Auditor-General calls for stricter management in rehabilitating abandoned mines and mine openings

PRETORIA – The Department of Mineral Resources and Energy (DMRE) needs to speed up its management of rehabilitating South Africa’s abandoned mines, as they “pose serious health, safety and environmental hazards for nearby communities,” Auditor-General (AG) Tsakani Maluleke warned on Thursday, 31 March 2022.

AG Maluleke’s comments were made at the release of the report on the follow-up performance audit conducted on the department’s rehabilitation of abandoned mines, also referred to as derelict and ownerless (D&O) mines. She added that while she recognised the efforts the department had made since the first performance audit in 2009, government needed to urgently improve its rehabilitation efforts as they negatively impact local communities and the environment.

Findings

The national audit office’s 2009 audit highlighted that unrehabilitated D&O mine sites negatively affect the environment and the health and safety of local communities. Maluleke says this negative impact “remains a key issue in South Africa and at mining sites globally”.

The 2021 follow-up audit evaluated the progress the department has made since 2009, focusing on whether the issues highlighted in the previous report still exist.

The majority of the 6 100 D&O mines closed down before the Mineral and Petroleum Resources Development Act of 2002 that compelled the holder to fully rehabilitate mines before a closure certificate is issued by the department.
Scope of audit

During the 2009 performance audit, the department reported that they managed 5,906 abandoned mines. Subsequently, the 2021 audit found that the DMRE manage 6,100 D&O mines. The increase in mines is a result of the department’s identification of additional D&O mines. The mines include the following high-risk commodity mines:

- 261 asbestos mines, and
- 2,322 other high-risk commodity mines such as gold, coal and copper.

Prior to the 2009 audit, the department had rehabilitated five asbestos mines. From 2009 to 2021 the department rehabilitated an additional 27 asbestos mines. To date none of the 2,322 other high-risk commodity mines have been rehabilitated.

In addition to the 6,100 mines, the department is also reporting on and managing 1,170 mine openings (referred to as holings), of which 507 were closed by 31 March 2021.

The graph above reflects the progress with the rehabilitation of mines and closure of openings programmes.

The latest audit revealed that the department’s rehabilitation programme has achieved only minor improvements over the past 12 years, with the average
number of mines rehabilitated in a year increasing from 1,67 mines in 2009 to 2,25 mines in 2021.

Below is a summary of the key findings. The full report can be accessed on the Auditor-General of South Africa (AGSA) website (www.aagsa.co.za).

**Strategic and operational planning challenges**

In the 2009 audit, the AGSA found that the department’s rehabilitation efforts had not effectively addressed the environmental and social impact of un rehabilitated abandoned mines, and that the department did not have an approved national strategy or policies and procedures to clearly link rehabilitation objectives to set time frames, priorities and responsibilities.

In this latest audit, the auditors found that the department’s management of the 6 100 abandoned mines and 1 170 mine openings was ineffective and did not address the environmental, social and health impact of unrehabilitated mines within a set time frame.

Between 2009 and 2021, the department focused on rehabilitating the remaining 256 asbestos mines and closing mine openings. Only 27 of these mines were rehabilitated and 507 mine openings were closed.

According to the AG, given the current allocated funding and planned targets, as well as the progress made in the past, “the department is not likely to achieve its objective of having all asbestos mines rehabilitated by 2033 unless it reprioritises”.

Since 2009, the department has approved a national strategy and compiled an implementation plan. However, the implementation plan has not been costed or approved and does not include all the key deliverables in the national strategy. “As a result, certain key initiatives have been delayed or not implemented,” notes the AG. “For example, the National Mine Closure Strategy, which provides for alternative opportunities to repurpose D&O mines instead of using rehabilitation as the only remedy, was not approved more than 11 years after this key deliverable was included in the national strategy. The department still has not developed policies and procedures to implement all key deliverables identified in the national strategy.”
Managing the D&O mines database

In its 2009 audit, the AGSA found that the department did not have an integrated information system to record and report on the status of abandoned mines. As a result of the department’s inadequate capacity, systems and funds, the D&O mines database had not been regularly updated.

The latest audit report reveals that the database contains errors, resulting in data being inaccurate, outdated and incomplete. Maluleke notes that “There were no procedures to maintain and manage the D&O mines database, and this responsibility has not been allocated since 1 April 2020. The database was also not regularly monitored and reviewed once per quarter to ensure that the information was reliable enough to support planning and decision-making.”

The planned handover of the D&O mines database to the department had also been delayed by more than two years. As such, Maluleke explains, “the department did not integrate the D&O mines database with other departmental information systems to ensure that the D&O mines database was efficiently maintained”.

The department is using a manual process to determine whether 2 238 D&O mines have mineral rights or private property ownership, which would potentially reduce the government’s legal liability to rehabilitate these mines. There is also no process and procedure to direct this determination and finalise government’s legal liability for these mines.

Project implementation

The 2009 audit indicated that the department’s organisational structure did not support its objectives to rehabilitate abandoned mines, and the lack of capacity had delayed project implementation.

The latest report reveals that while capacity did not impede the department’s ability to implement the D&O mines programme, the department was not well organised. The AGSA could not determine how effective the actual rehabilitation and closure work was, because the technical information for some projects had not been safeguarded and could not be provided to auditors. There were no processes and procedures to facilitate an economical and efficient rehabilitation. In addition, the
department did not promptly address community challenges that contributed to projects being uneconomically and inefficiently executed.

**Monitoring and maintaining rehabilitation projects**

In 2009, the department did not have the capacity to actively be part of decision-making, monitoring and site inspections for rehabilitation projects. The department had also not allocated funds for post-rehabilitation monitoring activities.

The latest report shows that the department has improved its monitoring, evaluation and reporting on the progress made in rehabilitating D&O mines. However, the AG notes that the department did not always carry these activities out effectively. She says these activities, which were limited to some of the asbestos mines, were done haphazardly.

“The department also did not implement the recommendations included in monitoring reports to address deficiencies. Although there was a specific budget allocated for monitoring activities, it was not based on monitoring programmes and procedures to ensure that rehabilitation was sustainable. Therefore, we could not evaluate whether the current allocated budget was sufficient,” she said.

**Communication and coordination**

The 2009 audit found that there were no communication policies or procedures for rehabilitating abandoned mines, and there were also no formal external communication channels.

In her latest report, Maluleke notes that the intergovernmental government task team on mine closure and water management, which was established to strengthen all communication channels between government departments related to mining in South Africa, did not deal with the D&O mines rehabilitation programme. This was despite one of its key functions being to facilitate and coordinate challenges in mine water management and mine environmental management, including sustainable mine closure options.

The rehabilitation oversight committee, which was established in 2009 to implement a well-coordinated, safe and sustainable D&O rehabilitation programme in South Africa, also did not function effectively. The committee did not meet regularly and
did not track and monitor its resolutions and recommendations to ensure that they were implemented.

**Key recommendations**

Below are some of the interventions Maluleke recommends that the department implement immediately to turn the current situation around:

- Consider the strategic importance of the D&O mines programme within the department’s strategic objectives and current mandate. Priority and funding to manage D&O mines should be key considerations during this process.

- Finalise and adopt the National Mine Closure Strategy. Once this has been done, the department should compile a comprehensive national mine closure policy and an implementation plan that includes opportunities for different end-land use (i.e. options other than complete rehabilitation) to reduce government’s liability to close these mines where possible.

- Determine government’s actual liability in managing the D&O mines. The mines on the D&O mines database must be validated for the department to compile and cost a comprehensive D&O mines implementation plan based on the determined liability of the D&O mines.

- Oversight and intergovernmental coordination committees should be strengthened to improve coordination between different role-players and to track and monitor the swift implementation of the D&O mines programme.

**Conclusion**

“Citizens have a constitutional right to a safe, healthy environment that promotes conservation. The department’s slow progress in dealing with these D&O mines and mine openings leaves unrehabilitated mining sites that often change the natural environment. This takes the form of air pollution from dust or toxic gases, infertile soil and severely degraded water resources that are often devoid of life,” explains Maluleke.
Current illegal mining could contribute to a range of environmental, social, health and safety problems because illegal miners use unsafe mining operations. It also threatens the viability of government’s holing programme, as the illegal miners open previously sealed mine openings.

“In South Africa, unrehabilitated D&O mines are not geographically isolated; rather, they are located close to communities and natural habitats. People who live close to these sites risk exposure to toxic contaminants through the air that they breathe, the food that they eat and the water that they drink. Strengthening the management and rehabilitation of these abandoned mines will safeguard the constitutional rights of the affected communities,” Maluleke concludes.

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Background

What is a performance audit?

A performance audit is an independent audit process that evaluates the measures taken by the management of a state entity (or auditee) to ensure that resources were procured economically and used efficiently and effectively.

It differs from the general reports that the AG tables (such as the 2020-21 Public Finance Management Act (PFMA) general report on the audit outcomes of national and provincial government that was tabled on 8 November 2021), which deal with the outcomes of the annual regularity audit processes. These general reports deal with matters that lay the foundation for proper service delivery, reflecting on the strength of financial and performance management in government. Performance audits, on the other hand, deal with the resource management within specific, strategically important service delivery areas.

This kind of auditing places special focus on citizens and taxpayers, as the main questions asked during the assessments relate to whether government is doing the right thing in the best and least expensive way.

What does managing D&O mines entail?

Managing D&O mines is not about rehabilitation alone. It also includes alternatives such as creating a landscape that can support future uses of the land or transferring liability to existing owners.

The department’s rehabilitation efforts are carried out at two levels:

- Rehabilitation of D&O mine sites – the process of repairing the damage done by mining activities by making the site safe and stable. This process is needed because of the cumulative impact of mine residue deposits and surface deformation on the environment and on the health and safety of communities.

- Closure of mine openings – the process of sealing and closing D&O quarries, mine shafts and trenches that are located close to residential areas and pose an immediate threat of injury to humans and animals.