

DEPARTMENT OF ENVIRONMENTAL AFFAIRS

NO. 667

17 MAY 2019

**NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998
(ACT NO. 107 OF 1998)**

**PROPOSED REGULATIONS PERTAINING TO FINANCIAL PROVISIONING FOR THE
REHABILITATION AND REMEDIATION OF ENVIRONMENTAL DAMAGE CAUSED BY
RECONNAISSANCE, PROSPECTING, EXPLORATION, MINING OR PRODUCTION OPERATIONS**

I, Nomvula Paula Mokonyane, Minister of Environmental Affairs, hereby give notice of my intention to make regulations pertaining to the financial provisioning for reconnaissance, prospecting, exploration, mining or production operations under sections 44(aE), (aF), (aG), (aH) read with sections 24(5)(b)(ix), 24(5)(d), 24N, 24P and 24R of the National Environmental Management Act, 1998 (Act No. 107 of 1998) in the Schedule hereto.

Interested and affected parties are invited to submit within 45 days of the date of the publication of this notice in the *Gazette*, written representations or objections to this notice to the following address:

By post to: Department of Environmental Affairs
The Director-General
Attention: Ms Dee Fischer
Private Bag X447
PRETORIA
0001

By hand at: Reception, Environment House, 473 Steve Biko Road, Arcadia, Pretoria.

By e-mail: dfischer@environment.gov.za

Any inquiries in connection with the notice can be directed to Ms Dee Fischer at 012 399 8843.

Comments received after the closing date will not be considered.



**NOMVULA PAULA MOKONYANE
MINISTER OF ENVIRONMENTAL AFFAIRS**

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CHAPTER 1

DEFINITIONS, PURPOSE AND APPLICATION OF THESE REGULATIONS

Definitions

1. In these Regulations, any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned, and unless the context indicates otherwise—

“annual rehabilitation plan” means the plan contemplated in regulation 6(2)(a) of these Regulations;

“applicant” means a person who applies for or requires—

(a) a reconnaissance permission, reconnaissance or mining permit or a prospecting, exploration, mining or production right in terms of the Mineral and Petroleum Resources Development Act, 2002; or

(b) consent in terms of section 11 or section 102 of the Mineral and Petroleum Resources Development Act, 2002 relating to a reconnaissance permission, reconnaissance or mining permit or a prospecting, exploration, mining or production right; or

(c) a renewal of a permit or right in terms of section 18, 24, 27, 81 or 85 respectively of the Mineral and Petroleum Resources Development Act, 2002;

“audit” means a review of the scientific and engineering acceptability of the measures and the adequacy of related costs associated with complying to the provisions of these Regulations;

“auditor” means a suitably qualified independent person or persons responsible for undertaking the audit, which person must be registered with the appropriate professional body;

“closure certificate” means the certificate contemplated in section 43 of the Mineral and Petroleum Resources Development Act, 2002;

“CPI” means the consumer price index as published by Statistics South Africa from time to time;

“effective date” has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

“Environmental Impact Assessment Regulations” means the regulation published in terms of sections 24(5) and 44 of the Act;

“environmental risk assessment report” means an assessment and report contemplated in regulation 6(2)(c) or 5(3) of these Regulations;

“exploration area” has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

“exploration operation” has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

“final rehabilitation, decommissioning and mine closure plan” means a plan contemplated in regulation 6(2)(b) of these Regulations;

"granting date" means the date on which the recommendation to issue a permission, right or permit is approved by the Minister in terms of the Mineral and Petroleum Resources Development Act, 2002;

"holder" means the holder of an old order right, a reconnaissance permission, a reconnaissance or mining permit or a prospecting, exploration, mining or production right or any consent for such permission, permits or rights issued in terms of section 11 or 102 of the Mineral and Petroleum Resources Development Act, 2002, and for which no closure certificate has been issued;

"incident" means an unplanned and unusual event which could include an act of God that may cause environmental damage;

"Independent" in relation to specialist or auditor conducting tasks identified in these Regulations, means that—

- (a) such specialist or auditor has no business, financial, personal or other interest in undertaking such tasks excluding normal and fair remuneration for work performed in connection with such tasks; or
- (b) there are no circumstances that may compromise the objectivity of that specialist or auditor in performing such tasks; or
- (c) in the case of the oil and gas sector, such specialist or specialist team may be from a parent or affiliate company;

"latent environmental impacts" means impacts which are existing but not yet developed and may manifest post closure;

"Mineral and Petroleum Resources Development Act, 2002" means the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002);

"mining work programme" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002 and for purposes of references to reconnaissance and exploration means a reference to the reconnaissance work programme or exploration work programme;

"mining area" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

"mining operation" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

"Minister" in the context of these Regulations means the Minister responsible for mineral resources;

"mitigate" means to alleviate, reduce or make less severe;

"parent or affiliate company" refers to any company that controls or is controlled by the applicant or holder including by having the power to materially influence the management of such company;

"post closure" means the period after a closure certificate is issued in terms of the Mineral and Petroleum Resources Development Act, 2002;

"production area" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

"production operation" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

"prospecting area" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

"prospecting operation" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002;

"reconnaissance operation" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002 and for purposes of these Regulations is limited to reconnaissance when it includes seismic activities;

"reconnaissance permission" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002 and for purposes of these Regulations is limited to reconnaissance when it includes seismic activities;

"reconnaissance permit" has the meaning assigned to it in section 1 of the Mineral and Petroleum Resources Development Act, 2002 and for purposes of these Regulations is limited to reconnaissance when it includes seismic activities;

"rehabilitate" means to restore to the approved sustainable end state of land;

"remediate" means to repair or reverse environmental damage;

"residual environmental impacts" means impacts remaining after all actions to mitigate, rehabilitate and remediate have been undertaken;

"risk profiling" means to provide a non-subjective understanding of risks posed by a reconnaissance, prospecting, mining, exploration or production operation by assigning numerical values to variables representing different types of environmental risks and the dangers they pose;

"risk threshold" means a determination of the environmental risk resulting from reconnaissance, prospecting, mining, exploration or production operations, which is regarded as being acceptable after the closure objectives have been implemented and the residual and latent defects have been calculated and which is to be included in the environmental risk assessment report contemplated in these Regulations;

"specialist" means an independent person who is qualified by virtue of his or her demonstrable knowledge, qualifications, skills or expertise in the mining, environmental, water, resource economy and financial fields;

"sustainable end state" the specific situation for land, water and air at the time of reaching the risk threshold;

"the Act" means the National Environmental Management Act, 1998 (Act No. 107 of 1998); and

"unscheduled closure" means the closing of a reconnaissance, prospecting, exploration mining or production operation prior to the lapsing of the permission, permit or right.

Purpose of these Regulations

2. The purpose of these Regulations are to—

- (a) establish the obligation of an applicant and holder to plan, manage and implement procedures and requirements to remediate and rehabilitate environmental damage caused by reconnaissance, exploration, prospecting, mining and production operations;
- (b) regulate the manner in which an applicant or holder is to determine, provide, set aside, maintain and manage financial security for undertaking progressive rehabilitation, decommissioning, closure and post closure activities associated with reconnaissance, prospecting, mining, exploration and production operations;
- (c) identify the circumstances under which the Minister may use the financial provision set aside to effect the obligation of the holder to remediate and rehabilitate negative environmental impacts and environmental damage; and
- (d) ensure that the State does not become liable for those costs which should be covered by a holder and to facilitate environmentally sustainable mining.

Application of these Regulations

3. These Regulations—

- (a) apply to an applicant or a holder, notwithstanding the applicability of section 52(1) of the Mineral and Petroleum Resources Development Act, 2002; and
- (b) do not apply in the case of an incident, in which case separate arrangements must be made to cover the liability associated with such an incident, and in which case the provisions of section 28 of the Act applies.

CHAPTER 2

OBLIGATION OF THE HOLDER TO REMEDIATE AND REHABILITATE ENVIRONMENTAL ENVIRONMENTAL DAMAGE

Obligation of the holder to remediate and rehabilitate

4. Every applicant and holder has an obligation to plan, manage and implement such procedures and requirements in respect of progressive rehabilitation, closure and post closure activities related to a reconnaissance, prospecting, exploration, mining and production operations as identified in the annual rehabilitation plan, the final decommissioning and mine closure plan and the environmental risk assessment report for the determination of residual and latent liability for reconnaissance, prospecting, exploration, mining and production operations.

CHAPTER 3

FINANCIAL PROVISIONING

Purpose of financial provisioning

5. The financial provision must guarantee the availability of sufficient funds for—

- (a) progressive rehabilitation and remediation;
- (b) rehabilitation, remediation, decommissioning and closure activities; and
- (c) remediation and management of residual and latent environmental damage including the ongoing pumping and treatment of polluted or extraneous water where relevant

to ensure that a reconnaissance, prospecting, exploration, mining or production area can be brought to the approved sustainable end state at the scheduled or unscheduled closure of operations, and to manage the related rehabilitation of residual and latent impacts post closure.

Determining the financial provision

6. (1) Financial provisioning is an iterative process of Impact assessment and risk profiling to identify, calculate, predict and provide for the costs of remediating and rehabilitating environmental impacts and risks associated with a reconnaissance, prospecting, mining, exploration or production operation, determined against agreed closure objectives designed to achieve an approved sustainable end state, in the short, medium and long term.

(2) An applicant or holder must determine the financial provision through a detailed itemisation of all activities and costs, based on actual market related rates for implementing the activities for—

- (a) annual rehabilitation, determined in the annual rehabilitation plan conforming to the content requirements of Appendix 1;
- (b) final rehabilitation, decommissioning and mine closure, determined in the final rehabilitation, decommissioning and mine closure plan, apportioned per year and conforming to the content requirements of Appendix 2; and
- (c) remediation and management of residual and latent environmental impacts, including the ongoing pumping and treatment of polluted or extraneous water, determined in an environmental risk assessment report conforming to the content requirements of Appendix 3.

(3) In the case of an application for consent in terms of section 11 or 102 or a renewal in terms of sections 18, 24, 27, 81 or 85 respectively of the Mineral and Petroleum Resources Development Act, 2002, the applicant must—

- (a) prepare the relevant plans and report as identified in subregulation (2) or, where the relevant plans exist for that permission, right or permit, update the plans and report in relation to the consent or renewal applied for; and
- (b) determine or confirm the financial provision to be set aside as identified in subregulation (2) and demonstrate that sufficient financial provisioning has already been made available should that be the case.

- (4) The determination of the financial provision must be undertaken by specialists.
- (5) The financial provision liability may not be deferred against assets at mine closure or mine infrastructure salvage value.
- (6) The Chief Executive Officer of the applicant, holder, or person appointed in a similar position, or, where liquidation or business rescue proceedings have been initiated, the liquidator or business rescue administrator of the company, is responsible for implementing the plans and report contemplated in subregulation (2) and signing off all documentation submitted to the Minister.
- (7) The applicant must submit to the Minister, with the application for a permission, right or permit—
 - (a) for approval—
 - (i) the annual rehabilitation plan as contemplated in subregulation (2)(a); and
 - (ii) the determination of financial provision as contemplated in subregulation (2); and
 - (b) for consideration—
 - (i) the final rehabilitation, decommissioning and mine closure plan contemplated in subregulation (2)(b); and
 - (ii) the environmental risk assessment report as contemplated in subregulation (2)(c).
- (8) The applicant must submit to the Minister, with the application for consent or renewal—
 - (a) for approval—
 - (i) the annual rehabilitation plan as contemplated in subregulation (2)(a) where such a plan does not exist or an updated annual rehabilitation plan contemplated in subregulation (3)(a) where such a plan exists; and
 - (ii) the adjusted or confirmed determination of financial provision as contemplated in subregulation (3)(b) where such a determination is in place; and
 - (b) for consideration—
 - (i) the final rehabilitation, decommissioning and mine closure plan as contemplated in subregulation (2)(b) where such plan does not exist or an updated final rehabilitation, decommissioning and mine closure plan contemplated in subregulation (3)(a); and
 - (ii) the environmental risk assessment report as contemplated in subregulation (2)(c) where such plan does not exist or an updated environmental risk assessment report as contemplated in subregulation (3)(a).

Availability of the financial provision

- 7. (1) An applicant and holder must—
 - (a) provide funds for the costs required to implement the activities for annual rehabilitation from the operational budget of the company; and
 - (b) set aside funds, using the methodology conforming to the requirements identified in—
 - (i) Appendix 4 in the case of a new reconnaissance, prospecting, exploration, mining or production operation; or
 - (ii) Appendix 5 in the case of an existing reconnaissance, prospecting, exploration, mining or production operation.
- (2) An applicant and holder must, on—

- (a) the granting date, provide proof of arrangements for financial provisioning; and
 - (b) the effective date, submit proof of the availability of the financial provision, or in the case of a financial guarantee, proof of such guarantee.
- (3) Funds set aside for financial provision must remain in place until a closure certificate is issued, unless a withdrawal as contemplated in regulation 11 is allowed.
- (4) Funds set aside for financial provision for remediation and management of residual and latent impacts must, on the issuing of a closure certificate—
 - (a) be ceded to the Minister; or
 - (b) in the case of a financial guarantee, be called upon by the Minister.
- (5) Funds set aside for the purposes of financial provisioning must be clearly linked and apportioned to the permission, right or permit to which it relates.
- (6) If a combination of financial vehicles is used, the vehicles and amounts provided for per vehicle, linked to the relevant permission, right or permit, must be indicated by the applicant when acting in accordance with subregulation (2) and by the holder when acting in accordance with regulation 12(3) or (4).

Financial vehicles available for setting aside financial provision

8. (1) An applicant and holder must make financial provision by using one or a combination of a—
- (a) cash deposited into an account administered by the Minister;
 - (b) a trust fund established for the sole purposes of regulation 5(b) and (c);
 - (c) a closure rehabilitation company established for the sole purposes of regulation 5(b) and (c); or
 - (d) a financial guarantee from an institution that is registered in terms of the applicable financial sector legislation in favour of the Minister.
- (2) Where the financial vehicle used is a cash deposit contemplated in subregulation (1)(a), no interest will be payable by the Minister for any amounts deposited in such account.
- (3) A trust fund contemplated in subregulation (1)(b) and a closure rehabilitation company contemplated in subregulation (1)(c) must include the minimum content as set out in Appendix 6 to these Regulations.
- (4) The financial guarantee contemplated in subregulation (1)(d) must be prepared in the format as set out in Appendix 7 to these Regulations.
- (5) When making use of a financial guarantee, proof of registration of the institution contemplated in subregulation (1)(d) must accompany the plans and reviews submitted in terms of regulations 6 or 12.
- (6) The trustees or directors empowered to administer the assets of the trust fund as contemplated in subregulation (1)(b) or a closure rehabilitation company contemplated in subregulation (1)(c) must pay out funds from the trust fund or closure rehabilitation company when ordered by the Minister to do so after the procedures set out in regulation 10 have been complied with.

Cancellation, withdrawal and claiming against a financial guarantee

9. (1) In the event that the financial institution intends to cancel or withdraw a financial guarantee which supports a financial provision, the financial institution must communicate its intention to withdraw, by registered mail, at least four months in advance to the holder, the Minister, the Minister of Environmental Affairs and the Minister of Finance.

(2) On receipt of the notification of the intention to cancel or withdraw the financial guarantee, the holder must—

- (a) within 7 days of receiving the notification, notify the Minister, the Minister of Environmental Affairs and the Minister of Finance of the intended cancellation or withdrawal; and
- (b) within 60 days from giving notice in terms of paragraph (a), provide the Minister with an alternative arrangement for the financial provisioning.

(3) Where an alternative arrangement contemplated in subregulation (2)(b) is not received by the Minister within 67 days as contemplated in subregulation (2), the Minister must—

- (a) call on the financial guarantee;
- (b) request the financial institution to deposit the funds into the account contemplated in regulation 8(1)(a);
- (c) release the financial guarantee to the financial institution within 21 days of receipt of confirmation that the funds have been disbursed into the account contemplated in paragraph (b) or within 7 days of a satisfactory alternative arrangement having been made by the holder; and
- (d) maintain the funds in the account until such time that an alternative arrangement is made to the satisfaction of the Minister.

(4) In the event that the Minister wishes to initiate a claim against the financial guarantee to effect remediation and rehabilitation—

- (a) he or she must provide the holder, liquidator or business rescue administrator and the financial institution, written notice of the intention to initiate a claim, including the reasons for such claim; and
- (b) the holder, liquidator or business rescue administrator must, within 30 days of receiving the notification of the claim against the financial guarantee, respond indicating the measures to be taken to remediate and rehabilitate to the satisfaction of the Minister providing actions and timeframes.

(5) Should the Minister not receive such notification or be satisfied with the measures proposed in accordance with subregulation (4)(b), the claim must be instituted and the funds as identified, called on.

(6) When the Minister has called on the financial guarantee, the financial institution must deposit the funds so called into the account contemplated in regulation 8(1)(a) within 21 days.

(7) The Minister must, after having complied with the provisions of the final rehabilitation, decommissioning and mine closure plan or environmental risk assessment report, within 1 year from the date of payment of a guaranteed sum by the guarantor in terms of a financial guarantee contemplated in regulation 8(1)(d) of these Regulations and Appendix 7, give account, in reasonable

detail, to the guarantor and the Minister of Finance, of how the guaranteed sum, or portion thereof, was utilised and repay any portion of the guaranteed sum which was not so utilised to the guarantor.

Claiming against a trust fund, closure rehabilitation company or cash deposit

10. (1) If the holder, liquidator or business rescue administrator fails to initiate actions to rehabilitate environmental damage as contemplated in regulation 4 within 30 days after being ordered to do so by the Minister, the Minister may —

- (a) order the trustees or directors of the trust fund or closure rehabilitation company to deposit an identified amount into the account administered by the Minister contemplated in regulation 8(1)(a) to enable the Minister to undertake the rehabilitation on behalf of the holder;
- (b) withdraw funds deposited into the account administered by the Minister for the purposes of the holder's financial provision, to undertake the rehabilitation on behalf of the holder; and
- (c) undertake such rehabilitation and claim the costs from the trustees of the trust fund, the directors of the closure rehabilitation company or from the financial provision deposited into the account administered by the Minister for that holder.

(2) Before the Minister implements any of the measures contemplated in subregulation (1), the Minister —

- (a) must provide the holder, the trustees, directors, the liquidator or business rescue administrator, written notice of the intention to initiate a claim, including the reasons for such claim;
- (b) must allow 30 days for a response from the holder, trustees, directors, the liquidator or business rescue administrator, indicating that measures will be taken to rehabilitate to the satisfaction of the Minister and providing actions and timeframes; and
- (d) may proceed, should no such response be received, with the actions contemplated in subregulation (1).

(3) When ordered to do so by the Minister, the trustees, directors, liquidator or business rescue administrator must deposit the funds into the account contemplated in regulation 8(1)(a) within 21 days of the date of communication of such order.

Withdrawal against a financial provision to facilitate decommissioning and final closure activities

11. (1) No holder may withdraw funds, or allow funds to be withdrawn, against the financial provision unless—

- (a) an application by the holder of the mining or production right to withdraw is made to the Minister;
- (b) the withdrawal is required to facilitate decommissioning and final closure activities, as identified in the final rehabilitation, decommissioning and mine closure plan contemplated in regulation 6(2)(b);

- (c) the withdrawal application is made within the 10 year period immediately preceding the intended date scheduled for final closure of the operations, as approved in the final rehabilitation, decommissioning and mine closure plan contemplated in regulation 6(2)(b);
- (d) withdrawals are limited to one application per financial year;
- (e) the withdrawal application is based on proof of –
 - (i) rehabilitation having been achieved in the form of, amongst others, survey reports, photographs and satellite imagery as approved in the final rehabilitation, decommissioning and mine closure plan signed off by an independent specialist; and
 - (ii) financial expenditure on rehabilitation in the previous year in relation to the approved final rehabilitation, decommissioning and mine closure plan, in the form of audited reports of expenditure against the rehabilitation;
- (f) in total all requested and approved withdrawals do not exceed two thirds of the total amount set aside for the purposes of final rehabilitation, decommissioning and closure as approved in the final rehabilitation, decommissioning and mine closure plan contemplated in regulation 6(2)(b); and
- (g) such withdrawal has been approved by the Minister in concurrence with the Minister responsible for Water Affairs and the Minister of Finance.

(2) No funds may be withdrawn from the amount set aside for the management of residual or latent impacts as contemplated in regulation 5(c).

Review, re-assessment, confirmation or adjustment of the financial provision

12. (1) In line with the iterative process of impact assessment and risk profiling, the holder must, once per financial year, review and update the plans and report contemplated in regulation 6 with a view to re-assessing the environmental impacts, closure objectives and sustainable end state of land to determine the appropriateness of the mitigation and rehabilitation measures, the acceptability of the risks and the adequacy of the financial provision.

(2) The review and re-assessment contemplated in subregulation (1) must be undertaken by specialists.

(3) The holder must, on completion of the actions contemplated in subregulation (1), confirm or adjust the financial provision according to the findings of the review and re-assessment.

(4) Within 30 days of receipt of the findings of the specialists regarding the review and re-assessment, the holder must—

- (a) set aside the adjusted financial provision, if not confirmed in line with the findings of the review and re-assessment; and
- (b) submit to the Minister for approval—
 - (i) the reviewed and amended annual rehabilitation plan;
 - (ii) confirmation of the adequacy of the financial provision or the adjusted financial provision; and
 - (iii) findings regarding the review and re-assessment; and

(c) submit to the Minister for consideration—

- (i) the reviewed and amended final rehabilitation, decommissioning and mine closure plan;
- (ii) the reviewed and amended environmental risk assessment report; and
- (iii) the proof of payment of the adjusted financial provision or the amended guarantee.

(5) An extension of time to submit the information contemplated in these Regulations may be considered by the Minister on application by the holder provided that—

- (a) a detailed explanation of the reasons for the inability to submit the information within the stipulated period is provided; and
- (b) the extension of the time period does not exceed 3 months.

(6) Only one extension of the timeframe may be applied for per reporting period.

Audits and related requirements

13. (1) The holder must ensure that the results of the reviews, confirmations or adjustments of the adequacy of the financial provision contemplated in regulation 12(1), 12(3) and 12(4)(b) are—

- (a) audited by an independent auditor;
- (b) included in the form of an auditor's report; and
- (c) submitted for approval to the Minister.

(2) The holder must, where relevant, submit to the Minister the financial audit undertaken in compliance with the Companies Act, 2008 (Act No. 71 of 2008), once completed.

Responsibility of a holder to disclose information

14. (1) The applicant and holder must make the determination, review and adjustment of financial provision as well as any audit of such financial provision, once submitted to the Minister,—

- (a) available on a publically accessible website of the holder if such a website exists;
- (b) available at the site office of the reconnaissance, prospecting, exploration, mining or production operation; and
- (c) accessible to the public on request.

(2) The applicant and holder must include the following information in the environmental management programme submitted in terms of section 24N of the Act—

- (a) audit contemplated in regulation 13(1);
- (b) plans and report contemplated in regulation 6(2);
- (c) sum of the financial provision, including the calculation of the sum; and
- (d) audit report contemplated in regulation 13(1).

(3) Within 5 days of receiving notification of the review decision, the holder must publish the outcome of such review decision in a provincial newspaper as well as a newspaper distributed within the municipal

area within which the reconnaissance, prospecting, mining, production or exploration operation is located, and indicate where the review and re-assessment reports can be obtained.

Powers and duties of the Minister

15. (1) If the Minister is not satisfied with the preparation of a plan, a calculation, a review, an adjustment of the financial provision, an audit required in terms of these Regulations or a withdrawal application in terms of regulation 11, the Minister may—

- (a) request the applicant or holder, at their own costs to—
 - (i) review and revise such a plan, calculation, review, adjustment, audit or a withdrawal application to the satisfaction of the Minister; or
 - (ii) have the plan, calculation, review, adjustment, audit or withdrawal application reviewed and revised externally by another team of specialists to the satisfaction of the Minister; or
- (b) appoint an independent assessor at the cost of the applicant or holder to confirm, review or revise any plan, calculation, review, adjustment, audit or withdrawal application to the satisfaction of the Minister, in consultation with the applicant or holder.

(2) The Minister must publish the account number contemplated in Regulation 8(1)(a) in the government gazette from time to time.

(3) The Minister must keep a register of funds kept in the account contemplated in Regulation 8(1)(a), including details of the amount held per applicant and holder related to permissions, permits and rights.

(4) The Minister must—

- (a) acknowledge receipt of all plans, reports and findings of reviews and assessments submitted in terms of these Regulations within 10 days of receipt thereof; and
- (b) where a decision is required in terms of these Regulations, make such decision within 60 days of receipt of the documentation.

(5) Where a plan, calculation, assessment or withdrawal application is rejected, the Minister must act in accordance with subregulation (1) and must provide reasons for the rejection and indicate a timeframe not exceeding 45 days within which a revised plan, calculation, assessment or withdrawal application must be resubmitted for approval.

CHAPTER 4

TRANSITIONAL ARRANGEMENTS

Transitional arrangements

16. (1) Unless subregulation (2) applies, a holder who applied for such right or permit prior to 20 November 2015, regardless when the permission, permit or right was obtained—

- (a) must, by no later than 3 months following its financial year end, which financial year end occurs after 19 February 2020, comply with these Regulations; and
- (b) shall, until 19 February 2020, be regarded as having complied with the provisions of these Regulations if such holder has complied with the provisions and arrangements regarding financial provisioning, approved as part of the right or permit issued in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

(2) A holder of an offshore oil or gas exploration right or production right who applied for such right prior to 20 November 2015, regardless when the right was obtained—

- (a) must by no later than 3 months following its financial year end, which financial year end occurs after 19 February 2024, comply with these Regulations; and
- (b) shall, until 19 February 2024, be regarded as having complied with the provisions of these Regulations if such holder has complied with the provisions and arrangements regarding financial provisioning, approved as part of the right issued in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

(3) Subject to subregulation (1) or (2), financial provision submitted in terms of regulations 53 and 54 of the Mineral and Petroleum Resources Development Regulations, 2004 or the Financial Provisioning Regulations, 2015 for which approval is pending when these Regulations take effect, must be dispensed with in terms of regulations 53 and 54 the Mineral and Petroleum Resources Development Regulations, 2004 or the Financial Provisioning Regulations, 2015 as if those Regulations are still in effect.

(4) Subject to subregulation (1) or (2), where an approved financial provision is under review in terms of the Mineral and Petroleum Resources Development Regulations, 2004 when these Regulations comes into operation, the approved financial provision must be reviewed as if regulations 53 and 54 of the Mineral and Petroleum Resources Development Regulations, 2004 are still in effect.

(5) If a holder contemplated in subregulation (1) or (2) is not able to increase the financial provision to cover any identified shortfall, the Minister may, after considering the financial stability and operating history of such holder, enter into a payment agreement with such holder for a period not exceeding 5 years to bring the financial provision in line with the requirements of these Regulations, on condition that—

- (a) a payment plan and timeframe is agreed upon between the Minister and relevant holder;
- (b) the payment plan and timeframe contemplated in paragraph (a) is consulted with interested and affected parties;
- (c) the payment plan and timeframe contemplated in paragraph (a) is supported by the Minister of Finance;
- (d) the payment plan contemplated in (a) is reviewed annually and compliance with the requirements and timeframe of the plan is demonstrated; and
- (e) the approved sustainable end state of land is not compromised.

(6) The Minister may request any information that may be relevant to the decision on the payment agreement contemplated in subregulation (5) from the holder.

(7) The payment agreement contemplated in subregulation (5), as well as any indication of compliance with such agreement, must be included in the annual review and assessment of the adequacy of the financial provision and must be submitted together with the plans and reports as required in terms of these Regulations.

CHAPTER 5

GENERAL MATTERS

Offences

17. (1) An applicant commits an offence if that person contravenes or fails to comply with regulation 4, 6(2), 6(3), 7(1), 7(2) and 8(1) of these Regulations.

(2) A holder commits an offence if that person contravenes or fails to comply with regulation 4, 6(2), 7(1), 7(2), 8(1), 9(2), 10(3), 12(1), 12(3), 12(4), 13(1), 13(2), 13(5), 14(1), 14(2) and 14(3) of these Regulations.

(3) A holder who applied for such right or permit prior to 20 November 2015, regardless when the permit or right was obtained, commits an offence if that person contravenes or fails to comply with regulation 16(1) or 16(2), as the case may be.

(4) A financial institution contemplated in these Regulations commits an offence if that bank or financial institution contravenes or fails to comply with regulation 9(1) or 9(6) of these Regulations.

(5) A trustee or director of a trust fund or a closure rehabilitation company commits an offence if the trustee or director contravenes or fails to comply with regulation 8(6).

Penalties

18. A person convicted of an offence in terms of regulation 17 of these Regulations, is liable to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, or to both such fine or such imprisonment.

Repeal of Financial Provisioning Regulations, 2015

19. The Financial Provisioning Regulations, 2015, as amended by Government Notice No R. 452, Government Gazette No. 41584 of 20 April 2018 and Government Notice No R. 991, Government Gazette No. 41921 of 21 September 2018, is hereby repealed.

Short title and commencement

20. These Regulations are called the Financial Provisioning Regulations, 2019 and comes into operation on the date of publication in the *Gazette*.

APPENDIX 1

MINIMUM CONTENT OF AN ANNUAL REHABILITATION PLAN FOR RECONNAISSANCE, PROSPECTING, EXPLORATION, MINING AND PRODUCTION OPERATIONS

1. General

The annual rehabilitation plan must use as its base the findings of the assessment, modelling and monitoring undertaken in the preparation of the final rehabilitation, decommissioning and mine closure plan as contained in Appendix 2.

The annual rehabilitation plan, which must focus on annual rehabilitation and mitigation, could form a chapter in the final rehabilitation and closure plan articulated in Appendix 2.

Any reference to mining in this plan must be construed as a reference to reconnaissance, prospecting, exploration, mining and production operations.

2. Objective of the annual rehabilitation plan

The objective of the annual rehabilitation plan is to—

- 2.1. review concurrent rehabilitation and remediation activities already implemented;
- 2.2. establish rehabilitation and remediation goals and outcomes for the forthcoming 12 months, which contribute to the progressive achievement of the closure objective and post-mining sustainable end state as identified in the final rehabilitation, decommissioning and mine closure plan;
- 2.3. establish a plan, schedule and budget for rehabilitation for the forthcoming 12 months based on the calculated costs;
- 2.4. identify gaps in knowledge and research to be undertaken to address shortcomings experienced in the preceding 12 months of rehabilitation;
- 2.5. provide an overview of the monitoring results and effect of rehabilitation;
- 2.6. highlight any risks emerging from monitoring; and
- 2.7. identify knowledge gaps which impact on achieving the end state and the interventions, including research interventions to address the gaps.

3. Content of the annual rehabilitation plan

The annual rehabilitation plan will be relevant for a period of 12 months, after which the plan is to be updated to reflect progress relating to rehabilitation and remediation activities in the preceding 12 months and the updated extraction and rehabilitation schedules as well as the budget for the forthcoming 12 months. The annual rehabilitation plan must contain information that defines concurrent rehabilitation and remediation activities for the forthcoming 12 months and how these relate to the operations' closure vision and sustainable end state, as detailed in the final rehabilitation, decommissioning and mine closure plan. The annual rehabilitation plan must indicate what closure objectives and criteria are being achieved through the implementation of the plan, it must be measurable and auditable and must include—

- 3.1. details of the—

- 3.1.1. specialist or specialists that prepared the plan;
- 3.1.2. professional registrations and experience of the specialist or specialists;
- 3.1.3. applicant or holder, including but not limited to the name, physical address, postal address and contact details;
- 3.1.4. timeframes of implementation of the current, and review of the previous rehabilitation activities;
- 3.2. the pertinent environmental and project context highlighting issues which are different to those indicated and considered in the final rehabilitation, decommissioning and mine closure plan which relate directly to the planned annual rehabilitation and remediation activity (e.g. drought, machine failure or anomaly);
- 3.3. results of modelling and monitoring of plans for the preceding 12 months with a view to informing rehabilitation and remediation activities going forward;
- 3.4. an identification of shortcomings in rehabilitation experienced in the preceding 12 months;
- 3.5. any risk which materialised or anomalies which impacted on the environment over the preceding 12 months, and how these were incorporated into the risk model for the operations;
- 3.6. details of the planned annual rehabilitation and remediation activities or measures for the forthcoming 12 months, including those which will address the shortcomings contemplated in 3.4 above or which address the risk which materialised or were identified from monitoring in the preceding 12 months, and including—
 - 3.6.1. if no areas are available for annual rehabilitation and remediation concurrent with mining, an indication to that effect and motivation why no annual rehabilitation or remediation can be undertaken;
 - 3.6.2. where areas are available for annual rehabilitation and remediation the following information must be tabulated:
 - 3.6.2.1. the nature or type of activity and associated infrastructure to be undertaken;
 - 3.6.2.2. planned remaining life of the activity and impact under consideration;
 - 3.6.2.3. area already disturbed or planned to be disturbed in the period under review;
 - 3.6.2.4. percentage of the area already disturbed, including the bulking factor and volume of material stockpiled;
 - 3.6.2.5. percentage of the area to be disturbed and the anticipated bulking factor and volume of material for stockpiling;
 - 3.6.2.6. area and volume of material available for concurrent rehabilitation and remediation activities;
 - 3.6.2.7. percentage of the area disturbed and volume of material identified in 3.6.2.4 above and on which concurrent rehabilitation and remediation can be undertaken;
 - 3.6.2.8. notes to indicate why total available or planned to be available area differs from area already disturbed or planned to be disturbed;
 - 3.6.2.9. notes to indicate why concurrent rehabilitation will not be undertaken on the full available or planned to be available area;
 - 3.6.2.10. the pertinent closure objectives and performance targets that will be addressed in the forthcoming 12 months of operations, which objectives and targets are aligned to the final rehabilitation, decommissioning and mine closure plan;
 - 3.6.2.11. details of rehabilitation activities planned on the area for rehabilitation for the forthcoming 12 months;
 - 3.6.2.12. description of the relevant closure design criteria adopted in the annual rehabilitation and remediation activities and the expected final sustainable

end state of land once all rehabilitation and remediation activities are complete for the activity or aspect;

3.7. a site plan indicating at least the total area disturbed, area available for rehabilitation and remediation and the area to be rehabilitated or remediated per aspect or activity;

3.8. a review of the preceding 12 months of rehabilitation and remediation activities, indicating a comparison between activities planned in the previous year's annual rehabilitation and remediation plan and actual rehabilitation and remediation implemented, which should be tabulated and as a minimum contain—

- 3.8.1. area planned to be rehabilitated and remediated during the period under review;
- 3.8.2. actual area rehabilitated or remediated; and
- 3.8.3. if the variance between planned and actual exceeds 15%, motivation indicating reasons for the inability to rehabilitate or remediate the full area; and

3.9. costing, based on market related figures, including—

- 3.9.1. an explanation of the closure cost methodology;
- 3.9.2. auditable calculations of costs per activity or infrastructure;
- 3.9.3. cost assumptions; and
- 3.9.4. monitoring and maintenance costs likely to be incurred during the period of execution of the annual rehabilitation.

APPENDIX 2

MINIMUM CONTENT OF A FINAL REHABILITATION, DECOMMISSIONING AND MINE CLOSURE PLAN FOR RECONNAISSANCE, PROSPECTING EXPLORATION, MINING AND PRODUCTION OPERATIONS

1. General

It is the intention that the initial closure planning process and the environmental authorisation process required in terms of the Environmental Impact Assessment Regulations be undertaken in parallel to allow a free flow of information between the assessment requirement. Such integration would inform the mitigation measures required for the environmental management programme (EMPr), and would allow the final rehabilitation, decommissioning and mine closure plan to be able to fulfil the requirements associated with the closure requirements in the EIA process.

The process of preparing the final rehabilitation, decommissioning and mine closure plan is an iterative process which must annually check that the planned closure objectives are in line with sustainability principles and will achieve an agreed sustainable end state. The calculation of costs associated with the final rehabilitation, decommissioning and mine closure must be based on the rehabilitation and environmental management of the full extent of the area disturbed and must be expressed as an annual figure based on the rate of extraction and extent of current disturbance.

The costs associated with the final rehabilitation, decommissioning and mine closure pronounces on the sustainability of the mine in the case of a greenfield operation or the continued sustainability of an existing operation. The calculated annual cost associated with final rehabilitation, decommissioning and mine closure is to be used in the calculation of the financial provision to be set aside as per Appendix 4 and 5.

Any reference to mining in this plan must be construed as a reference to reconnaissance, prospecting, exploration and production operations.

2. Objective of the final rehabilitation, decommissioning and mine closure plan

The objective of the final rehabilitation, decommissioning and mine closure plan, at design, throughout the operations and post closure, is to—

- 2.1. determine, review and revise as required, a sustainable end state for the mining operation which includes a sustainable and achievable end state of the land, as well as sustainable post closure management and monitoring measures;
- 2.2. set, review and revise sustainable end state objectives including water quality and quantity objectives;
- 2.3. ensure early and regular consultation throughout the life of the mine, with government and external stakeholders and communities on closure objectives and the sustainable end state objectives;
- 2.4. predict and model the mining activities throughout the life of the mine;

- 2.5. assess and model the expected environmental impacts related to the mining operations based on the life of mine, the mineral extraction schedule and applying and explaining a risk based approach and hierarchy linked to closure activities;
- 2.6. determine, review and revise the rehabilitation and remediation activities related to the sustainable end state of the environment at closure and post closure;
- 2.7. determine an overall cost for implementing the avoidance, management and rehabilitation activities;
- 2.8. determine the annual budget and schedule for the implementation of the avoidance, management and rehabilitation activities;
- 2.9. audit and report on the implementation of the plan; and
- 2.10. identify knowledge gaps and propose actions to actively address the identified gaps through among others, applicable research;

3. Content of the final rehabilitation, decommissioning and mine closure plan

The final rehabilitation, decommissioning and mine closure plan must be measurable and auditable, must use as a base the identified sustainable end state objectives of the mining operations area and must include—

- 3.1. details of—
 - 3.1.1. the person or persons that prepared the plan;
 - 3.1.2. the professional registrations and experience of the person or persons who prepared the plan;
 - 3.1.3. the applicant or holder, including but not limited to the name, physical address, postal address and contact details;
- 3.2. the context of the project, including but not limited to—
 - 3.2.1. mineral/s to be or being mined, mining method, area already mined or to be mined in the case of a greenfields site, the backlog in rehabilitation if relevant, annual extraction rate, overall extraction rates, life of mine and any material information and issues that have guided the development of the plan;
 - 3.2.2. an overview of—
 - 3.2.2.1. the environmental context, including but not limited to air quality, quantity and quality of surface and groundwater, land, soils, terrestrial and aquatic biodiversity;
 - 3.2.2.2. the social context that may influence closure activities and post-mining land use or be influenced by closure activities and post-mining land use; and
 - 3.2.2.3. other mining activities within a 20km radius of the mining area.
- 3.3. stakeholder issues and comments that have informed the plan;
- 3.4. the mining plan and schedule for the full approved operations, including—
 - 3.4.1. appropriate description of the mine plan;
 - 3.4.2. drawings and figures to indicate how the mine develops;
 - 3.4.3. what areas are disturbed and will be disturbed; and
 - 3.4.4. how infrastructure and structures (including ponds, residue stockpiles etc.) develop during operations;
- 3.5. details of the preferred sustainable end state of the operations including—

- 3.5.1. the legal and governance framework and interpretation of these requirements for the closure design principles;
 - 3.5.2. a description of the sustainable end state, objectives and targets, which objectives and targets must reflect the local environmental and socio-economic context, the regulatory and corporate requirements and stakeholder expectations;
 - 3.5.3. a description and evaluation of alternative closure and post closure options where these exist, that are practical within the socio-economic context; and
 - 3.5.4. environmental opportunities and constraints in which the operation is located.
- 3.6. findings of an environmental risk assessment and modelling process leading to the most appropriate closure strategy, including—
- 3.6.1. a description of the risk assessment methodology including risk identification and quantification, to be undertaken for all areas of infrastructure or activities or aspects for which an applicant and holder has a responsibility to mitigate an impact or risk at closure;
 - 3.6.2. an identification of receptors most sensitive to potential risks and the monitoring of such risks with a view to informing rehabilitation and remediation activities;
 - 3.6.3. an identification and modelling of conceptual closure strategies to avoid, manage and mitigate the impacts and risks;
 - 3.6.4. a reassessment of the risks to determine whether, after the implementation of the closure strategy, the residual risk has been avoided and / or how it has resulted in avoidance, rehabilitation and management of impacts and whether this is acceptable to the mining operation and stakeholders; and
 - 3.6.5. an explanation of changes to the risk assessment results, as applicable in annual updates to the plan; and
 - 3.6.6. design principles for achieving the closure objectives, including the proposed final sustainable end state which is appropriate, feasible and possible to implement and which meets the principles of sustainable development, including—
 - 3.6.6.1. descriptions of appropriate and feasible final post-mining land use for the project area
 - 3.6.6.2. a map of the proposed final sustainable end state of the land;
 - 3.6.6.3. a motivation for the preferred closure option within the context of the risks and impacts that are being mitigated;
 - 3.6.6.4. a definition and motivation of the closure and post closure period, taking cognisance of the probable need to implement post closure monitoring and maintenance for a period sufficient to demonstrate that the risk threshold criteria have been achieved; and
 - 3.6.6.5. details associated with any ongoing research on closure options;
 - 3.6.7. closure actions, including—
 - 3.6.7.1. a detailed description of the assumptions made to develop closure actions in the absence of detailed knowledge on site conditions, potential impacts, material availability, stakeholder requirements and other factors for which information is lacking;
 - 3.6.7.2. the development and documenting of a description of specific technical solutions related to infrastructure and facilities for the preferred closure option, which must include all areas, infrastructure, activities and aspects associated with mining for which the mine has the responsibility; and

- 3.6.7.3. the development and implementation of plans to address threats and opportunities and any uncertainties associated with the proposed closure actions, which will be used to identify and define any additional work or research that is needed to reduce the level of uncertainty;
- 3.6.8. a schedule of actions for the annual rehabilitation plan, and the final rehabilitation, decommissioning and mine closure plan which will ensure avoidance, rehabilitation and management of impacts including ongoing pumping and treatment of extraneous water—
- 3.6.8.1. linked to the mining work programme, if greenfields, or to the current mine plan, if brownfields, including assumptions and schedule drivers; and
- 3.6.8.2. including a spatial map, showing planned spatial progression throughout operations;
- 3.6.9. an indication of the organisational capacity that will be put in place to implement the plan, including—
- 3.6.9.1. organisational structure as it pertains to the plan;
- 3.6.9.2. responsibilities; and
- 3.6.9.3. training and capacity building that may be required to build closure competence;
- 3.6.10. an indication of gaps in the plan, including an auditable action plan and schedule to address the gaps;
- 3.6.11. closure and risk threshold criteria for each activity or infrastructure in relation to environmental aspects with auditable indicators;
- 3.6.12. the closure cost based on cost estimates for operations, or components of operations as follows—
- 3.6.12.1. costing, calculated using market related figures and the current value of money and no discounting or net present value calculations;
- 3.6.12.2. costs must be calculated for the rehabilitation, remediation, maintenance and long term monitoring being undertaken on all disturbed areas and associated environmental impacts;
- 3.6.12.3. costs calculations must be based on rehabilitation, remediation, maintenance and long term monitoring of activities undertaken by a third party;
- 3.6.12.4. where appropriate, a differentiation between capital, operating,
- 3.6.12.5. replacement and maintenance costs;
- 3.6.12.6. the closure cost estimation must include cost assumptions and auditable calculations of costs per activity or infrastructure; and
- 3.6.12.7. cost estimates for operations, or components of operations as follows:

End of life of operation (or components of operation) from year of assessment	Design effort	Degree of accuracy in cost estimation
> 30 years	Pre-Conceptual / Class 5 Estimate / up to 2% of complete definition	-50% to + 50%

10 to 30 years	Conceptual / Pre-feasibility / Class 4 Estimate / up to 15% of complete definition	-30% to + 30%
5 to 10 years	Preliminary / Feasibility / Class 3 Estimate / up to 40% of complete definition	-20% to + 20%
Less than 5 years	Detailed Designs / Bid / Tender / Class 2 estimate up to 75% of complete definition	-10% to + 10% (or less)
* The calculations for operations with 5 or less years must include a line item for carrying out specialist studies up to Detailed Design effort to improve the degree of accuracy to +/-10% as well as a contingency to ensure sufficient funds for closure by a third party. Motivation must be provided to indicate the accuracy in the reported number and as accuracy improves, what actions resulted in an improvement in accuracy.		

- 3.6.13. the estimated costs must be expressed for each year based on the rate of extraction and extent of disturbed area;
- 3.6.14. the risk modelling and the calculation of closure cost estimation must be updated annually during the operation's life to reflect known developments, including changes from the annual review of the closure strategy assumptions and inputs, scope changes, the effect of a further year's inflation, new regulatory requirements and any other material developments;
- 3.6.15. monitoring, auditing and reporting requirements as per these Regulations;
- 3.6.16. schedule of reporting requirements as per these Regulations; and
- 3.6.17. motivations for any amendments made to the final rehabilitation, decommissioning and mine closure plan, given the monitoring results in the previous auditing period and the identification of gaps as above.

APPENDIX 3

MINIMUM CONTENT OF AN ENVIRONMENTAL RISK ASSESSMENT REPORT FOR THE DETERMINATION OF RESIDUAL AND LATENT LIABILITY FOR RECONNAISSANCE, PROSPECTING EXPLORATION, MINING AND PRODUCTION OPERATIONS

1. General

The environmental risk assessment report must follow an iterative risk profiling approach which through modelling must predict environmental risk, identify their potential to manifest, the timeframes in which they will manifest and the costs associated with their management and rehabilitation once the impacts have manifest. The risk assessment process must calculate a risk threshold for the operations and predict the time period to reach the risk threshold.

The costs calculated for the management and monitoring of residual and latent impacts prior to reaching the risk threshold for scheduled closure pronounce on the sustainability of mining in the case of a Greenfields operation and on the continued sustainability in the case of an existing operation.

The assessment must calculate the cost associated with managing and monitoring residual and latent impacts prior to reaching the risk threshold and must include a section on the costs to manage and monitor residual and latent impacts in the event of an unscheduled closure implementing immediately available closure technologies including water treatment options. This cost is to be used in the calculation of the financial provision to be set aside as per Appendix 4 and 5.

The risk assessment report could form a chapter in the final rehabilitation and closure plan articulated in Appendix 2.

Any reference to mining in this plan must be construed as a reference to reconnaissance, prospecting, exploration and production operations.

2. Objective of the environmental risk assessment report

The objective of the environmental risk assessment report is to—

- 2.1 ensure the timeous prediction and quantification of environmental risk associated with the operations;
- 2.2 ensure timeous risk reduction through appropriate interventions;
- 2.3 identify the potential residual and latent environmental risks which will manifest post closure;
- 2.4 detail the approach to managing post closure risks;
- 2.5 quantify the potential risks and liabilities associated with the management of the risks;
- 2.6 the quantification must be based on market related costs;
- 2.7 calculate a risk threshold and timeframe in which to reach the risk threshold; and
- 2.8 outline and cost the post closure monitoring, auditing and reporting requirements.

3. Part 1

Content of the environmental risk assessment report for scheduled closure

The environmental risk assessment report must contain information that is necessary to determine the potential financial liability associated with the management of residual and latent environmental liabilities

post closure, keeping in mind the proposed sustainable end state of land, once the initial risk threshold criteria has been achieved and must include—

3.1. details of—

- 3.1.1. the person or persons that prepared the plan;
- 3.1.2. the professional registrations and experience of the person or persons who prepared the plan;
- 3.1.3. the applicant or holder including but not limited to: name; physical address; postal address, contact details; and
- 3.1.4. rights, permits, licences and authorisations associated with the operation including the right or permit number, environmental authorisation number, and similar details of all other authorisation received e.g. water use licence, waste licence etc.

3.2. details of the assessment process used to identify and quantify the post closure, residual and possible latent risks, including—

- 3.2.1. a description of the risk assessment methodology inclusive of risk identification and quantification;
- 3.2.2. substantiation why each risk will occur post closure, including why the risk was not or could not be mitigated during concurrent rehabilitation and remediation or during the implementation of the final rehabilitation, decommissioning and mine closure plan;
- 3.2.3. a detailed description of the drivers that could result in the manifestation of the risks after closure;
- 3.2.4. a description of the expected timeframe in which the risk is likely to manifest, typically as expected years after closure, and the duration of the impact, including motivation to support these timeframes;
- 3.2.5. a detailed description of the triggers which can be used to identify that the risk is imminent or has manifested, how this will be measured and any cost implications thereof;
- 3.2.6. results and findings of the risk assessment or risks which will occur post closure; and
- 3.2.7. an explanation of changes to the risk assessment results as applicable in annual updates to the plan;

3.3. management activities, including—

- 3.3.1. monitoring of results and findings, which informs adaptive or corrective management and/or risk reduction activities;
- 3.3.2. an assessment of alternatives to mitigate or manage the impacts once the risk has become manifested, which must be focussed on practicality as well as cost of the implementation;
- 3.3.3. motivation why the selected alternative is the appropriate approach to mitigate the impact; and
- 3.3.4. a detailed description of how the alternative will be implemented; and

3.4. calculation of costs for implementing the activities to manage and monitor residual and latent impacts until the agreed risk threshold is reached using market related figures and the current value of money and no discounting or net present value calculations which must—

- 3.4.1.1. include costs to determine whether the risk is imminent or has manifest are to be included in the assessment as there are monitoring costs likely to be incurred during the implementation of the strategy to manage or mitigate the impacts once the risk has become manifest;

- 3.4.1.2. be based on the management, rehabilitation, remediation, maintenance and long term monitoring of activities undertaken by a third party;
- 3.4.1.3. be calculated for the management, rehabilitation, remediation, maintenance and long term monitoring of residual and latent impacts for all disturbed areas and associated environmental impacts;
- 3.4.1.4. include the costs for the management, rehabilitation, remediation, maintenance and long term monitoring of activities for residual and latent impacts must include cost assumptions and auditable calculations of costs per activity or infrastructure;
- 3.4.1.5. include the risk modelling and the calculation of post closure cost estimation must be updated annually during the operation's life to reflect known developments, including changes from the annual review of the closure strategy assumptions and inputs, scope changes; and
- 3.4.1.6. include the cost estimates for modelling and calculating the post closure costs must be calculated using accuracy estimations as follows:

End of life of operation (or components of operation) from year of assessment	Design effort	Degree of accuracy in cost estimation
> 30 years	Pre-Conceptual / Class 5 Estimate / up to 2% of complete definition	-50% to + 50%
10 to 30 years	Conceptual / Pre-feasibility / Class 4 Estimate / up to 15% of complete definition	-30% to + 30%
5 to 10 years	Preliminary / Feasibility / Class 3 Estimate / up to 40% of complete definition	-20% to + 20%
Less than 5 years	Detailed Designs / Bid / Tender / Class 2 estimate up to 75% of complete definition	-10% to + 10% (or less)
*The calculations for operations with 5 or less years must include a line item for carrying out specialist studies up to Detailed Design effort to improve the degree of accuracy to +/-10% as well as a contingency to ensure sufficient funds for closure by a third party. Motivation must be provided to indicate the accuracy in the reported number and as accuracy improves, what actions resulted in an improvement in accuracy.		

4. Part 2

Content of the environmental risk assessment report for unscheduled closure

For unscheduled closure, the contents of Part 1 - 3.1 to 3.3.4 (inclusive of 3.3.4) apply as well as the calculation of costs for implementing the activities to manage and monitor residual and latent impacts until the agreed risk threshold is reached using market related figures and the criteria identified for scheduled closure based on—

- 4.1 an assessment of residual and latent impacts for the current disturbed area as well as the disturbance for the next 12 months of operations; and

4.2 costs associated with the management, remediation, rehabilitation and monitoring of residual and latent impacts for the existing extent of the area disturbed until the risk threshold is reached based on costs for technologies immediately available, including water treatment technologies.

APPENDIX 4

METHODOLOGY FOR CALCULATION OF FINANCIAL PROVISION FOR NEW RECONNAISSANCE, PROSPECTING, EXPLORATION, MINING AND PRODUCTION OPERATIONS

1. Application of the methodology

This methodology must be used to determine the funds to be set aside for rehabilitation, decommissioning, closure and post closure activities associated with new reconnaissance, prospecting exploration, mining and production operations and is calculated for the mining area. Any reference to mining in this Appendix must be construed as a reference to reconnaissance, prospecting, exploration and production operations.

The costs include the costs associated with rehabilitation and management of impacts from:

- 1.1 the anticipated disturbance of the first year of mining operations;
- 1.2 the residual and latent impacts associated with the anticipated disturbance for the first year of mining operations; and
- 1.3 the impacts of inflation on the costs of a third party closure.

2. Assumptions made for purposes of calculating

- 2.1 All costs are based on actual market related figures based on prevailing rates;
 - 2.2 Mining infrastructure asset salvage value has not been taken into account; and
 - 2.3 Provisional and general costs and contingencies as per the industry standard are included.
- and

3. Calculating the costs to be set aside for final rehabilitation, decommissioning and mine closure

In order to calculate the costs to be set aside for final rehabilitation, decommissioning and mine closure for a new operation, the following formula must be used:

Total 1+ Total 2 = sum (1+ CPI plus 2%) x VAT.

Where:

Total 1 is – the costs calculated in the final rehabilitation, decommissioning and mine closure plan for the rehabilitation and impact management related to the disturbance that will occur in the first year of the operation; and

Total 2 is – the costs calculated in part 2 of the risk assessment report for the determination of residual and latent liability, which are the costs calculated for the management and rehabilitation of residual and latent impacts that are expected to manifest in the future based on an unscheduled closure on the anticipated disturbed area for the first year of operation.

APPENDIX 5

METHODOLOGY FOR CALCULATION OF FINANCIAL PROVISION FOR EXISTING RECONNAISSANCE, PROSPECTING, EXPLORATION, MINING AND PRODUCTION OPERATIONS

1. Application of the methodology

1.1 This methodology must be used to determine the funds to be set aside for rehabilitation, decommissioning, closure and post-closure activities associated with an existing reconnaissance, prospecting exploration, mining and production operations and is calculated for the mining area. Any reference to mining in this Appendix must be construed as a reference to reconnaissance, prospecting, exploration and production operations.

1.2 The costs include the costs associated with rehabilitation and management of impacts from:

- 1.2.1 the current disturbed area;
- 1.2.2 the anticipated disturbance of the next year of mining operations;
- 1.2.3 the residual and latent impacts associated with current disturbed area, the anticipated disturbance of the next year of mining operations; and
- 1.2.4 the impacts of inflation on the costs of a third party closure.

2. Assumptions made for purposes of calculating

- 2.1 A third party will be employed to undertake rehabilitation and remediation work;
- 2.2 All costs are based on actual market related figures based on prevailing rates;
- 2.3 Mine infrastructure asset salvage value has not been taken into account; and
- 2.4 Provisional and general costs and contingencies as per the industry standard are included.

3. Calculating the costs to be set aside for final rehabilitation, decommissioning and mine closure

In order to calculate the costs to be set aside for final rehabilitation, decommissioning and mine closure for an existing operation, the following formula must be used:

$$\text{Total 1} + \text{Total 2} + \text{Total 3} = \text{sum (1+ CPI plus 2\%)} \times \text{VAT.}$$

Where:

Total 1 is – the costs calculated in the final rehabilitation, decommissioning and mine closure plan for the rehabilitation and impact management for the current disturbed area;

Total 2 is – the costs calculated in the final rehabilitation, decommissioning and mine closure plan for the rehabilitation and impact management related to the disturbance that will occur in the next 12 months of the operation; and

Total 3 is – the costs calculated in part 2 of the environmental risk assessment report contemplated in Appendix 3 for the determination of residual and latent liability, which are the costs calculated for the management and rehabilitation of residual and latent impacts that are expected to manifest in the future

based on an unscheduled closure on the current disturbed area as well as the disturbance for the next year of operation.

APPENDIX 6

MINIMUM CONTENT OF A TRUST FUND AND A CLOSURE REHABILITATION COMPANY

4. General

The founding documents of a trust fund or closure rehabilitation company contemplated in these Regulations must comply with the requirements set out in this Appendix and must as a minimum include—

1.1 details of the—

- 1.1.1 holder for which the deed of trust or the closure rehabilitation company is being set up; and
- 1.1.2 trustee(s) or director(s) who will administer the trust fund or closure rehabilitation company, including the names and identification information;
- 1.2 the permission, right or permit number to which the trust fund or closure rehabilitation company relates and its lapsing date;
- 1.3 the obligation of the holder, namely to remediate and rehabilitate environmental damage as identified in these Regulations;
- 1.4 the sole objective of the trust fund or closure rehabilitation company namely to receive contributions and to hold these contributions for the purposes of providing the vehicle contemplated in regulation 8(1)(b) and (c) of these Regulations, for maintaining the financial provision required to be set aside by the holder for the guaranteeing of funds for the purposes of fulfilling the holder's obligation to remediate and rehabilitate environmental damage;
- 1.5 an indication that—
 - 1.5.1 the provisions of the founding documents of the trust fund or closure rehabilitation company may only be varied with written approval of the holder and the Minister and on condition that the objective of the trust or closure rehabilitation company and obligation of the holder is not varied in any way;
 - 1.5.2 the trustee(s) and director(s) shall not receive any remuneration from the trust fund for their services, unless the trustee or director is a professional fiduciary services company, in which event it may be paid its normal commercial rates for the provision of professional services; and
 - 1.5.3 no person may be a trustee or director if he or she would not be eligible to be a director of a company under the Companies Act No. 71 of 2008, or has been convicted of any offence involving dishonesty;
- 1.6 the duties and obligations of the trustee or director, which must include as a minimum—
 - 1.6.1 the duty to not allow any funds to be withdrawn from the trust fund or closure rehabilitation company or in any form be alienated from the trust fund or closure rehabilitation company, other than if such withdrawal has been approved by the Minister in terms of these Regulations or a closure certificate has been issued by the Minister;
 - 1.6.2 the obligation to pay out funds from the trust fund or closure rehabilitation company when ordered by the Minister to do so after the procedures set out in these Regulations have been complied with; and
 - 1.6.3 that such trustee or director—
 - 1.6.3.1 shall not, in their personal capacity, engage in any trade, undertaking or business of the trust fund or closure rehabilitation company, nor shall any such trustee or director participate in any of the affairs of the trust fund or closure rehabilitation company, or provide any financial assistance or services or facilities other than is required to fulfil their role as trustee or director;

1.6.3.2 shall cause proper books of account to be kept for the trust fund and closure rehabilitation company and shall appoint independent auditors to report on the financial statements for each financial year of the trust fund and closure rehabilitation company;

1.6.3.3 shall not be permitted to distribute, except as may otherwise be provided herein, any of the funds of the trust fund or closure rehabilitation company to any person and shall utilise the trust fund or closure rehabilitation company solely for investment in accordance with the object for which the trust fund or closure rehabilitation company has been established;

1.6.3.4 shall not be entitled, on behalf of the trust or closure rehabilitation company, to—

1.6.3.4.1 incur any indebtedness of any nature (including through the use of any negative mark to market position in relation to any derivative instrument) save for non-interest bearing trade credit incurred in the ordinary course of the business of the trust or closure rehabilitation company; or

1.6.3.4.2 encumber the assets of the trust fund or closure rehabilitation company in any manner whatsoever; and

1.7 an indication that the trust or company may only hold financial instruments issued to the holder by any—

1.7.1 collective investment scheme as regulated in terms of the Collective Investment Schemes Control Act, 2002 (Act No. 45 of 2002);

1.7.2 long-term insurer as regulated in terms of the Long-term Insurance Act, 1998 (Act No. 52 of 1998);

1.7.3 bank as regulated in terms of the Banks Act, 1990 (Act No. 94 of 1990);

1.7.4 mutual bank as regulated inters of the Mutual Bank Act, 1993 (Act No. 124 of 1993); or

1.7.5 sphere of government in the Republic.

APPENDIX 7

TEMPLATE FOR A FINANCIAL GUARANTEE

(FINANCIAL INSTITUTION'S LETTERHEAD)

MINISTER RESPONSIBLE FOR MINERAL RESOURCES (or his/her successor)

.....

Permission, right or permit number:

Expiry date of the permission, right or permit:

Sir

DEMAND GUARANTEE FOR THE COMPLIANCE WITH THE STATUTORY OBLIGATION RELATED TO DETERMINING AND MAKING OF FINANCIAL PROVISION FOR RECONNAISSANCE, PROSPECTING, EXPLORATION, MINING OR PRODUCTION OPERATIONS

1. In relation to the responsibility, in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and/or replaced from time to time, ("the Act"),..... (the "holder") is required to determine and provide the prescribed financial provision to undertake rehabilitation and remediation of environmental damage caused by reconnaissance, prospecting, exploration, mining or production operations to the satisfaction of the Minister in accordance with the provisions of the Financial Provisioning Regulations, 2019, promulgated in terms of the Act, or any legislation or subordinate legislation which supplements, amends and/or replaces such regulations or deals with similar or related matters for such operations known asand situated at (give full description of property) or any applicable part thereof (the "Mine"), and we, in our capacity as duly authorised representatives of the bank / financial institution as Guarantor, confirm that the aggregate maximum amount of R..... (.....) (the "Guaranteed Sum") is available to the Minister for the purpose of executing the rehabilitation and remediation actions identified in plans used to determine the prescribed financial provision for such operations as contemplated in the Financial Provisioning Regulations, 2019, or any legislation or subordinate legislation which supplements, amends and/or replaces such regulations.

2. Subject to compliance by the Minister with the requirement to give notice as contained in the Financial Provisioning Regulations, 2019, or any legislation or subordinate legislation which supplements, amends and/or replaces such regulations, the Guarantor hereby unconditionally undertakes, as a principal obligation, to pay to the Minister the Guaranteed Sum, or any portion thereof, by no later than 21 working days (Mondays to Fridays, excluding weekends and public holidays in the Republic of South Africa) after receipt of a written claim from the Minister (or made on behalf of the Minister) to do so.

2.1 A claim under this guarantee may be instituted by the Minister at any stage commencing from the date of signature of this guarantee and must be delivered to the Guarantor, together with the original guarantee document, or by complying with paragraph 3.1 if the original guarantee document is lost, at the Guarantor's address as provided herein.

2.2 Where relevant, this guarantee is issued as a replacement of Guarantee No. _____ issued by _____ (the Guarantor) on _____ for the amount of R _____ and does not create any further obligations for the Guarantor other than set out in this replacement guarantee. Guarantee No. _____ is null and void from the date of issue of this replacement guarantee (scrap if not applicable).

3. This guarantee is not negotiable nor transferable, and—

3.1 must be returned to the Guarantor when giving account to the Guarantor in terms of the Financial Provisioning Regulations, 2019, or any legislation or subordinate legislation which supplements, amends and/or replaces such regulations, or if the original guarantee document has been lost, must be accompanied by a statement that the applicable document cannot be located and that you indemnify the Guarantor against any direct loss that it may suffer (other than as a result of its own negligent or wilful act or omission) as a direct result of such original document not being returned to it;

3.2 shall lapse—

(i) after the financial institution has paid out the Guaranteed Sum, should the Minister call on the guarantee;

(ii) on the granting of a closure certificate in terms of the Mineral and Petroleum Resources Development Act, 2002 in respect of the whole of the operations; or

(iii) on withdrawal of this guarantee and replacement with an alternative financial vehicle where relevant; and

3.3 shall not be construed as placing any other responsibility on the Guarantor other than the paying of the Guaranteed Sum or any portion thereof.

4. The Guarantor reserves the right to withdraw from this guarantee after having given the holder, the Minister, the Minister responsible for environmental affairs and the Minister of Finance at least 4 months' written notice in advance, by registered mail, of his/her/its intention to do so.

5. The Guarantor will pay on demand under this guarantee without regard to any claim or dispute of any nature which any party may allege.

6. This Guarantee shall be governed by the laws of the Republic of South Africa. The courts of the Republic of South Africa shall have sole jurisdiction.

Yours faithfully

.....

(SIGNATURE)

(SIGNATURE)

.....

.....

(NAME)

(NAME)

.....

.....

(DESIGNATION)

(DESIGNATION)

Who hereby warrants his/her authority

Who hereby warrants his/her authority

ADDRESS:.....

.....

.....

.....

DATE:

PLEASE NOTE:

- (1) No amendments and/or additions to the terms or conditions of this guarantee will be accepted.
- (2) The address of the addressee of this guarantee must be stated clearly.
- (3) This guarantee must be returned to:

.....

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