



Tax Deductibility of mining rehabilitation expenditures – Sishen Iron Ore Company (Pty) Ltd v Commissioner for the South African Revenue Service

by K. Thambi

Affiliation:

Faculty of Law, University of Johannesburg,
South Africa

Correspondence to:

K. Thambi

Email:

kiyashat@uj.ac.za

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ORCID:

K. Thambi

<https://orcid.org/0000-0003-4456-3027>

Abstract

Environmental rehabilitation has increasingly become a central concern in the regulatory and fiscal landscape governing South African mining operations. A key issue within this domain is the extent to which mining entities may claim tax deductions for expenditures incurred in fulfilling their environmental rehabilitation obligations. The Supreme Court of Appeal's decision in *Sishen Iron Ore Company (Pty) Ltd v Commissioner for the South African Revenue Service* [2025] ZASCA 16 addresses pivotal questions regarding the tax treatment of such expenditures. The judgment offers authoritative clarification on the interpretation of the Income Tax Act 58 of 1962—specifically sections 11(a), 11(c), and 36(11)(e)—as they pertain to mining activities and the environmental responsibilities imposed under the Mineral and Petroleum Resources Development Act 28 of 2002. This commentary critically examines the multifaceted implications of the Sishen ruling, highlighting the intersection of statutory interpretation, operational realities, and environmental accountability within South Africa's mining sector.

Keywords

Tax deductions, mining rehabilitation, capital expenditure, mining right obligations, Sishen, MPRDA, South Africa mining law

Introduction

In the matter of *Sishen Iron Ore Company (Pty) Ltd v Commissioner for the South African Revenue Service*, the Supreme Court of Appeal (SCA/the court) addressed the deductibility of environmental rehabilitation expenses under Section 36(11)(e) of the Income Tax Act 58 of 1962 (the Income Tax Act). The appellant, Sishen Iron Ore Company (SIOC), sought to claim tax deductions for expenditures incurred in terms of a mining right pursuant to the Mineral and Petroleum Resources Development Act (MPRDA), specifically related to environmental rehabilitation (Sishen, 2025). The SCA ruled that such expenditures are deductible, provided they are directly linked to the mining operations and comply with the provisions of the MPRDA (Sishen, 2025). This judgment reaffirms the statutory right of mining corporations to obtain tax relief for verifiable environmental rehabilitation expenditures, thereby reinforcing the 'polluter pays' principle embedded within South African environmental jurisprudence.

The SCA ruled in favour of SIOC, holding that:

- “Expenditure incurred to fulfil a mining right obligation under the MPRDA is directly related to mining operations.
- Rehabilitation expenses are inextricably linked to mining operations, forming part of the cost of compliance with statutory conditions under which mining rights are granted.
- Section 36(11)(e) should be liberally interpreted to give effect to the purpose of the provision: to allow deductions for costs incurred in conducting sustainable mining in compliance with South African environmental law” (Sishen, 2025).

Moreover, the Court emphasised that interpreting the Income Tax Act in isolation from the MPRDA and National Environmental Management Act 107 of 1998 (NEMA) would be legally incorrect and undermine legislative coherence (Sishen, 2025).

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Background

The global shift toward heightened environmental awareness, catalysed by the Brundtland Report on sustainable development (Brundtland, 1987), has prompted a wave of policy interventions aimed at promoting environmental accountability. These responses have culminated in the establishment of comprehensive legal frameworks and regulatory guidelines focused on environmental protection and rehabilitation (Van Wyk, Haagner, 2025). Within this evolving landscape, the South African mining sector has come under increasing scrutiny for its perceived inadequacies in addressing environmental concerns and the socio-economic impacts on surrounding communities. As a capital-intensive industry characterised by substantial start-up costs and complex regulatory obligations, mining operations face persistent challenges in reconciling economic imperatives with sustainable development objectives (Thambi, 2018). The emergence of sustainability as a guiding paradigm has further foregrounded the role of normative values in shaping mine closure strategies. As such, a comparative study conducted in Australia, Foran et al. (2024) identified two core values underpinning effective mine closure: the pursuit of net-positive outcomes and the equitable distribution of responsibility, risk, and opportunity throughout the closure process (Marais, 2025).

Mining companies typically incur a broad spectrum of expenditures in the course of their operations, encompassing both current and capital outlays. Current expenditures are generally deductible under the general deduction formula outlined in the Income Tax Act, while capital expenditures are subject to specific provisions that allow for immediate deductions, particularly in relation to prospecting and incidental activities (Clegg, 2018). The capital expenditure regime is designed to accommodate the unique financial structure of the mining sector, which is characterised by substantial upfront investment and delayed revenue generation (Ledwaba, Montjane, 2024). Notably, amendments introduced through the Taxation Laws Amendment Bill of 2016 extended the scope of section 36(11)(e) to include capital expenditures incurred for infrastructure development mandated by the Mineral and Petroleum Resources Development Act 28 of 2002 (TLAB, 2016). These legislative developments reflect a broader policy objective to incentivise sustainable investment in the mining industry by aligning fiscal relief mechanisms with regulatory obligations.

Furthermore, recent legislative developments underscore a broader policy commitment to incentivising sustainable investment within the mining sector by harmonising fiscal relief mechanisms with environmental regulatory obligations. Section 38(1)(d) of the MPRDA stipulates that mining permit holders are required, insofar as reasonably practicable, to rehabilitate land disturbed by mining activities to its natural or predetermined state, or to a land use consistent with sustainable development principles (MPRDA, 2002). Complementing this, the NEMA imposes a statutory duty on holders of prospecting or mining rights to remediate environmental damage, pollution, or ecological degradation resulting from mining operations. In fulfillment of these obligations, mining companies must make financial provision for rehabilitation, which may take the form of financial guarantees, direct cash payments to a Department of Mineral Resources and Energy (DMRE) account, or contributions to special purpose vehicles such as rehabilitation trusts or companies.

In this regard, the Income Tax Act provides tax relief for such contributions, allowing deductions for cash payments made to approved mining rehabilitation funds. Section 37A of the Act governs the tax treatment of these entities, stipulating that the sole purpose of the rehabilitation company or trust must be the remediation of environmental impacts associated with mine closure, including latent and residual effects (the Income Tax Act).

While the overarching aim of rehabilitation practices is to restore disturbed land to a sustainable and productive condition, considerable ambiguity persists regarding the specific requirements of such rehabilitation and the delineation of accountability (Van Wyk, Haagner, 2025). A key complexity in closure and sustainability planning lies in the necessity for rehabilitation objectives to align with broader national and regional Integrated Development Plans (IDP). Despite this, the rehabilitation goals articulated in Environmental Management Plans (EMP) and Closure Plans are typically formulated and costed by mining companies themselves, based on internal corporate commitments and their interpretation of sustainable post-mining land use (Van Wyk, Haagner, 2025). Although section 38(1) of the MPRDA mandates the restoration of land to its natural or predetermined state, it also emphasises that such rehabilitation must be practicable and informed by a public participation process to determine the intended end-use (MPRDA, 2002). The lack of alignment among monitoring programmes further complicates the realisation of sustainability outcomes, often resulting in delays (Van Wyk, Haagner, 2025). Moreover, despite growing awareness within the mining sector regarding rehabilitation responsibilities, the absence of a standardised framework or centralised database for evaluating rehabilitation quality continues to hinder effective decision-making and the successful reintegration of mined land into productive socio-economic systems (Van Wyk, Haagner, 2025).

The problem

The real problem lies in the intersection of fiscal policy, environmental regulation, and operational accountability. Moreover, the lack of coherence between tax law and environmental law, resulted in uncertainty where the Commissioner for the South African Revenue Service (CSARS) disallowed deductions for essential compliance costs. Meanwhile the Income Tax Act provides mechanisms for tax relief, the stringent compliance conditions, regulatory overlap, and the potential for fund misuse present significant challenges. Addressing these issues requires clearer guidance from CSARS, stronger governance of rehabilitation entities, and better integration of fiscal and environmental planning frameworks to support sustainable mine closure and land reintegration.

Context to the Sishen Iron Ore case

In the matter of SIOC v Commissioner for the South African Revenue Service, the Supreme Court of Appeal addressed the deductibility of environmental rehabilitation expenses under Section 36(11)(e) of the Income Tax Act. The appellant, SIOC, sought to claim tax deductions for expenditures incurred in terms of a mining right pursuant to the Mineral and Petroleum Resources Development Act (MPRDA), specifically related to environmental rehabilitation (Sishen, 2025).

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Facts

SIOC, a major mining operator in the Northern Cape, incurred substantial expenditure towards environmental rehabilitation in the course of its mining operations. These expenditures included costs associated with the relocation of the Dingleton township and the Sishen Western Expansion Project (SWEP) infrastructure, legal expenses related to the relocation of Dingleton residents, and the relocation of a 66 kV power line supplying electricity to mine equipment. These costs were part of its obligations under the MPRDA and were captured in its Environmental Management Plan (EMP). SIOC attempted to deduct these expenditures from its taxable income in terms of section 36(11)(e) of the Income Tax Act. CSARS disallowed the deductions, arguing that the expenses did not qualify under the relevant section as they were not “capital expenditure directly incurred in respect of mining operations”. This led to the appeal. (Sishen, 2025).

The primary issues before the court were:

- “Whether the relocation expenditures for Dingleton and SWEP infrastructure were deductible under section 36(11)(e) of the Income Tax Act.
- Whether the costs associated with the relocation of the 66 kV power line were deductible under sections 11(a) or 36(11)(e).
- Whether the legal expenses incurred for assisting Dingleton residents were deductible under section 11(c).
- Whether interest and penalties imposed by CSARS were justified under section 89quat of the Income Tax Act” (Sishen, 2025).

Nuanced judgment delivered by the SCA, addressing the following issues:

Relocation expenditures

The taxpayer, Sishen Iron Ore sought to deduct relocation expenditures under sections 15(a), 25, and 36(7C), read with section 36(11)(e) of the Income Tax Act, which permits deductions for capital expenditure incurred “in terms of a mining right” other than in respect of infrastructure. Alternatively, Sishen argued that the relocation costs constituted revenue expenditure, forming part of its operational costs associated with open-cast mining, or compensation obligations under section 54 of the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA), and were therefore deductible under section 11(a) (Sishen, 2025). The Commissioner disputed the deductibility, contending that the expenditure was capital in nature and not incurred in terms of the mining right. However, the Supreme Court of Appeal held that the relocation costs related to the Dingleton community and SWEP infrastructure were indeed deductible under section 36(11)(e), as they were incurred pursuant to the mining right and were essential for the continuation of mining operations (Sishen, 2025; Tax Act, 1962). The court emphasised that such expenditures are not merely compliance costs but integral to the exercise of mining rights (Sishen, 2025).

The 66 kV power line relocation

The relocation of the 66 kV power line, which forms part of the operational infrastructure supplying electricity to Sishen’s mining equipment, was central to the continuation of its mining activities. Sishen claimed the associated expenditure as capital expenditure in

respect of “mine equipment” under section 36(11)(a) of the Income Tax Act. In the alternative, it argued that the expenditure qualified as revenue in nature under section 11(a), or as a depreciation allowance under section 11(e). A key legal challenge arose from the fact that the term “mine equipment” is not explicitly defined in the Act, creating interpretive uncertainty (Sishen, 2025).

The CSARS contended that the expenditure related to infrastructure, which is expressly excluded from the scope of section 36(11)(e), and that being capital in nature, it could not be deducted under section 11(a). Furthermore, CSARS argued that section 11(e) was inapplicable, as the expenditure did not relate to wear and tear but rather to relocation costs incurred to access previously sterilised mining areas (Sishen, 2025).

The SCA ultimately upheld the deductibility of the 66 kV line relocation costs under section 36(11)(a), alternatively under section 11(a), on the basis that the power line was integral to the operation of mine equipment and essential for the extraction of ore. The Court emphasised that the expenditure was not merely incidental but directly linked to the income-generating activities of the mine. Each relocation of the line was necessitated by the movement of mining operations, thereby constituting an activity closely associated with the method or process of mineral extraction. Accordingly, the expenditure was deemed deductible as part of the operational framework supporting Sishen’s mining trade (Sishen, 2025).

Legal expenses

Section 11(c) of the Income Tax Act permits the deduction of legal fees incurred during the year of assessment, provided such expenses arise from claims, disputes, or legal actions that occur in the ordinary course of a taxpayer’s trade (Tax Act, 1962). However, the Act does not define the terms “claim,” “dispute,” or “action at law,” which introduce interpretive ambiguity. Furthermore, the provision is subject to two key limitations: the legal expenses must not be capital in nature, and they must not relate to claims for damages or compensation where the settlement of such claims would not qualify for deduction under section 11(a) (Tax Act, 1962).

The taxpayer, Sishen Iron Ore sought to deduct legal fees paid to practitioners who assisted residents of Dingleton with relocation-related legal advice. Sishen argued that these expenses were incurred in the course of its mining trade and thus deductible under section 11(c). The central issue was whether the legal services bore a sufficiently close connection to the company’s income-producing activities. The Supreme Court of Appeal held that the legal fees did not satisfy the requirements of section 11(c), as they were not incurred in the direct production of income and lacked a proximate link to Sishen’s core mining operations. Consequently, the deduction was disallowed (Sishen, 2025).

Interest and penalties

The SCA overturned the understatement penalties levied by the CSARS, concluding that they were not substantiated by the facts of the case. With respect to the interest imposed under section 89quat(2) of the Income Tax Act, the Court remitted the matter to CSARS for reconsideration. It directed the revenue authority to assess whether the tax shortfall may have been influenced by external factors beyond the control of SIOC, thereby necessitating a more nuanced evaluation of the circumstances surrounding the understatement (Sishen, 2025).

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Strategic and operational implications of the Sishen judgment

From an operational standpoint, Sishen Iron Ore Company has encountered significant logistical and infrastructure-related constraints that have adversely affected its production capacity and financial performance. These disruptions have had cascading effects, not only for SIOC but also for key downstream stakeholders, including Transnet and regional suppliers, thereby exposing systemic vulnerabilities in the mining value chain.

Strategically, the Sishen case has illuminated the pressing need for policy reform within South Africa's mining regulatory framework. The legal complexities and operational challenges arising from the interpretation of the Mineral and Petroleum Resources Development Act (MPRDA) have reignited debates around the adequacy of the current legislative environment. In particular, the case contributes to broader discussions on resource nationalism and the transformation agenda, especially regarding the balance between state custodianship and private sector participation in mineral wealth allocation. The judgment may serve as a catalyst for renewed calls to amend the MPRDA to enhance legal certainty and investment stability.

From a technical and economic perspective, the long-term viability of Sishen has come under scrutiny. The legal risk premium now associated with the asset has prompted a reassessment of capital allocation strategies, particularly in relation to brownfield expansion and high-grade ore recovery. Nevertheless, the clarity provided by the judgment may offer a stabilising effect, enabling the realignment of technical planning and the restoration of investor confidence.

Importantly, the ruling affirms the tax deductibility of environmental rehabilitation expenditures under the Income Tax Act, reinforcing the principle that such obligations are not merely regulatory but constitute legitimate business expenses. It underscores the necessity for mining companies to maintain compliance with the MPRDA to ensure the recognition of these costs for tax purposes (Myburgh, Cronje, 2025). Furthermore, the judgment reiterates the enduring responsibility of mining entities to fulfil their environmental obligations, even beyond the cessation of active operations (Sishen, 2025).

The legal and policy implications of the Sishen case

The legislative context and relevant statutes pertaining to this decision are:

- Income Tax Act, Section 36(11)(e): Provides for deduction of capital expenditure in mining operations.
- MPRDA, especially Sections 41 and 96: Requires mining companies to conduct environmental rehabilitation and submit financial provision plans.
- NEMA (Act 107 of 1998): Governs environmental impact assessment and rehabilitation principles under Section 24.

The SIOC judgment is of considerable significance for both legal and operational dimensions of the mining sector.

- Clarification of deductibility criteria: The ruling provides authoritative guidance on the interpretation of sections 11(a), 11(c), and 36(11)(e) of the Income Tax Act, particularly in relation to expenditures incurred in the course of mining

operations and in fulfilment of environmental obligations.

- Integration of environmental compliance into tax law: The judgment affirms that environmental obligations arising from mining rights are not peripheral but are embedded within the operational and fiscal framework of mining enterprises. This integration reflects a maturing alignment between environmental and tax law.
- Precedential value for future disputes: The decision sets a precedent for the tax treatment of expenditures related to environmental compliance, offering a framework for future adjudication in similar contexts.
- Recognition of environmental costs as core business expenditure: By affirming the deductibility of post-closure rehabilitation and related environmental costs, the Court recognised these as essential, income-producing expenditures rather than discretionary or ancillary obligations.
- Incentivising corporate environmental responsibility: The allowance of tax deductions for rehabilitation-related costs serves as a fiscal incentive for mining companies to proactively plan for environmental restoration, thereby reinforcing the principle of environmental stewardship through the tax system.
- Implications for SARS policy and interdepartmental coordination: The judgment underscores the need for greater consistency and transparency in SARS's treatment of rehabilitation fund deductions. It also highlights the importance of harmonising regulatory approaches between the Department of Mineral Resources and Energy (DMRE) and SARS to ensure coherent policy implementation.
- In sum, this decision represents a critical step toward the long-advocated integration of environmental and fiscal governance in the mining sector. While it resolves key areas of legal uncertainty, it also exposes ongoing challenges—particularly the lack of transparency and oversight in the administration of rehabilitation funds. These gaps underscore the need for robust regulatory frameworks and public accountability mechanisms to ensure that environmental commitments are both credible and enforceable.

Unintended consequences of the Sishen case

While the SCA provides much-needed clarity on the deductibility of mining-related expenditures—particularly those associated with the relocation of communities and infrastructure under section 36(11)—it simultaneously introduces new interpretive complexities. Legal and tax experts have cautioned that the judgment may blur the traditional distinctions between capital and revenue expenditure, especially in the context of the interplay between sections 11(a), 15(a), and 36(11) of the Income Tax Act (Myburgh, Cronje, 2025).

As a result, mining companies are now faced with heightened compliance demands. There is an increasing need to ensure that Mine Works Programmes (MWP), legal obligations, and financial reporting frameworks are meticulously aligned to demonstrate that such expenditures are “necessary and indispensable” to the conduct of mining operations. This evolving standard not only raises the evidentiary threshold for tax deductibility but also contributes to increased administrative and legal complexity in tax planning and audit preparedness.

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Conclusion

The Supreme Court of Appeal's ruling in *Sishen Iron Ore Company (Pty) Ltd v CSARS* [2025] represents a landmark moment in the evolving relationship between tax law, environmental governance, and mineral rights regulation in South Africa. By affirming the deductibility of key expenditures—including those related to infrastructure relocation and community resettlement—the judgment provides critical clarity on the application of sections 11(a), 11(c), and 36(11) of the Income Tax Act. This clarity is particularly timely, given the 9.6% decline in mining sector investment in 2024 (Myburgh, Cronje, 2025) and may serve as a fiscal stimulus for capital expenditure in an increasingly risk-sensitive industry.

Importantly, the judgment reinforces the principle that environmental rehabilitation obligations are not merely regulatory burdens but tax-recognisable business expenses—integral to the lawful and sustainable operation of mining enterprises. This recognition strengthens the alignment between fiscal policy and environmental stewardship, yet also raises the bar for compliance, requiring mining companies to demonstrate that such expenditures are “necessary and indispensable” to their trade. However, the ruling also exposes persistent tensions surrounding the interpretation of the MPRDA, especially in relation to mineral rights and ownership structures. These tensions have historically contributed to legal uncertainty and operational instability, and the *Sishen* case is likely to influence future judicial and legislative approaches to the MPRDA.

Ultimately, this case serves as more than a legal precedent—it is a lens through which the structural strengths and vulnerabilities of South Africa's mining landscape are revealed. It underscores the need for coordinated reform across legal, fiscal, and environmental domains. Addressing the challenges highlighted by this judgment will require collaborative engagement among regulators, industry stakeholders, and policymakers to ensure a mining sector that is both profitable and sustainable. Moreover, the case contributes to broader debates on resource nationalism and transformation, particularly regarding the balance between state and private interests in mineral wealth allocation. As such, it may catalyse renewed calls for legislative clarity and targeted amendments to the MPRDA to prevent similar disputes and promote long-term sectoral stability.

References

- Centre for Environmental Rights (CER). 2018. “Tackling the transparency of mine rehabilitation in South Africa.” <https://www.mining-technology.com/features/tackling-transparency-mine-rehabilitation-south-africa/mining-technology.com> [Accessed 9 June 2025].
- Fincor. 2022. Mining rehabilitation of a company or trust: deductibility of amounts paid and compliance with Section 37A of the Income Tax Act – Part 1 of 2. 2022. <https://fincor.co.za/mining-rehabilitation-of-a-company-or-trust-deductibility-of-amounts-paid-and-compliance-with-section-37a-of-the-income-tax-act-part-1-of-2/> [Accessed 10 June 2025].
- Hertog, D. 2023. Accelerated Capital Expenditure Allowances: Does it Apply to Contract Miners? <https://law.uct.ac.za/mineral-law/articles/2023-05-30-accelerated-capital-expenditure-allowances-does-it-apply-contract-miners> [Accessed 18 June 2025].
- Ledwaba, S., Montjane, J. 2024. *Capability statement 2024*. <https://www.granthornton.co.za/insights2/mining-tax--cit/> [Accessed 11 June 2025].
- Mandlana, W. 2017. New tax measures to curb abuse of mining rehabilitation funds are a missed opportunity. <https://bowmanslaw.com/insights/new-tax-measures-curb-abuse-mining-rehabilitation-funds-missed-opportunity/> [Accessed 11 June 2025].
- Marais, L. 2025. Planning for post-mining economies: Misconceptions and opportunities. *Journal of the Southern African Institute of Mining and Metallurgy*, vol. 125, no. 4. pp. 217–224.
- Myburgh, A., Cronje, E. 2025. “Supreme Court of Appeal boost for Mining tax deductions” <https://www.mondaq.com/southafrica/income-tax/1594958/supreme-court-of-appeal-boost-for-mining-tax-deductions> [Accessed 1 June 2025].
- Southern African Legal Information Institute. 2025. *Sishen Iron Ore Company (Pty) Ltd v Commissioner for the South African Revenue Service* [2025] SASCA 16; ALL SA 350 (SCA), <https://www.saflii.org/za/cases/ZASCA/2025/16.html> [Accessed 7 June 2025].
- South Africa. 1962. Income Tax Act, 58 of 1962. Sections 11(a), 11(c), 36(11)(e), 36(7C), section 89quat.
- South Africa. 2002. Mineral Petroleum Resource Development Act, 28 of 2002. Sections 41 and 96.
- South Africa. 1998. National Environmental Management Act 107 of 1998. Section 24.
- Van Blerck, M. 1992. Mining Tax in South Africa. 2nd ed. Rivonia, South Africa: Taxfax CC page 12-12.
- Van Wyk, SJ., Haagner, A.S.H. 2025. A review of mine land rehabilitation outcomes: Culture, procurement and practice. *Journal of the Southern African Institute of Mining and Metallurgy*, vol. 125, no. 4. pp. 209–216. ◆



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