

FULL DISCLOSURE

The Truth about Water Use Licence Compliance at Mpumalanga Coal Mines

Executive Summary

An assessment of the compliance of eight large coal mining operations in Mpumalanga with their water use licences paints a dismal picture: gross violations and water pollution by the operators, as well as massive failures by the Department of Water & Sanitation and supposedly independent auditors. For these operations, it appears that the regulatory system - from issuance of a water use licence to accountability for non-compliance - has effectively disintegrated. Moreover, instead of ensuring the protection of water resources, companies and independent auditors are complicit in taking advantage of the regulatory breakdown.

Coal mining in the Olifants and Wilge River Catchment Areas

The pollution of South Africa's precious water resources occurs on a particularly egregious scale in areas with high levels of mining activity. The mining of coal is particularly harmful, with acid mine drainage from coal mines polluting surface and groundwater with acid, salts and metals. This, in turn, affects human health,

livestock, crop production and aquatic ecosystems.

On the Mpumalanga Highveld, coal mining has had a devastating impact on the Olifants River Catchment. Water use in that catchment has increased dramatically in recent years due to extraction of coal for electricity production, mining of a variety of other minerals, large-scale irrigation schemes for agriculture, and urban development. This, in turn, has had considerable negative impacts on human health, stemming from water contamination, water shortages, and pollution of air and land. In particular, the Upper Olifants Catchment is characterised by a high density of active and abandoned coal mines, coal fired power stations and acid mine water discharge sites.

The rivers in the Upper Olifants Catchment drain into the Loskop Dam, which is the receiving body of the accumulated impact of coal mining and coal power generation in the Upper Olifants. This concentration of over 650 active and abandoned mines and associated acid mine drainage and mining effluent, alongside eutrophication from waste water treatment facilities (Ashton & Dabrowski, 2011), has resulted in severe degradation of water quality, including groundwater.

The 2013 National Water Resources Strategy published by the DWS identified the Olifants Catchment as "one of South

Africa's most stressed catchments in terms of both water quantity and water quality."

Despite comprehensive research and damning reports about the impacts of coal mining on the Olifants Catchment and the recognition of the threat coal mining poses to water resources in the catchment, the Department of Water and Sanitation (DWS) takes little or no action to stop the pollution, and to hold polluting mining companies responsible. Moreover, given that the DWS has never published its own report on the results of its compliance monitoring and enforcement activities, and that the DWS does not force companies to publish compliance data themselves, it is usually very difficult for the public and affected communities to assess whether mining companies operating in the catchment are in fact complying with the conditions of their water use licences.

What we do know, however, is that mining companies are required by law to obtain and comply with the conditions of a water use licence, and that non-compliance with those conditions is a criminal offence and may lead to the suspension of that water use licence. Monitoring and enforcement of compliance with water use licence conditions, or the absence thereof, is therefore vital to understanding why pollution prevention and control has gone so horribly wrong in the Olifants River Catchment.

"Cultures in all parts of the world acknowledge the importance of water. Water is life. Without it, nothing organic grows. Human beings need water to drink, to cook, to wash and to grow our food. Without it, we will die."

(Mazibuko and Others v City of Johannesburg and Others [2009] ZACC 28)



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Project objectives

This project evaluated eight coal mining companies in the Olifants and Wilge Catchment Areas, questioning the following:

- How the monitoring and independent auditing of compliance with water use licences are undertaken;
- Whether licence holders in fact comply with the conditions of their water use licences; and
- What enforcement action was taken in circumstances where non-compliance was identified.

Methodology

First, we selected 13 large coal mining operations in the Olifants and Wilge River Catchment areas for assessment.

Second, we spent several months collecting copies of water use licences and independent audit reports for the various operations by submitting applications to the DWS under the Promotion of Access to Information Act, 2000. We also requested additional information from the licence holders themselves, like water quality data.

Water use licences issued by the DWS contain a standard requirement for a compliance audit to be undertaken by an independent auditor, and for the results of that audit to be reported to the DWS. Since there seemed to be no compliance monitoring reports produced by the DWS itself, the independent audit reports

should, in theory, give a clear picture of a licence holder's compliance with their water use licences.

Third, we reviewed the licence conditions and the reports produced by independent auditors on compliance with the licence conditions in respect of the eight coal mining operations.

Fourth, we presented the eight companies with the results of our findings and conclusions in relation to the mining operations under their control, and requested comment from them.

With the exception of Glencore Operations SA (Pty) Ltd who refused to provide their water quality data, all licence holders in our assessment sample co-operated in a satisfactory manner and granted access to most of the requested information.

The eight coal mining operations for which both water use licences and independent audit reports could be obtained, and which were therefore assessed for this report, are:

- The Tweefontein South (at the time of assessment, owned by Glencore Operations South Africa (Pty) Ltd)
- Manungu Colliery (Tshedza Mining Resources (Pty) Ltd)
- Leeuwpan Coal Mine (Exxaro Resources Limited)
- Khutala Colliery (South32 SA Coal Holdings (Pty) Ltd)
- Vanggatfontein Colliery (Wescoal Mining (Pty) Ltd)
- Isibonelo Colliery (Anglo American plc)
- Goedgevonden Colliery (Glencore Operations South Africa (Pty) Ltd)
- Kangala Colliery (Universal Coal Development 1 (RF) (Pty) Ltd)

We were unable to obtain audit reports for five other operations from the DWS, as the DWS had not received these from the companies in question. These operations were therefore **not** assessed for this report **despite attempts to do so:**

- Wolvekrans (WUL issued in the name of BHP Billiton Energy Coal of South Africa (Pty) Ltd)
- Kriel (WUL issued in the name of Anglo Operations (Pty) Ltd)
- Optimum (WUL issued in the name of Optimum Coal Mine (Pty) Ltd)
- Koornfontein (WUL issued in the name of Koornfontein Mines (Pty) Ltd)
- Mooiplaats (WUL issued in the name of Coal of Africa (Pty) Ltd)

KEY FINDINGS

The outcome of our assessment of the eight coal mines for which reports could be obtained paints a dismal picture of the state of compliance with water use licences. It also lays bare the massive failure by coal mining companies, the DWS, and supposedly independent environmental auditors, to ensure the protection and sustainability of our water resources.

Examples of these key findings in relation to the eight companies assessed are provided in the full report.

DWS

The DWS appears to be in a state of complete institutional and regulatory breakdown.

- It appears to be unable to issue licences with appropriate conditions within a reasonable time, resulting in the assessed companies proceeding without authorisation and on their own terms, without any regulatory oversight.
- By the time licences are issued, companies often regard conditions of their licence pertaining to infrastructure that has already been established, as irrelevant or not applicable. This would include requirements such as the lining of dirty water dams, and the implementation of commitments and undertakings that the applicants made in support of their applications. In instances where companies started work without a licence – a criminal offence - the DWS took no action against the companies.
- When licences are issued, these become a moving target, with many generic, inappropriate licence conditions and inadequate monitoring requirements.
- Companies also use ongoing amendment applications – which the DWS is extremely slow to process - to exacerbate the state of flux that makes monitoring and enforcement very difficult.
- Despite the massive impacts and risks coal mining poses to water resources, almost none of the water use licences make water treatment – and financial

provision to fund water treatment – an upfront requirement. Financial provision for mining rehabilitation administered by the Department of Mineral Resources is also supposed to include water impacts, but very few companies provide for post closure management of water in the DMR-administered provisions. As a result, the state and the public are bearing the full risk of these impacts.

- The DWS also appears to be unable to monitor compliance, or to respond to flagrant misrepresentations made by external auditors, and unable to respond to violations which are patently apparent from routine submissions made by licence holders themselves. Even repeat violations reported by the licence holders go unnoticed. No evidence of WUL compliance monitoring by DWS could be found in our assessment sample. In fact, all indicators point to a total absence of compliance monitoring and enforcement by DWS.
- DWS never approves or rejects the mandatory Integrated Water and Waste Management Plan (IWWMP) or the Rehabilitation Strategies and Implementation Programmes (RSIP). The licence holders accordingly change these documents at their own discretion to incorporate changes to their original commitments and undertakings.
- DWS also never respond to water quality data or other reports submitted in accordance with the WUL conditions, even if the reports demonstrate detrimental impacts of the licence holder on the receiving water resources.
- Because DWS takes no action in response to violations reported for the companies assessed, licence holders simply regard DWS' silence as condonation of the reported non-compliance.

Coal mining companies

- Companies tend to interpret conditions in a way that limits measures to be taken, and to ignore any requirements not spelled out, even if those are essential for protection of water resources.

- Companies unilaterally deviate from commitments made in their licence applications.
- Not one of the companies in our assessment, sample monitor the quality of water leaving their sites during rainfall conditions. The river monitoring undertaken by some, are done during dry weather conditions, which are not representative of the pollutant load entering the rivers during rainfall events.
- We could not find one “approved IWWMP or RSIP, despite WUL conditions requiring the annual submission of these documents to DWS for approval. The DWS’ failure to respond to the annual submissions of these reports is abused by the licence holders, who constantly change their original undertakings. The companies then regard these un-approved versions as the “official” plans and strategies.
- Mandatory submissions made by the licence holders to the DWS during the period under review often reflected significant non-compliance with licence conditions and other statutory requirements.

Independent auditors

The WULs include as a standard condition the requirement to undertake an external WUL compliance audit. The audit reports must be submitted to the DWS, and must also be published on the websites of the licence holders (being an “environmental authorisation” for the purposes of interpreting Chapter 5 of the National Environmental Management Act, 1998). These external audit reports are intended to provide accurate compliance reflections of the licence holders.

In the independent audit reports assessed, we found many unsubstantiated or inaccurate conclusions, and failures to report pollution incidents, deviation from pollution monitoring and violations of licence conditions.

- With the exception of one of the auditing firms, none of the auditors complied with the minimum statutory requirements for such audits.

- Auditors often give a company a status of “compliant” merely based on the fact that monitoring is undertaken. The fact that the monitoring data reveals non-compliance with the water quality requirements imposed by the WUL is not revealed. Deviation from the prescribed monitoring locations and/or variables to be monitored are also often excluded from the audit reports.
- Auditors do a “walk-through” visual assessment on the day of the audit, and reach compliance conclusions based on very limited visual information, and in some instances even without records, and on aspects that require the analysis of technical and scientific data. For example, most auditors confirm that storm water leaving the mining

sites is not contaminated, based on visual observations during dry weather conditions and without any reference to water quality monitoring results taken during moderate rainfall events.

- Auditors give a “compliant” status for submitting required plans, without assessing the effective implementation of those plans.
- Auditors do not audit general legal requirements such as taking reasonable measures to prevent pollution. They usually mark these requirements as “take note” issues, instead of highlighting negligent and intentional pollution of water resources as violations of section 151(i) and (j) of the National Water Act, 1998.

It appears that, for the coal mining operations assessed, the regulatory system, from issuance of a water use licence to accountability for non-compliance, has effectively disintegrated.

Moreover, instead of ensuring the protection and preservation of our most precious and life-giving resource, companies and supposedly independent environmental auditors are complicit in taking advantage of this regulatory breakdown.

KEY RECOMMENDATIONS

Our full report makes detailed recommendations on the proper interpretation and application of water use licence conditions as well as recommendations aimed at improving overall compliance and monitoring. These include but are not limited to the following

- That the DWS or the Portfolio Committee on Water and Sanitation urgently review the resources and capacity of the DWS to fulfil its regulatory function, so as to enable it to issue appropriate licences within a reasonable time period, ensure compliance monitoring, meaningfully review, external audit reports, and take enforcement action;
- That WULs are issued in draft format to facilitate a once-off review opportunity by the WUL holder prior to issuing the final WUL. The DWS’ response to any amendment requests made during this review process must be clear and unambiguous. If an amendment request is not granted, it must be expressly rejected, with reasons. This will eliminate the current situation where obvious errors are used to submit amendment applications, allowing companies to continue as if no valid licence exists.
- That the DWS introduce a standard condition in the water use licence that enables the DWS to commission its own independent water use licence audit at the cost of the licence holder. In the event that an audit report does not meet legislative and regulatory requirements, this condition could be invoked in order to obtain an external independent report and deter the current conduct of environmental auditors;
- That the chief executive officer of the licence holder certify the external audit reports as a true and accurate reflection of the status quo. Should this transpire to be a false declaration, the DWS should institute legal proceedings against both the CEO and the external auditor in their personal capacities (as provided for by section 154 of the NWA and section 34 of NEMA). One or two such precedents are likely to bring about a rapid and dramatic improvement in water management in the mining sector; and
- That the newly established Environmental Assessment Practitioners’ Association of South Africa consider whether their registration requirements, code of conduct and powers can be used to provide effective quality control over independent audit of water use licences, and oversight over the auditors who conduct these audits.



CONCLUSION

Based on the findings of this report it is evident that various institutions and actors must be challenged to reform the way water is regulated and used in South Africa. South Africa faces a grave crisis in relation to its water resources, and the pollution of our scant water resources, particularly in light of the radical changes predicted for our climate, poses massive risk for present and future generations. We therefore call on legislators, regulators, industry, financiers and investors to use their spheres of influence to take immediate action for meaningful reform.