Our performance

All our operational mines have Biodiversity Action Plans (BAPs) in place with implementation on track. As shown in Figure 31 below, this has included the rehabilitation of approximately 260 hectares of land in 2016, thereby reducing our overall footprint by decreasing total land disturbed by our mines by over 1% this year. Total disturbed land was reduced by 45 hectares, the equivalent of rehabilitating an area greater than 60 football pitches. Rehabilitation rates tend to be determined by the age of the mine. For example, Kibali is still relatively young and in an expansion and disturbance phase while Morila is nearing closure and therefore has a much greater focus on restoration and rehabilitation.

We continue to monitor animals onsite and now have cameras within our Kibali permit area to help record the different species. We have found that animal populations on site are generally increasing with new species identified on the Kibali site. When animals come too close to our operations they are caught and relocated to a safer part of the permit and our environmental teams have been trained in the catching and handling of different species. For example at our Kibali mine we relocated a large number of snakes during 2016.

Our rehabilitation efforts included planting more than 17 000 trees across all sites in 2016.

Perhaps the most significant progress on biodiversity in 2016 was the extension of our offset programmes to build on our successful work with the Garamba National Park in the DRC. As set out in the case study box on page 167, we now have plans for biodiversity offset programmes in each host country and worked with sustainability consultants in 2016 to quantify the value our biodiversity offset programmes in 2017.

None of our operational mines are located within the boundaries of any natural World Heritage Sites nor do our mines affect the habitats of any endangered species.

WASTE MANAGEMENT

The process of extracting ore from the ground generates large quantities of hazardous and non-hazardous waste. Ensuring it is responsibly dealt with is crucial to ensuring environmental and community health.

Our policies

Each one of our mines has its own site-specific waste management plans that detail how organic, inorganic and hazardous wastes should be handled, stored, separated, recycled or disposed to ensure everything is done in a safe and environmentally friendly manner.

Cyanide and hazardous waste

We take special care to handle the small amount of hazardous waste we produce such as acids, chemical reagents, hydrocarbon and cyanide. For the second consecutive year, cyanide management in particular was highlighted as one of our highest priority issues in the 2016 materiality assessment.

Our production, transportation, storage and use of cyanide is aligned with national regulations and international industry best practice and we require all our cyanide suppliers to be certified to the international cyanide code. We also provide regular training and supervision especially for those transporting cyanide and burning cyanide-related waste.

We track any environmental incidents relating to cyanide and conduct annual cyanide code audits, for example testing for levels of cyanide in water facilities

We also generate a relatively small amount of other hazardous waste each year such as batteries, fluorescent lights, certain oils, solvents, electronic waste and laboratory assay wastes. As with process materials, the types of hazardous wastes vary among our sites. However, all are recycled or disposed of according to the appropriate regulation in the countries in which we operate.

No waste deemed hazardous under the Basel Convention is transported, exported, imported, treated or shipped internationally by Randgold.

We seek to minimise the amount of hazardous waste we generate. Wherever possible we replace hazardous chemicals with less hazardous products, and we recycle wherever possible. For example we reduce our hydrocarbon waste by working with reputable local companies, such as Lubetech in Côte d'Ivoire, to remove waste oils from site for recycling.

FIGURE 31: TOTAL LAND REHABILITATED AND DISTURBED

	2016	2015	2014
Total hectares rehabilitated	**260**	20	16
Total hectares disturbed	**222**	53	682
Total disturbed areas on our mines	4 345	4 383	4 350

PROTECTING ENDANGERED ANIMALS IN THE DRC AND MALI

During 2016 we continued our partnership with the Garamba National Park in the DRC. Garamba is one of Africa's oldest national parks and a UNESCO World Heritage Site, and was once home to the now extinct Northern White Rhino. Our partnership with the park began in 2014. Since then we have provided more than $750 000 in support for a range of projects in the Garamba:

- In 2014 we provided $240 000 for a project to monitor and protect elephants from poaching via tracking collars and aerial flights.
- In 2015 we provided $250 000 to fund a team to monitor and protect the critically endangered Kordofan giraffe.
- **In 2016** our goal was to help reintroduce Rhino back into the Garamba. However, security concerns arising from militia activity has delayed the project. Instead much of our support for the Garamba has been channelled to provide tracking collars for a further 50 elephants and the improvement of roads and access to the park – boosting options for ecotourism and emergency response rates.

During 2016 we also began a partnership with the Mali Elephant Project in the Gourma region of Mali to bolster our biodiversity offset efforts. Home to an endangered population of desert elephant only found in Namibia and Mali, the Gourma also has limited employment opportunities for young people and the area has been a recruiting ground for extremist factions. The Mali Elephant Project helps to protect Mali's elephants, by working with local communities to convey the importance and long term financial value of this unique elephant population for local communities.

The project also supports funding for 670 community eco-guardians to detect poaching, boosting protection for the elephants and provides alternative employment for young people.

In 2017, we hope to finalise similar partnerships with the Comoe National Park in Côte d'Ivoire and Niokolo Koba National Park in Senegal, and with conservation organisations such as Panthera.

Non-hazardous waste

By volume most of our waste is from waste rock and tailings from operations. In line with IFC Performance Standards, the dumping of waste rock is carefully managed by geotechnical engineers to ensure the correct angle of slopes for stability and the correct drainage to recover any leachates. As part of site rehabilitation waste rock dumps are then covered with topsoil and planted with native plants, which also helps stabilise the infrastructure and thereby minimises the chance of leach generation. The way we design and construct our waste rock dumps is informed by the geochemical composition of the waste rocks, and we conduct geochemical assessments of waste rock prior to the design stage. For example, when planning the waste rock dump for our Gounkoto mine, the dump was designed to reduce dumping near the river and to maximise dumping in the pit. We have also been able to reduce the total volume of waste rock generated by the Gounkoto super pit by 46% by constructing the waste rock dump on top of the backfilled pit and through inpit dumping, thereby mitigating the most significant negative impacts of the super pit.

All our tailings are sent to engineered TSFs, which are designed to safely hold the tailings even in severe weather. We have clear policies to ensure the construction operation, maintenance, monitoring and closure of our TSFs meets international industry best practice. Our staff conduct daily inspections of TSFs, and our TSF management is audited on a quarterly basis by independent auditors Epoch Resources.

Other non-hazardous wastes produced by our mines include general waste such as scrap metal, used tyres and organic waste. Our waste policy emphasises the recycling and reuse of general waste wherever possible. In 2016 we introduced a new target to reduce the volume of general waste we produce and to send to landfill 50% by 2020. We shall report on this target in next year's sustainability report.

Our performance

As seen in Figure 32 below, the volume of general waste we produced decreased from over 11 000t in 2015, to 9 569t during 2016. We dispose of each material appropriately and in 2016 sent more than 10 000t of waste for recycling.

The disposal of waste can also provide opportunities for local economic development and wherever possible we work with local communities to create sustainable and profitable waste management and collection companies. For example, in 2016 we signed a contract with the Chief of the Surur village near Kibali to recycle all Kibali's scrap steel. We also sell used grease, air filters, steel drums and conveyor belts to local artisans for reuse.

FIGURE 32: TONNES OF WASTE MANAGED

Tonnes	**2016**	2015	2014
Tailings	**16 407 312**	18 497 138	17 174 516
Waste rock	**82 620 763**	64 382 913	86 209 131
Hazardous	**6 589**	7 294	6 313
General	**9 569**	11 379	5 065
Waste recycled	**10 358**	12 400	3 739
Waste to landfill	**3 566**	2 439	2 047