NATURAL CAPITAL REVIEW

Our unique model ensures that our activities result – to a large extent – in an environmental clean-up as the numerous mine dumps of yesteryear are slowly recycled or reclaimed.

Unlike the discarded material of the past, modern 'waste' is deposited according to more stringent environmental rules and on a 1 474ha footprint some 12km from our flagship plant in Brakpan. As a result of our re-mining activities, valuable – and often strategically located – pieces of real estate are, after clean up and rehabilitation, released into the economy for development and re-use.

"What we do, or fail to do, is visible not only to the regulators but also to the communities surrounding our operations"

The corollary of our mining activities in the 'backyard' of the cities of Johannesburg and Ekurhuleni is that there is no place to hide. As a result what we do, or fail to do, is visible not only to the regulators but also to the communities surrounding our operations who are sometimes inconvenienced by our activities, most significantly by dust.

As we aim to work in harmony with, and even assist in developing, these communities it goes without saying that our approach to managing our natural capital – water, land, air, renewable and non-renewable resources – is stringent and focused and integral to our sustainable economic performance. Regular stakeholder engagement underpins our policies and we value the relationships with community leaders and engage with them on a regular basis. For more information on this aspect of our business refer to page 21.

At DRDGOLD we believe that not only do we have a responsibility to manage our environmental impact, but also to be pro-active and to continually work at improving the environmental measures we have in place and the policies that govern our approach.

COMPLIANCE

We comply with the existing environmental legislation and we have environmental management plans (EMPs) in place at all operations to address the impacts of mining.

The EMPs outline details of closure arrangements, including the financial provisions that have been made to implement the plans.

We recently consolidated the above EMPs for City Deep, Crown, Knights and Ergo into one document that has been submitted to the DMR for approval. This document will assist in auditing and monitoring our activities.

As part of the management and mitigation processes, we monitor, audit and review our environmental impacts to evaluate the success of our systems as well as appropriate mitigation measures, should they be required.

Environmental management is an integral feature of our project planning because prevention is more efficient than mitigation or rehabilitation. Before we embark on any project which will affect our stakeholders, we engage in a public participation process with I&APs. This approach seeks to identify, address and minimise the effects of our activities on the environment. Risk, including environmental risk, is carefully monitored in our business and is managed by procedures identified in the risk register.

ERPM has an EMP as well as three detailed closure plans addressing the three phases of closure of the mine. However on 24 July 2014 DRDGOLD announced the disposal of these mining rights, subject to certain conditions. More information on the ERPM sale can be found on page 13.

DRDGOLD did not receive any fines in respect of non-compliance with laws and regulations during FY2014.

COMPLIANCE AUDITS

The following audits took place during the FY2014:

- DMR Environmental Compliance Audit at ERPM – November 2013 – no major findings;
- DMR Environmental Compliance Audit at ERPM – June 2014 – no major findings;
- Department of Water Affairs (DWA) Water Use Licence Audit – June 2014 – some minor findings were established and action plans have been implemented;
- National Nuclear Regulator (NNR) Compliance Audit of COR53 – February 2014 – achieved 81% score; and
- Government Notice (GN) 704 Water Audit – November 2013.

OUR ENVIRONMENTAL ISSUES

South Africa's environmental legislation is governed by the National Environmental Management Act, 1998 and numerous other related acts. Our environmental management systems comply with these and other relevant legislation. We manage compliance using the following tools:

- internal audits and self-inspections;
- external audits;
- identifying non-conformances and developing mitigation procedures and deadlines;
- regular production/management meetings to discuss recommendations;
- measuring progress for tabling at formal, monthly environmental co-ordination meetings; and
- managing a compliance management tool.

"We recognise that water and dust are our key concerns"

Management recognises that water and dust are our key issues.

DUST

Dust is one of the challenges we have to manage year-round to ensure that in windy periods its effects on the surrounding communities are minimised. Our dust suppression measures comply with GN R827 National Environmental Management: Air Quality Act No 39 of 2004, National Dust Control Regulations (dated 1 November 2013).

We outsource our dust monitoring to an independent service provider, SGS Environmental Services, which measures dust according to the American Society of Testing and Materials Standard Method for collection and analysis of dust fall (ASTM D 1739). A quarterly open dust forum is facilitated by Ergo and attended by regulators, councillors, NGOs and community members in order to review the data and discuss progress and challenges.

Dust complaint registers where we log and register all complaints for attention are kept at each of the operational sites. Two dust complaints were received during the FY2014 period. Both of these complaints were caused by on-going removal of dumps in close vicinity to the complainants. Mitigation measures included spraying dust suppressant.

MITIGATION MEASURES

We have a well-established re-vegetation programme in place on the exposed areas of our tailings dams and these form part of our broader dust control measures.

Significant progress has been made in the re-vegetation of the Crown and Ergo TSFs. The re-vegetation programme will be advanced in FY2015. Numerous trials using chemical dust suppressants have been undertaken on the Ergo complex.

We vegetate the dumps and will irrigate using grey water in future

NATURAL CAPITAL REVIEW

(CONTINUED)

"Dust fall out has reduced significantly in recent years"

Windblown dust from tailings facilities is also suppressed through the use of the following:

- **water bowsers:** water bowsers spray binding chemicals (e.g. RDC20) on all active haul and access roads;
- **water spraying and irrigation:** water is sprayed on exposed mining surfaces (exposed slopes);
- **netting:** this reduces wind velocity, decreasing airborne dust created from exposed surfaces as well as supporting vegetation growth;
- **vegetation:** vegetation is established on open surfaces of the tailings dams as well as the side slopes of tailings dams;
- **cladding:** main access roads are clad with suitable material for dust control;
- **mining method:** we mine sand dumps in the prevailing wind direction to prevent open faces being exposed to the wind; and
- **new research:** Ergo is constantly searching for new methods of dust suppression.

Dust fall-out results have reduced significantly over the last three years and those for FY2014, when compared to FY2013, indicate the measures have been effective.

We engage with the community on dust issues and are represented on the local dust forum which meets quarterly.

DUST SITES MONITORED

	FY2014	FY2013	FY2012
CROWN			
Total	**984**	827	942
Exceedances	**21**	31	105
%	**2.13**	3.75	11
ERPM			
Total	**252**	247	258
Exceedances	**3**	11	40
%	**1.19**	4.45	14
ERGO			
Total	**276**	206	264
Exceedances	**3**	9	40
%	**1.09**	4.37	15.15
TOTAL			
Total sites monitored	**1 512**	1 297	1 464
Exceedances	**27**	51	182
%	**1.78**	3.93	12.43
% improvement year-on-year	**47**	72	n/a

NATURAL CAPITAL REVIEW

(CONTINUED)

VEGETATION OF TSFs

	Total ha	FY2014 ha	Completed prior to FY2014 ha	%
Mooifontein				
Top	30	–	30	100
Side	75	–	27	36
GMTS				
Top	51	–	32	63
Side	109	–	17	16
Diepkloof				
Top	20	–	20	100
Homestead				
Top	26	–	0	0
Side	100	**24**	20	44
Rooikraal				
Top	112	**10**	102	100

"We are investigating alternative water sources so we can reduce our consumption of potable water"

WATER

WATER: A CRITICAL RESOURCE

Water is a critical resource and from an operational viewpoint it is a necessity as Ergo's business and reclamation activities depend on water. Our supplies are well-controlled and no water discharges took place in FY2014.

WATER LICENCES

The status of our integrated water use licences (IWULs) is as follows:

- the Ergo WUL has been approved;
- WUL applications for Crown, City Deep and Knights are still awaiting approval;
- an internal audit of the Ergo IWUL was conducted during FY2014 as required;
- an external audit of the IWUL was conducted during FY2014 as required;
- the DWA performed an audit during June 2014; and
- as a result of the above audits, an action plan has been compiled and implemented to ensure compliance with all IWUL conditions.

WATER MANAGEMENT AND RECYCLING

We manage our water consumption in a number of ways including a closed loop process.

Ergo recycles some 20% of water from its tailings dam for re-use in the metallurgical process. We are currently able to recycle 60% to 70% of water pumped to the dam as slurry. Rain water captured on the dam is also harvested. The desilting of the return water dams at all TSFs has been elevated to project status and will be undertaken in the next three years. This will ensure that run-off rain water is contained and re-used.

All our sites have in place clean/dirty water separation measures and a water quality monitoring programme. The results of this monitoring programme are submitted to the DWA each quarter. GN 704 audits are undertaken by independent consultants and submitted to the DWA annually.

DRDGOLD has received authorisation from the DWA to utilise nearby waste water treatment works to replace potable water in its circuits and to irrigate the vegetation on its tailings dams. Once we have received the various authorisations, expected later this year, we will begin construction of the pipelines that link our workings with the plants. This source will bring about a significant saving in water costs and also reduce our usage of potable water. It is anticipated that the final NEMA authorisations will be granted in September 2014. Construction will begin immediately and May 2015 is the target date for commissioning the project. The planned off-take is 10Ml/d.

We are also investigating alternative water sources, including treated acid mine drainage (AMD) and waste water to address our future requirements. More information on the AMD-treated water can be found on page 79.

TOTAL WATER USED AND RECYCLED (000m³)

	2014	2013	2012	2011
Potable water externally sourced	**5 762**	5 748	8 301	8 491
% water externally sourced	**22**	20	23	26
Surface water used	**3 079**	1 800	15 198	6 299
% surface water	**12**	6	43	19
Water recycled in process	**17 194**	21 773	15 154	17 674
% recycled water	**66**	74	43	55
Total water used	**26 035** [LA]	29 321 [LA]	35 508	32 464

[LA] *Limited assurance*

[#] *Figures include Blyvoor until end May 2012*

We liaise regularly with all stakeholders and I&APs and are represented on the Klip River and Blesbok Spruit water forums.

LAND MANAGEMENT AND REHABILITATION ACTIVITIES

All mining companies are, by law, required to rehabilitate the land on which they work to a determined standard for alternative use (e.g. development). DRDGOLD's business involves the reclamation of previously discarded material deposited, in many cases, by other companies, most of which have since closed their doors. As a result, some of the issues we deal with are legacy issues. Nevertheless, we view our environmental responsibilities seriously and are steadily rehabilitating land previously sterilised by mine residue dumps.

"We are currently able to recycle 60% to 70% of water pumped to the dam as slurry"

We have a structured programme to gradually clean up historical slime spills and our environmental team is also responsible for sealing disused mine shafts on our properties (specifically at ERPM) and making them safe.

During FY2014 our operational activities covered 4 803 hectares (ha) of land and we spent R44 million (FY2013: R67.9 million) on rehabilitation.

The following is a list of FY2014 highlights.

- The process for closure at a number of historical sites associated with Crown Gold Recoveries and Ergo were initiated. Rehabilitation of the following sites has been completed and closure is being applied for:
  - 3L19 and 20 : 23.6ha;
  - Mennels (3A19): 13.4ha;
  - 6L18: 86.46ha;
  - 6L19: 94.07ha;
  - 3L10: 14.5ha;
  - 3L11: 4.12ha; and
  - 3L12: 26.32ha.

NATURAL CAPITAL REVIEW

(CONTINUED)

- The following sites are in the process of being rehabilitated and will be completed in FY2015 and FY2016:
  - 4L8;
  - 4L10; and
  - 4L13.
- At ERPM four redundant shafts were capped and sealed as required by the DMR and we are currently rehabilitating the South East Vertical shaft area. This will be completed during FY2015 leaving only Far East Vertical and South West Vertical as active open shafts.
- On the Rooikraal and Crown tailings complexes, long-term sustainable vegetation cover was established. A total of 10ha of the top surface of Rooikraal was vegetated and a total of 24ha on the side slopes of the Crown complex.
- The dust control measures now in place have resulted in a 47% reduction in dust fall-out compared to FY2013.
- Alien vegetation is actively controlled and removed where possible.
- A total of 161.5ha was cleared of radiation and removed from NNR control during FY2014:
  - 11ha Central Hostel;
  - 10ha Sid Sideski;
  - 15ha Cinderella Hostel;
  - 1.5ha Cason Cinderella;
  - 3ha Blue Sky;
  - 25ha Leeupoort;
  - 90ha \/an Dyk Park; and
  - 6ha Piccadilly.

"We employ members of the local community in our revegetation initiatives"

DRDGOLD has two nurseries in the Crown and Brakpan areas where indigenous plants, suitable for the prevailing conditions on mine dumps, are cultivated and cared for by members of the local communities. The combined cost of these projects is R2.7 million (FY2013: R3.1 million). A total of 10ha (FY2013: 75ha) of top surfaces and 24ha (FY2013: 46ha) of side slopes were vegetated during FY2014.

The following challenges, among others, were encountered during FY2014:

- ensuring an adequate and consistent water supply to irrigate the vegetated areas on the tailings dams, as well as sufficient water for active dust suppression in operational areas;
- effective pollution control and water management at the Crown tailings complex, especially with regard to the silting of the return water/pollution control dams after heavy rain events;
- theft of equipment and infrastructure used to manage rehabilitation activities;
- damage on vegetated and rehabilitated areas due to fires;
- storm damage to access ramps at the various tailings dams which, on occasion, restricted access to the sites for rehabilitation work;
- dust from active reclamation sites during windy periods;
- proximity of local communities; and
- spillage from burst pipelines. The Knights residue pipeline is currently being replaced and is due for completion in December 2014.

LAND DISTURBED BY MINING AND PROCESSING ACTIVITIES (HA)

Plants	Plant area	Reclamation sites	Tailings	Total
Crown	15	992	341	**1 348**
City Deep	10	560	–	**570**
Knights	4	583	–	**56**
Brakpan tailings facility	56	400	1 500	**1 956**
Elsburg slimes dams	–	342	–	**342**
Total	85	2 877	1 841	**4 803**

REHABILITATION CLOSURE

Operation	Current liability assessment		Trust funds		Guarantees	
Occupational Level	FY2014 (R'000)	FY2013 (R'000)	FY2014 (R'000)	FY2013 (R'000)	FY2014 (R'000)	FY2013 (R'000)
Crown	**152 274**	219 359	**66 110**	62 758	**7 753**	7 753
Ergo	**144 352**	155 456	**–**	–	**238 598**	305 735
ERPM	**77 577**	77 149	**24 865**	23 599	**59 392**	59 392
Total	**374 203**	451 964	**90 975**	86 357	**305 745**	372 880

"Our deployment to each new mine site follows a stringent public consultation process"

COMMUNITY INVOLVEMENT

Community and stakeholder engagement is a focus for our environmental management team. Numerous meetings and consultations take place during the year including the following:

- community meetings;
- meetings with authorities;
- water catchment forums;
- youth forums;
- business forums;
- landowner meetings; and
- development companies.

Our deployment to each new mine site follows a stringent public consultation process during which the project is announced to I&APs. This approach allows them an opportunity to raise concerns which we then consider before implementing mitigating measures, should they be required.

Ergo also has a grievance mechanism facilitating contact with our environmental manager. Complaints received are recorded in a complaints register along with the mitigation measures taken. This is submitted to the Ergo MD for review and sign off.

Ergo facilitates a quarterly open forum where dust monitoring results from the past quarter are presented to regulators, municipalities, NGOs, councillors and any other interested persons. At these meetings I&APs are able to raise issues related to dust fallout. The meetings are minuted and any issues raised are followed up.

NATURAL CAPITAL REVIEW

(CONTINUED)

MATERIALS USAGE

The FFG circuit requires power and therefore the start-up of this additional circuit has increased Ergo's electricity consumption. Energy efficiency remains a priority and new 'power factor correction' equipment will be installed during FY2015 to improve the power factor above 98%. The company also uses other methods in its quest for energy efficiency. These include soft starts, sizing pumps for maximum efficiency, making use of variable-speed drives and energy efficient motors. Electricity consumption is unlikely to decrease in the foreseeable future, not only because of the introduction of the FFG circuit but also because some of the new sites coming on line are located further from the plants than previous sites, and therefore increased pumping pressure is required to get the material to its destination. The table below indicates our energy and fuel usage.

ENERGY CONSUMPTION

	Unit	Year	Crown	ERPM	Ergo	Total*
Electricity	MWh	FY2014			353 159	**353 159** [LA]
		FY2013	–	–	325 509	**325 509** [LA]
		FY2012	168 591	11 386	124 119	**304 096**
		FY2011	169 210	7 003	115 378	**291 591**
Diesel	litre	FY2014			1 542 467	**1 542 467** [LA]
		FY2013			1 526 098	**1 526 098** [LA]
		FY2012	1 203 675	–	246 533	**1 450 208**
		FY2011	1 373 314	–	60 000	**1 433 314**

* *FY2011 total includes Blyvoor. FY2012 total includes Blyvoor until end May 2012*

[LA] *Limited assurance*

"Energy efficiency remains a priority"

EMISSIONS: SCOPE 1, SCOPE 2 AND SCOPE 3

The use of fossil fuels contributes to direct or scope 1 emissions and is measured as carbon dioxide or CO_2. DRDGOLD makes use of these fuel types at its operations and is directly responsible for these as the company owns the means of combustion.

Total scope 1 emissions measured in FY2014 comprised 4 134 tonnes of CO_2 and equivalents (FY2013: 4 227 tonnes). The introduction of carbon taxation is planned but details have not yet been finalised by the South African government.

Indirect CO_2 (scope 2) emissions are those emissions generated in the production of the electricity used by DRDGOLD. We used 353 158 tonnes in FY2014 (FY2013: 390 611).

DRDGOLD employees are entitled to claim kilometres travelled on official business and these form the basis of our travel (scope 3) emissions. We used 121 tonnes in FY2014 (FY2013: 146) and these are included in total CO_2 emissions. Air miles are unreported and are excluded from these calculations.

The overall increase in emissions year-on-year is explained above under materials usage. We forecast that consumption will increase in future as the FFG circuit ramps up and we bring more sites online that require more pumping effort.

In South Africa, electricity is supplied by Eskom, which generates approximately 89% of its power at coal-fired power stations, resulting in significant indirect emissions for South African customers. The emission factors related to the use of Eskom power change subtly year-on-year.

"Although we strive for energy efficiency, our electricity consumption is unlikely to decrease in the near future"

EMISSIONS AND INPUTS PER UNIT OF ESKOM ELECTRICITY CONSUMED

		Units	Ergo (incl ERPM)	Corporate
Electricity consumption FY2014			353 159 [LA]	
Electricity consumption FY2013	Factor	MWh	325 509 [LA]	0
Coal use FY2014	0.56	t	197 768	
Coal use FY2013	0.56	t	182 285	0
Water use FY2014 *	1.42	kl	501 484	
Water use FY2013	1.42	kl	462 223	0
Particulate emissions FY2014 *	0.32	t	113	
Particulate emissions FY2013	0.32	t	104	0
CO_2 emissions FY2014*	1.00	t	353 159	
CO_2 emissions FY2013	1.00	t	325 509	0
CO_2 emissions FY2014 @* (international standard factor: clean development mechanism – CDM)	1.20	t	423 790	
CO_2 emissions FY2013 @ (international standard factor: clean development mechanism – CDM)	1.20	t	390 611	0
SOx emissions FY2014 *	8.23	t	2 906	
SOx emissions FY2013	8.23	t	2 679	0
NOx emissions FY2014 *	4.35	t	1 536	
NOx emissions FY2013	4.35	t	1 416	0

[LA] *Limited assurance*

* *For more information, see tables below*

@ *The emission factor for CO_2 of 1.2kg per kWh has been used as recommended by the United Nations Framework Convention on Climate Change*

SUMMARY TABLE OF TOTAL OF EMISSIONS (TONNES)

Measure	2014	2013	2012*	2011*
Direct CO_2 (scope 1)	**4 134**[LA]	4 090[LA]	8 159	8 472
Indirect CO_2 (scope 2)	**353 158**[LA]	390 611[LA]	697 796	682 666
Travel emissions (scope 3)	**121**	146	265	234
Total CO_2 emissions	**357 413**	394 847	706 220	691 372
NOx	**1 642**	1 521	3 096	3 050
SOx	**2 913**	2 686	5 586	5 355
VOC	**9**	9	13	14
Carbon monoxide	**23**	23	35	36
Methane	**0**	0	2	2
Particulate emissions	**120**	112	217	228

[LA] *Limited assurance*

\# *FY2011 figure includes Blyvoor. FY2012 figure includes Blyvoor until end May 2012*

NATURAL CAPITAL REVIEW

(CONTINUED)

PRIMARY MATERIALS USED (TONNES)

Measure	2014	2013	2012 #	2011 #
Cyanide	**7 527** LA	5 712 LA	6 574	6 682
Steel (grinding)	**4 350**	5 757	8 098	9 274
Hydrochloric acid	**1 845**	1 312	1 656	1 482
Caustic soda	**3 407**	2 721	2 465	2 403
Lime	**45 145**	38 463	29 306	42 973
Carbon	**1 228**	859	1 267	1 114
VOC	**9**	9	13	14
Carbon monoxide	**23**	23	35	36
Methane	**0**	0	2	2
Particulate emissions	**120**	112	217	228

LA *Limited assurance*

\# *FY2011 figure includes Blyvoor. FY2012 figure includes Blyvoor until end May 2012*

CYANIDE USE

DRDGOLD uses cyanide in the gold liberation process. In accordance with the requirements of Section 9 of the MHSA, mandatory Codes of Practice on cyanide management are in place at all DRDGOLD operations. The transport, offloading and use of cyanide, as well as training and safety requirements to ensure its safe handling are managed according to the Code of Practice which is strictly adhered to. The company accepts responsibility for the safe storage and use of cyanide at all operations. The tailings from the Ergo retreatment process, which may contain traces of cyanide, are deposited according to the Code of Practice.

"Mandatory Codes of Practice on cyanide management are in place at all DRDGOLD operations"

SPILLS AND LEAKAGES

Ergo has an extensive pipeline infrastructure delivering tonnes of material to the plants and pumping the discarded residue – from which as much of the gold as is currently possible has been removed – to the TSF. Therefore substantial resources are deployed to the monitoring and maintenance of these pipelines.

We have a programme in place to systematically replace any old and/or worn pipes. To mitigate the risks of leakage, new pipes have been installed along the route from Crown to Ergo via City Deep. We are in the final stages of replacing the entire 27km Knights residue pipeline and the project is due for completion in December 2014. Sections of the Cason sand line were replaced during FY2014. An advanced 24/7 telemetric pressure- and flow-monitoring system is also in place to indicate leaks. The spill management programme involves security patrols along the major pipeline routes on a daily basis and a preventative maintenance team is on 24/7 standby to attend to leaks so that minor problems are prevented from escalating and also to pro-actively address problems that are detected.

"We deploy significant resources to the monitoring and maintenance of our pipeline network"

POLLUTION: ACID MINE DRAINAGE

The central basin, created during decades of mining on the Witwatersrand, is currently flooding and water is expected to decant around ERPM Cinderella Shaft unless preventative measures are taken. The water, known as AMD, is contaminated with metal sulphides. At the time of writing, the water level in the basin had risen to 120m below surface at the SWV shaft.

Government has rejected the proposal to contain the situation which was submitted by various mining companies, including DRDGOLD, opting instead to contain the situation itself and appointing the Trans Caledon Tunnel Authority (TCTA) as the main contractor to implement its plan. DRDGOLD is collaborating with the TCTA and has placed both land and infrastructure at its disposal from where it can pump AMD and construct a treatment plant. The TCTA pump station and plant were completed in June 2014 and are being commissioned. The plant will treat water to a 'grey' standard before releasing it into the environment. The plant's potential and performance is unknown at present. DRDGOLD has negotiated an option to purchase up to 30Ml grey water a day from the TCTA should it need to do so.

ENVIRONMENTAL MANAGEMENT EXPENDITURE

FINANCIAL EXPENDITURE FOR FY2014

Areas	Amount (R)
Brakpan tailings	1 579 823
Crown tailings	23 291 478
Rooikraal tailings	1 953 060
Daggafontein tailings	1 125 836
Crown sites	10 189 380
Spill cleanup	5 873 641
Total	44 013 218