



Wasted land: The rehabilitation of mines curtails carbon dioxide emissions and restores valuable agricultural land. If it is not done, potentially productive land is ruined. Photo: Paul Botes

# Mines left to pollute the soil

Both the industry and officials are responsible for continuing damage to the environment and for huge, unnecessary carbon dioxide emissions

## Mark Olalde

For more than six years, no large coal mine has been granted closure, meaning the mines cannot be rehabilitated and lie abandoned, leaving a legacy of pollution, according to 19-month data investigation of mine closures.

The country's operating and abandoned coal mines combined release up to 4.3-million tonnes of carbon dioxide a year, the mining consulting firm Latona Consulting estimates. That is roughly equal to the consumption of 10-million barrels of oil.

It could be significantly decreased by proper mine rehabilitation, including backfilling pits, sealing shafts and replanting flora.

"The department of mineral resources has been totally incapable of closing individual mines," said David Hallowes, a coal researcher of the nonprofit organisation groundWork. "A lot of this land is high productive agricultural land and it's ruined. End of story."

Never-before-seen data released by the department in response to requests under the Promotion of Access to Information Act (Paia) exposes a system of mine closure in which large operations rarely apply for closure certificates and almost never receive them. Without a closure certificate, a mine is not considered legally closed and liability cannot be transferred from a mining company to the government.

Data derived from the documents shows that the largest mining companies hold by far the largest amount of financial provisions for rehabilita-

tion. But, as some extractive industries plateau or contract, junior mining companies, which operate on slim profit margins and often hold insufficient funds for rehabilitation, are replacing the major mining houses.

As of 2015, R45-billion was held in financial provisions for rehabilitation, according to the department.

Companies are required to set this money aside before they obtain mining licences. Once a mine is rehabilitated and closed, the money is returned. If a mine is abandoned, the department has the right to use this money for rehabilitation.

The largest funds are put up by holders of mining rights – one of three types of mining licences – which are for mines larger than five hectares and can operate for decades without renewing the licence. The other two types are mining permits, for mines smaller than five hectares, which must renew their permits and prospecting rights every few years. According to this regulation, experts say certificates granted for mining rights carry the most weight.

Analysis of the documents, as well as information revealed in Parliament in response to questions from the Democratic Alliance, found that 754 closure certificates were issued between 2011 and 2016. Of those, 83% went to prospecting rights, mining permits or borrow pits and other work associated with highway construction. An additional 80 certificates were unspecified.

Only 44, less than 6%, went to mining rights. All but six of the closure certificates granted for mining rights were issued in the Western Cape.

In the major gold-mining provinces, large companies are holding on to substantial financial provisions and do not close operations.

In the Free State, companies hold about 1125 financial provisions for rehabilitation with a combined value about R5.4-billion. The largest 5% of the provisions comprise nearly 99% of the total funds. This means the remaining 95% of provisions hold, on average, less than R60 000.

But, of the 221 closure certificates granted in the province between 2011 and 2016, only one went to a mining right not associated with road construction.

The trend also holds true in Gauteng: of the 628 bank guarantees, in one type of financial provision, worth a combined R3.4-billion, the largest 5% account for 83% of all funds. The remaining bank guarantees average slightly less than R1-million.

Of the 15 closure certificates granted between 2011 and 2016 in Gauteng, zero went to mining rights.

Although many companies include their financial provisions in the sales of mines, whether a rehabilitation fund is passed on to the buyer is dependent on individual terms of sale, the department said in a statement.

"This will depend on the parties structuring a commercial transaction. The department's role is to ensure that the state is not exposed to the risk of inheriting environmental liability in the long run," it said.

The Blyvooruitzicht Gold Mine in Carletonville, in Gauteng, for example, has no closure certificate and has been abandoned since 2013 when a sale between DRDGold Limited and Village Main Reef Limited fell through.

The liquidator and activists failed to gain access to Blyvooruitzicht's financial provision, which is still

managed by DRDGold personnel. The documents show the fund amounts to R35-million, which is inadequate to clean up the mine, DRDGold has admitted.

On the West Rand, Mintails Mining South Africa holds three mining rights, which cover 1715 hectares near Krugersdorp. It is operating under business rescue. The business rescue plan shows that Mintails requires about R259-million to complete the rehabilitation on those rights – a figure that is far too low, according to the environmental management programme report. The Paia documents reveal that the company and related entities hold less than R17-million in funds for rehabilitation.

According to department of environmental affairs statistics, 40% of operational mines held inadequate financial provisions in 2012-2013. This was in part because the guidelines for calculating financial provisions have not been updated in more than 12 years.

Exacerbating the problem, legislation does not allow the funds to be used for concurrent rehabilitation. Laws governing environmental management of the mining industry are shifting with the advent of the One Environmental System in December 2014, aimed at streamlining regulation by bringing together the departments of mineral resources, environmental affairs and water and sanitation.

Marthán Theart, an attorney at the Centre for Environmental Rights, has closely followed the evolution of the hotly debated mine closure financial provision regulations, an integral aspect of the new system.

"The new financial provision regulations provide for a fund that is big enough to cover three types of rehabilitation: post-closure rehabilitation and remediation, the decommission-

ing of a mine, and latent or residual impacts of a mine – in other words, the risk of acid mine drainage," Theart said.

In an imminent round of amendments to the provisions, environmental affairs plans to rescind its inclusion of "care and maintenance" oversight – a term the industry created to explain indefinitely mothballing unproductive mines – because the department believes this oversteps its mandate.

The department is also considering removing the requirement that prospecting rights should hold financial provisions.

Environmental affairs spokesperson Albi Modise said: "Legislation and its implementation is generally an iterative process and therefore the system had to be tweaked to ensure that smoother operation was achieved."

But members of the mining industry, including DRDGold and Sibanye Gold Limited, launched litigation in late 2016 against the three departments and others.

"[The environment affairs department] had a lot of pushback from industry. This is the single environmental system being tested," said Tracy-Lynn Humby, a law professor at the University of the Witwatersrand.

"Is this really a more sustainable solution, or is it simply business as usual but with a green veil?" – [oxpeckers.org](http://oxpeckers.org)

Mark Olalde is an associate of the Oxpeckers Centre for Investigative Environmental Journalism. The Oxpeckers #MineAlert platform and Code for Africa sponsored this investigation. His work is also funded by the Fund for Investigative Journalism, the Pulitzer Centre on Crisis Reporting and the Fund for Environmental Journalism