes of the Crown tailings complex during the year under review. This operation also makes use of sprayed water to control dust at the sites that are in the process of being reclaimed. At sites such as Mennels, which are sensitive because they are in the centre of town, a monthly inspection involving inspectors from the DME is held to ensure that the mitigating measures are adequate. Quarterly meetings are held with the local authorities and the community where dust-related issues are discussed and information shared. A dust register and a complaints book are kept at Crown for use by the public to lodge complaints which are then followed up.

During FY08, 26 hectares of vegetation on top of the Elsburg tailings complex at ERPM were maintained and the remainder of the top surface, which has yet to be vegetated, was ridge ploughed.

With regard to DRD and West Wits, 111 hectares of vegetation were maintained and fertilised on the 2L24 complex and 55 hectares of vegetation were established at the WRC tailings facility. Vegetation, established during 2006-07 at the Princess dump complex after complaints from residents, is now very well developed and self-sustaining.

WATER

Existing water uses at all operations have been registered as required by the National Water Act of 1998. Applications for integrated water use licences have been submitted by all the operations but the licences have not yet been issued.

Significant progress has been made in addressing water-related issues in the year under review.

Together with Harmony (Randfontein Estates) and Mintails SA (Mogale), DRDGOLD (through its subsidiary West Wits) participates in the section 21 company Western Basin Environmental Corporation (WBEC), formed to find solutions to the acid mine drainage from the Western Basin of the Witwatersrand goldfields, which seeps into rivers and dams in the Randfontein area. WBEC entered into a management agreement with Western Utilities Corporation (WUC) to evaluate treatment options for the water.

Three pilot plants were constructed at the end of 2007 and the results were very encouraging. A bankable feasibility study is currently being undertaken for the establishment of a full-scale treatment plant. Initial indications are that a plant of 75 million litres (ML) per day would be commercially viable and sustainable. As the discharge from the Western Basin is some 20ML a day, other contaminated water sources from other mining basins would be required to reach daily capacity. Once a sustainable plant has been commissioned, DRDGOLD and the other parties will be able to end their involvement in WBEC as part of their closure strategy.

ERPM pumps water out of the Central Basin of the Witwatersrand goldfields, effectively preventing the flooding of all the gold mines in this area. A plugging programme, involving the construction of water barrier plugs, was started some years ago to isolate the ERPM working areas from the Central Basin. Partially funded by the DME, the programme was completed in FY08.

The mined out area behind these plugs has been flooding, with the water level reaching 30 metres below the pump chamber on 24 level at South West Vertical Shaft on 21 November 2007. The water level is being maintained at this elevation through the use of submersible pumps. The pump chamber is pumping some 60ML of water per day to surface. About 10ML of this water is used for mining operations; the balance is partially

treated to remove heavy materials and correct the pH, then discharged into the environment.

A section 21 company, Central Basin Environmental Corporation (CBEC) has been established to find a long-term, self-sustaining solution for this water. Apart from DRDGOLD SA, the other members are Mintails SA, Central Rand Gold and West Wits Mining. It is envisaged that, initially, a large portion of this water will be used in mining operations such as Ergo. This will ensure that the most contaminated water is used first and the country's potable water resources are not contaminated, but are kept available for alternative uses. It is likely that the long-term sustainable solution will be a treatment plant, treating water from both the Central and Western basins to supply sufficient water for self-sustainability. CBEC will also be looking at upgrading existing pumping infrastructure to keep the basin de-watered for future mining operations.

Blyvoor is one of the founder members of the Far West Rand Dolomitic Water Association which has the responsibility of managing the consequences of de-watering.

The operation pumps around 25Ml of water per day to keep the underground workings dry. Of this water, some is used in the mining process and the balance (some 8Ml) is discharged into the river system. Blyvoor is investigating the establishment of a treatment plant to treat the water to a potable standard for use on the mine. This would lessen the possibility of pollution and reduce the amount of fresh water that the operation draws from the Rand Water Board (RWB). A pilot plant was constructed and operated successfully at the end of 2007 and the mine is now in the process of contracting a company to construct a permanent plant which could become operational during the first quarter of 2009. This will assist Blyvoor as it strives to achieve the target of zero discharge.

Water quality and discharge volumes are monitored regularly. At Blyvoor, two continuous water monitors have been installed at the discharge points and can be viewed on the Internet. The required water samples are taken every week and analysed in an accredited laboratory. The results are submitted to DWAF and to the Potchefstroom municipality. Remedial action is taken as necessary.

Blyvoor is a member of the Mining Interest Group (MIG) which was established by all the mining companies in the area to deal with allegations regarding possible radiation pollution in the Wonderfontein Spruit. There have been various studies undertaken over the years but it is still not clear what remediation, if any, is needed. Government regulators have also established a specialist task team to examine all the

information collected and MIG has proposed making a grant to North-West University for a scientific investigation to determine what action, if any, should be taken. Previous studies have identified the dams along the Spruit as areas that may require some form of remediation.



ENVIRONMENTAL PERFORMANCE [CONTINUED]

ENVIRONMENTAL INCIDENTS

Two environmental incidents occurred at Blyvoor during FY08. There was a run-off in December 2007 when the No 4 and 5 slimes dam reclamation emergency dam overflowed. A breach in the dam wall – the result of a combination of heavy rain and a trip in the power supply – caused contaminated water to flow into an area (approximately three square kilometres in size) in Carletonville. It took a week to clean the affected area in the town and the affected grassland is in the process of being rehabilitated. Slimes spills occurred when the No 4 and 5 reclamation slurry pipe burst repeatedly during the year and a portion of the pipeline has been bypassed to eliminate further spills. This affected an area of about two square kilometres in size – 90% of which had been cleaned up by year-end. The operation spent close to R900 000 in FY08 on cleaning up these two areas.

To address the issues of slimes spillage and run-off, Blyvoor is creating additional toe paddocks at the Doornfontein complex and the No 4 and 5 emergency dam has been cleaned out and segregated with rock. In-dam paddocks have also been set up at the No 4 and 5 reclamation site.

Crown recorded 12 incidents during the year: one occurred when the return dams overflowed after heavy rain; the others were burst pipes. All spillage from the burst pipes was cleaned up immediately. No people or animals were directly affected. The return dams are being de-silted during the winter months to provide more storage capacity.

No reportable environmental incidents were recorded at ERPM during FY08.

No fines were imposed or legal action taken against DRDGOLD SA in connection with environmental incidents during FY08.

RESOURCE USAGE

POTABLE WATER

Blyvoor used 2 687ML of potable water on the operation during the year. As mentioned above the mine is looking at installing a water treatment plant to treat underground water to potable standards for its own use. The size of plant currently envisaged would treat 6ML a day. This means the mine would cut its discharge of water into the Wonderfontein Spruit by 2 190ML a year while reducing the amount of potable water it draws from

the RWB by the same amount. This meets DWAF's objective of using the most contaminated water first and freeing up the country's potable water for alternative uses.

Crown is dependent on the RWB at this stage for all its operational requirements because it has no alternative source. Crown used 4 597ML of water during the year. Approximately 50% of the water sent to the slimes dam is returned and reused at the reclamation sites. A project to pump water from ERPM is being looked at to reduce the dependence on the RWB. If this proves feasible, it is likely to be implemented in 2010.

ERPM pumps approximately 60ML of water to surface daily. At this stage 11ML is used by ERPM and Knights plant for process water and the balance discharged. The plan is to use this water for the Ergo operations. They would need 20ML a day from May 2009 and a possible 40ML per day in 2010. ERPM uses water from the RWB for ice for cooling purposes because the underground water would be too costly to treat given the volumes used. ERPM used 4 314ML of water from the RWB during the year.

ENERGY

Given the current pressure on the national power supply network in South Africa, state power utility Eskom requires all mining operations to reduce consumption of demand by at least 5% overall. In the event that supply to a mine is stopped, Eskom guarantees a six-hour window to allow for the evacuation of employees. Independent power generation is being considered but the expense of this option is a concern.

While Blyvoor is able to meet the 5% reduction without production being affected, ERPM is unable to achieve the saving. Eskom is aware that ERPM pumps water from the Central Witwatersrand Basin on a 24-hour basis, using all of the installed capacity of the current infrastructure. Discussions with the utility were under way in order to upgrade the infrastructure as a partly Eskom-funded demand-side management (DSM) project. However, these discussions have been put on hold because Eskom is concentrating on more energy efficient projects as opposed to load shifting projects.

Together with IST OTOKON, ERPM is investigating a more efficient ice-making option for the ice plant, which might require less energy than the equipment that is currently being used.

As a surface re-treatment operation, Crown consumes less power than the underground operations and the impact of power cuts is therefore less severe. In addition, as it has sites in different parts of the Johannesburg area, it is only partially

affected when an outage occurs in a section of the city. Nonetheless, it has reviewed its overall usage and has started to implement measures to reduce the effect of power cuts.

LAND MANAGEMENT AND REHABILITATION

No areas of biodiversity fall under the management of DRDGOLD SA nor are its operations in or adjacent to protected areas of high biodiversity value. Blyvoor, Crown and ERPM manage 4 506, 1 942 and 1 469 hectares, respectively. The land disturbed by mining activities is 4 023 hectares in the case of Blyvoor and 688 hectares in the case of ERPM. Crown has cleared 239 hectares of land while 206 hectares have been cleared and developed or are in the process of being developed.

All of the operations have updated their closure plans as required by the new EMPs.

In FY08, the redundant Uranium plant was demolished at Blyvoor in accordance with the NNR's approved procedure at a cost of R562 000. This operation's Annan Hostel has been demolished and the rubble is being deposited into sinkholes. In the year under review, seven sinkholes were filled at a cost of R316 490. The remaining four sinkholes were filled in July 2008.

Several sites were rehabilitated at Crown during the year, including 3L17. Negotiations are also under way with various contractors to sell the oversize material that is generated at the operational reclamation sites.

ERPM is in the process of removing a redundant railway embankment. There is no cost involved in this but it will reduce the operation's liability.

At DRD and West Wits, nine redundant shafts have been closed and capped.

The closure liabilities associated with environmental issues for each operation are reassessed on an annual basis. The amounts, calculated according to the official DME guidelines as at June 2008, are set out in the table in the next column.

The operations have trust funds to meet the final closure liability and DRDGOLD makes annual contributions to the environmental trust fund in place at each operation. Blyvoor has a trust fund of R24.3 million (FY07: R26.9 million) to provide for the financial liabilities associated with the rehabilitation and closure of this operation. This operation has presented a proposal to the DME that

| 30 June 2008 | Closure liability |
|---|--------------------|
| Operation | R |
| Crown | 104 993 605 |
| Blyvoor | 61 283 274 |
| ERPM | 62 315 785 |
| DRD/Rand Leases(RL) [†] | 27 303 498 |
| West Wits/West Rand Consolidated (WRC) [†] | 36 547 950 |
| Total | 292 444 112 |

[†] Discontinued operations

revenue from the sale of the No 2 waste rock dump be used to supplement the rehabilitation fund. If accepted, this will result in Blyvoor's liabilities being fully funded.

Crown reduced its closure liability by R30 million through finding alternative uses for screen oversize material and by carrying out site rehabilitation concurrently with its operations. Crown also contributes an amount of R250 000 per month as well as revenue from scrap sales to its trust fund. In addition, in FY08 Crown made an *ad hoc* payment of R20 million to boost the value of this fund.

Apart from the proceeds from scrap sales, ERPM pays R200 000 into its trust fund every month.

In the case of DRD and West Wits, the rehabilitation of the tailings facilities forms the largest portion of the liability. As these facilities are all earmarked to be re-treated by Mintails, they will be removed from the closure liability when mining rights are granted. When this happens, DRD and West Wits/WRC will be fully funded.

The fund amounts as at 30 June 2008 are set out below.

| Trust funds | June 2008 | June 2007 |
|---------------------|--------------------|-------------------|
| Operation | R | R |
| Crown | 37 159 250 | 11 917 935 |
| Blyvoor | 26 906 119 | 24 319 738 |
| ERPM | 12 835 761 | 9 011 218 |
| DRD/RL [†] | 18 188 099 | 16 398 858 |
| WW/WRC [†] | 15 678 020 | 14 123 218 |
| Total | 110 767 249 | 75 770 967 |

[†] Discontinued operations