



SAIMM
THE SOUTHERN AFRICAN INSTITUTE
OF MINING AND METALLURGY



ESG INTEGRATION INTO SAMCODES

A McDonald,
Chair: SAMCODES ESG Working Group

CONFERENCE ESG IN THE MINERALS INDUSTRY – CHALLENGES AND OPPORTUNITIES

16 – 17 OCTOBER 2024



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SAMCODES:



22 Member and 3 Observer Professional Organisations / Industry/Government Bodies

SAMCODES Standards Committee (SSC)



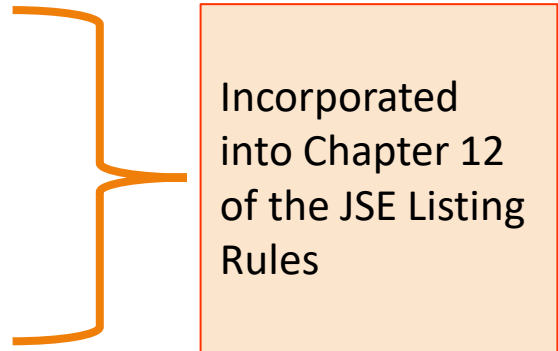
The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves



The South African Code for the Reporting of Mineral Asset Valuation



The South African Code for the Reporting of Oil and Gas Resources



Incorporated into Chapter 12 of the JSE Listing Rules

GUIDELINES: SAMESG | DIAMONDS | COAL | INDUSTRIAL

The South African Guideline for the Reporting of Environmental, Social and Governance parameters within the mining and oil and gas industries

SAMREC Guideline Document for the Reporting of Diamond Exploration Results, Diamond Resources and Diamond Reserves

SANS 10320:2017: South African guide to the systematic evaluation of coal resources and coal reserves

Industrial Guideline Document – work in progress



Current ESG in SAMREC:

“Environmental” and “Social” mentioned five times in the Code:

- LoM plan definition (page 2)
- Modifying Factors definition and Figure 1 (page 13)
- Guidance Mineral Resources (page 19)
- Figure 2 (page 33)
- Figure 3 (page 40)

They appear seven times in Table 1:

- Table 1 Sections 1.2(ii), 1.5(ii), 4.1(iii), 4.3(v), 4.5(iii), 5.5(i-v), 5.7
- Also in Appendix 1 - Technical Studies (page 83)

“Governance” does not appear in the Code at all

No mention of or reference to:

“The South African Guideline for the Reporting of Environmental, Social and Governance parameters within the mining and oil and gas industries” (SAMESG Guideline, first issued in 2015)

ESG Factors from exploration to closure not adequately covered in Code.

Align disclosure of ESG Factors from exploration to closure with international trends.

			Exploration Results	Mineral Resources	Mineral Reserves
5.5	Environmental and Social	(i)	<p>Frequently results in no ESG reporting at Exploration, even Scoping stages</p> <p>Technical Studies are not applicable to Exploration Results.</p>	Confirm that the company holding the tenement has addressed the host country’s environmental legal compliance requirements and any mandatory and/or voluntary standards or guidelines to which it subscribes	
		(ii)		Identify the necessary permits that will be required and their status. Where not yet obtained, confirm that there is a reasonable basis to believe that all permits required for the project will be obtained	
		(iii)		Identify and discuss any sensitive areas that may affect the project as well as any other environmental factors, including Interested and Affected Parties I&AP and/or studies that could have a material effect on the likelihood of eventual economic extraction. Discuss possible means of mitigation.	
		(iv)		Identify any legislated social management programmes that may be required and discuss the content and status of these.	
		(v)		Outline and quantify the material socio-economic and cultural impacts that need to be mitigated, and their mitigation measures and, where appropriate, the associated costs.	

Current ESG in SAMREC:

ESG Factors from exploration to closure not adequately covered in Code.

		Exploration Results	Mineral Resources	Mineral Reserves
1.2	Location	(i)	Description of location and map (country, province, and closest town/city, coordinate systems and ranges, etc.).	
		(ii)	Country profile: present information pertaining to the project host country that is pertinent to the project, including relevant applicable legislation, environmental and social context etc. Assess, at a high level, relevant technical, environmental, social, economic, political and other key risks.	
4.1	Geological Model	(iii)	Describe any obvious geological, mining, metallurgical, environmental, social, infrastructural, legal and economic factors that could have a significant effect on the prospects of any possible exploration target or deposit.	
4.3	RPEEE	(v)		Disclose and discuss the environmental and social (or community) parameters.
4.5	Reporting	(iii)	State assumptions regarding mining methods, infrastructure, metallurgy, environmental and social parameters. State and discuss where no mining-related assumptions have been made.	
5.7	Risk Analysis	(i)	Technical Studies are not applicable to Exploration Results.	Report an assessment of technical, environmental, social, economic, political and other key risks to the project. Describe actions that will be taken to mitigate and/or manage the identified risks.

Current ESG in SAMVAL:

“Environmental” and “Social” aspects mentioned five times in the Code:

- Valuation methods (page 14)
- Definition of Feasibility Study (page 25)
- Definition of LoM Plan (page 29)
- Definition of Mineral Reserve (page 30)
- Definition of Modifying Factor (page 30)

They appear two times in Table 1:

- Sections T1.2, T1.10

“Governance” aspects are referred to in Table 1.10.

“The South African Guideline for the Reporting of Environmental, Social and Governance parameters within the mining and oil and gas industries (SAMESG)”

Referred to in Table 1.10 and Appendix D

**T1.10
Modifying Factors
and Key
Assumptions**

A statement of Modifying Factors shall be included, separately summarizing material issues relating to each applicable Modifying Factor. The CV shall set out the manner in which he has satisfied himself that he can rely upon the technical information provided.

(NOTE: All the Modifying Factors shall be listed, or references provided to relevant definitions).

This shall include an explanation of all material assumptions and limiting factors.

When reporting on environmental, social and governance modifying factors, reference should be made to the ESG reporting parameters as required by the Southern African Minerals Environmental, Social and Governance Guideline (SAMESG) or other recognised code, e.g. Equator Principles.

Align disclosure of ESG Factors and their impact on mineral asset valuation from exploration to closure with international trends.



12. ENVIRONMENTAL, SOCIAL & GOVERNANCE CONSIDERATIONS

12.1. Public Reports must discuss the environmental, social (including health and safety), governance aspects (ESG) of the project or operation that could materially affect the project during development, operations and after closure.

PERC REPORTING STANDARD 2021
Pan-European Standard for the Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves

The Pan-European Reserves and Resources Reporting Committee (PERC asbl) approved and published 1 October 2021

Logos: I-M3, FAMME, IMEB, The Geological Society, Institute of Minerals, Metals & Mining, etc.

three principal themes: Environmental, Social (including safety) and Governance; ESG includes all aspects of licence to operate relevant to the success or failure of a project or operation.

Aspects of a project or operation affect shareholder and management decisions and decision making, employees and contractors; maintaining environmental permits from regulatory bodies, and licence to operate from host communities and potentially other stakeholders.

Health and safety is the ability of the environment to maintain itself and its ability to support the local flora and fauna. The environment also includes services that cover how the plants and animals mesh with their habitats and support the broader ecological systems we live in.

A 'whole of site' incorporates evidence of environmental management, how social impacts are mitigated and how governance structures to facilitate effective management of the project are managed through local procurement and hiring (local content), and other factors.

Health and Safety is an integral part of ESG (under Social). Health and Safety includes community and employee well-being, environmental management and the governance structures to facilitate effective management of the project.

External governance exercised by governmental and internal corporate governance. External governance includes national and international regulatory requirements. Governance at the project level includes transparency, board diversity, shareholder engagement, and regulatory bodies; and

Legacy issues associated with a project or operation that could present a material risk.

Public reports should include available relevant information on the external context for a project or operation, and governance Modifying Factors related to the project or operation that should be included in the management controls/measures/

5.6 Environmental, Social Performance, and Governance	
(i)	<p>General:</p> <ul style="list-style-type: none"> Confirm that the company or reporting entity has addressed the host country environmental legal compliance requirements and any mandatory and/or voluntary standards or guidelines to which it subscribes Identify the necessary permits that will be required and their status and where not yet obtained, confirm that there is a reasonable basis to believe that all permits required for the project will be obtained Identify and discuss any sensitive areas that may affect the project as well as any other environmental factors including interested and Affected Parties (I&AP) and/or studies that could have a material effect on the likelihood of eventual economic extraction. Discuss possible means of mitigation. Identify any legislated social management programmes that may be required and discuss the content and status of these. Outline and quantify the material socio-economic and cultural impacts that need to be mitigated, and their mitigation measures and where appropriate the associated costs.
5.5	<p>Context: The project context is determined and described, including the following aspects:</p> <ul style="list-style-type: none"> The locality's physical geography, centres of population, economic and cultural characteristics; Existing land and natural resource use for economic, cultural, recreational and conservation purposes (inclusive of environmental and cultural sites of interest); Existing or historical industrial development and associated infrastructure including mining and quarrying in the region; and Local governance structures and administrative bodies, their roles and responsibilities in relation to permitting and regulators. <p>(ii) Site access routes and any potential impact on environment or local communities</p> <p>(iii) Provision of energy for activities (e.g. off-grid renewable energy), or sourced direct from local non-renewable power grid with plans for decarbonization for future project if possible)</p>
(iii)	<ul style="list-style-type: none"> High level drought, flood or other natural hazards High level known in or around the project area

Table 1 - Section 5.5 Environmental, Social Performance, and Governance Items (i) to (xiii)

Section References	PERC REPORTING STANDARD - TABLE 1			Section in the CPR where this is located or why it is considered not relevant to the project. (If not, why not?)
	Exploration Results	Mineral Resources	Mineral Reserves	
(iv)	Permits and permission: Identification of the necessary permits that will be required and their status, and where not yet obtained, and confirmation that there is a reasonable basis to believe that all permits required for the project will be obtained in a timely manner. Also include any records of penalties / fines or revoked permits complete with rationale.			
(v)	Liabilities: Describe any known rehabilitation activities, liability and / or compliance costs	Describe the best cost estimate for closure inclusive of environmental, social material remaining liability and compliance costs. Provide a description of mechanisms in place to address unplanned closure		If appropriate, describe bonding obligations in place to ensure that these liabilities can be funded on a qualitative and quantitative basis.
(vi)	Description of stakeholder group characteristics Records of Community and Stakeholder relationships: Records kept of all engagements with all stakeholders from the outset of the project. A grievance and/or complaints procedure established, stakeholders' issues, concerns recorded and tracked until resolved.			
(vii)		A data management system implemented to record and track engagements; Provisions made for vulnerable and/or underrepresented stakeholder groups Presence, or not of Indigenous People, if FPIC triggered, how is this managed		
(viii)	Health and safety protocols and procedures required for exploration target definition inclusive of evidence of adherence to them and ongoing health and safety record.	Health and safety procedures and protocols, including community safety and security, across the exploration programme inclusive of evidence of adherence to them and ongoing health and safety record		
(ix)	Opportunities for contributing to the local economy identified and utilized where appropriate.	Legislated and or voluntary social development programmes that may be required and content and status of these.		
(x)		Material socio-economic and cultural impacts that need to be managed, and where appropriate the associated costs.		
(xi)	Description of corporate governance board structure: gender, nationality, tenure, roles, responsibilities and process for selection of Board members, and Board remuneration processes and procedures			
(xii)	<ul style="list-style-type: none"> Commitment to GIP: transparency, diversity, commitment to ESG described Corporate commitment to social performance described / provided Corporate commitment to environmental stewardship described / provided 	<ul style="list-style-type: none"> Description of how corporate compliance is assured and verified Demonstrable commitment to GIP: transparency, diversity, commitment to ESG described Demonstrable commitment to social performance described Demonstrable commitment to environmental stewardship described 		
(xiii)	Integrated Risk Management: Description of identified potential modifying factors and management actions taken to manage them where appropriate	<ul style="list-style-type: none"> Description of proposed mitigation plans for identified modifying factors and management actions taken to manage them where appropriate. Description of any additional risks that may impact on the long term future of the project, even if not deemed to be material at the current time. Description of how the risk assessment process outlined here is integrated with the overall risk management framework for the company as a whole. 		

JORC (2024) DRAFT:

Australasian Code for Reporting of Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves

The JORC Code Exposure Draft

DRAFT

	Exploration Targets	Exploration Results	Mineral Resources	Ore Reserves
5.5 Environmental, Social and Governance (ESG)	5.5.1	Confirmation that the relevant host jurisdiction tenement environmental and legal requirements are in good standing. Disclosure of any material legal environmental and social permitting actions, or challenges in process. Confirmation that any required regulatory rehabilitation bonds/financial assurance are in place.		
	5.5.2	The legal, governmental, permitting, statutory parameters. Status of key stakeholder identification, mapping and engagement plans.	The legal, governmental, permitting, statutory parameters. Provide commentary if any resources are contingent on environmental permitting and land access. Status of key stakeholder identification, mapping and engagement plans, and potential risks to achieving stakeholder support.	The legal, governmental, permitting, statutory parameters. Provide commentary if any reported ore reserves are contingent on environmental permitting and land access situations still to be resolved (resettlement, cultural heritage etc.). Status of key stakeholder identification, mapping and engagement plans, and likelihood of achieving and maintaining stakeholder support.
	5.5.3	Discuss any known ESG-related considerations which could influence ongoing exploration access and/or reasonable prospects for economic extraction.	Discuss any material ESG-related parameters that may put at risk the future conversion of some or all the reported mineral resources to ore reserves.	The material ESG-related parameters that: - could restrict access to capital - are present or likely to be present that may materially impact the anticipated asset value - may potentially risk downgrade of some or all the ore reserves
	5.5.4	Potential material exploration parameters that may influence the conversion of mineral resources to ore reserves.		Parameters that may influence the conversion of mineral resources to ore reserves, as applied in the PFS/FS Study, including commentary on post-technical deliverability, adequacy of budget provisions, any mining commitments or legal requirements.
	5.5.5	Identification of any declared potential impacts that may affect the way the exploration is conducted.		Identified or sensitive biodiversity areas that may have a material impact on the project and/or specific adjustments to mine and land use planning to confirm inclusion in and alignment to the Ore Reserves case.
	5.5.6	Optional reporting of greenhouse gas emissions.		Understanding of expected greenhouse gas emissions for Ore Reserves.
	5.5.7	High level statement of level of water stress at project level.	Report climate and water risk assessment, including historical occurrences and terrain exposures to extreme weather events and water access for the development project.	Declaration of climate and water risks, including fire, flood, drought and extreme weather exposures, and competition from other users for water from identified sources. Report any adaptations required to protect the expected value of the Ore Reserve.
	5.5.8	N/A	Declaration of potential effects on the project from climate change-related statutory, regulatory and fiscal requirements.	Report in project economic evaluations the costs associated with climate change-related statutory, regulatory and fiscal requirements.
	5.5.9	Identify potential environmental geochemistry risks	Discuss geochemical characterisation and environmental geochemistry hazards identified (including but not limited to acid and metalliferous drainage potential) with potential effects identified. Comment on scoping study options and risk assessments completed.	Discuss PFS/FS level waste rock environmental geochemical characterisation completed risk assessments undertaken, control mechanisms applied, and mine domains designed to address any identified risks for operational and closure phases. Where applicable, the status of approvals for process residue storage and waste rock dumps should be reported.
	5.5.10	Optional identification of local economic participation and/or social contributions	Report any legislated and/or discretionary economic participation and/or social contribution requirements and their status.	
	5.5.11	High level description of relevant stakeholder groups, in particular any indigenous and other groups having legally recognised land-connections. Complaints-procedure established, any prevalent issues outcomes reported. Outline any material pre-existing social issues.	Discuss relevant stakeholder groups, in particular any indigenous and other groups having legally recognised land-connections. Report status of engagement programmes and any legally binding local level agreements, including land access agreements. Disclose material social issues requiring resolution or ongoing commitments required for project progression.	
	5.5.12	Description of identified exploration and ESG-related risks, and mitigating management actions where appropriate	Description of how ESG-related risk management is integrated within project overall risk management. Description of identified potential ESG-related risks and management actions taken to manage them where appropriate. Description of ESG-related risks that are different to project risks but relevant to potential long-term operations.	Description of how ESG-related risk management is integrated within project overall risk management, and for construction and future operations. Description of proposed mitigations for identified ESG-related project and construction risks. Description of proposed mitigations for identified ESG-related future operational and owner risks
	5.5.13	Report health and safety approach for workers and community during exploration work.	Report health and safety approach for workers and community during resource definition work, including evidence of protocols, procedures and record keeping.	Report health and safety approach for workers and community during reserve definition work, including evidence of protocols, procedures and record keeping. Report transition and change management arrangements for transfer of health and safety system to project construction team. Other ESG-related factors associated with current on the ground field activities that may affect project construction.
	5.5.14	Description of rehabilitation liabilities associated with unanticipated exit from or termination of exploration activities.	For a scenario where the project does not proceed, report exit strategy including rehabilitation liability and costed mitigation.	

Table 1 - Section 5.5 Environmental, Social Performance, and Governance Items (i) to (xiv)

JORC (2024) DRAFT – Guidance Notes:

APPENDIX 1 ESG GUIDANCE MATRIX

ENVIRONMENTAL				
Impact Category	Exploration	Mineral Resources	Ore Reserves	
Air	Air emissions, including dust quantity and characteristics	• Potential impacts to people and environment	• Potential impacts to people and environment • Extreme event management (storm, flood, fire)	• Potential impacts to people and environment • Extreme event management (storm, flood, fire)
	Noise and visual	• Potential impacts to people and environment	• Potential impacts to people and environment	• Potential impacts to people and environment
Water	Availability and competition	• Availability and quality	• Availability and quality • Availability and competition	• Availability and quality • Availability and competition
	Surface flow and quality impacts		• Hydrological & hydrogeological interpretation	• Hydrological & hydrogeological interpretation • Dewatering and other discharges
	Aquifer impacts		• Water and wastewater management	• Water and wastewater management • Water efficiency, reuse, and recycling
Sto				
SOCIAL				
Impact Category	Exploration	Mineral Resources	Ore Reserves	
Land and Biodiversity	Nat Ter imp Agr	Health, Safety and Security	Affected community H&S	• Workforce considerations
	Pro spe			• Workforce considerations
GOVERNANCE				
Impact Category	Exploration	Mineral Resources	Ore Reserves	
Mineral Waste	Soil Mir RO	Tenure	Permits, Approvals and Licences status	• Permits, Approvals and Licences status
			Indigenous Title/Agreements	• Indigenous Title/Consent Agreements
			Other rights holders	• Other rights holders (e.g. pastoralists)
People	Management	Record keeping, data quality and security	• Record keeping, data quality and security	
		Downstream supply chain certification	• Management systems and records	
		Repor and di	• Management systems and records • Policies and procedures	
Climate	Crit GH GH Car Ens anc	Legal	Business corrup comp	• Management systems and records • Extreme event management
			Planning for closure, unanticipated suspension/termination	• Sustainability ratings
			Sustainability	• Sustainability ratings
Heritage	Legal	Land acquisition	• Land acquisition	
		Permitting	• Permitting condition compliance	
		Commercial arrangements	• Commercial arrangements	
Human Rights	Human Rights	Terms and conditions	• Existing orders • Terms and conditions	
		Refer to UN Charter and Voluntary Principles on Security and Human Rights	• Due diligence review as appropriate • Adherence to Voluntary Principles on Security and Human Rights	
		Adherence to Voluntary Principles on Security and Human Rights	• Adherence to Voluntary Principles on Security and Human Rights	
Ethics	Ethics	Reputation exposures	• Commitment to ESG described	
			• Commitment to ESG described • Transparency • Diversity • Whistleblowing procedure	
			• Commitment to ESG described • Transparency • Diversity • Whistleblowing procedure • Codes of conduct • Supplier privacy • Political Influence	

Australasian Code for Reporting of Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves

The JORC Code - Guidance Notes Exposure Draft

The ESG Guidance Matrix in Appendix 1 of the Guidance Notes expands on the Table 1 requirements in the Code.



ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) DEFINITIONS GUIDE

in support of the public reporting of

EXPLORATION TARGETS, EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES

May 2024



ESG Factors

ESG is the acronym referring to Environment, Social and Governance. Each of these areas are unique disciplines themselves, however there are many aspects that overlap, and it is often this inter-relationship that drives risk (threat and opportunity).

Environmental Factors relate to the surroundings in which a property exists. These include the current and anticipated future state of climate, air, water resources, biodiversity, and ecosystem services within the project's environmental zones of influence

Social Factors relate to the lives, livelihoods, social organisation, cultural heritage, and health, safety, and well-being of internal (employees) or external (communities) people who live and work within the project's social zones of influence.

Governance Factors relate to the company's leadership, strategies, policies and systems aimed at driving compliant and ethical business practices in pursuit of sustainable development. It specifically includes mechanisms to enable the company to effectively implement, verify and report on the management of business risks (threats and opportunities). Governance strategies, policies and systems are typically developed by the company for implementation by the project with due cognisance of context-specific circumstances.

ESG Inquisition – Key Conclusions and Learnings:

Content of updated guidance

- Define **E, S and G** in the context of MRR.
- Disclose **comparable ESG** information.
- Guidance on determining **materiality**.
- Material commitments made within the public domain to be **disclosed**.
- “Hot topics” to be considered including **Human Rights** and **climate change risk**.
- **Residual and latent liabilities** require specific disclosures.
- Address **South African-centric** requirements e.g. Social & Labour Plan (SLP).
- **Quantification of the risk and integration into mineral project valuation.**
- Consider **financial allocations** to fund implementation of the ESG strategy.
- **Data assurance** practices.
- How to report on different phases of the mining lifecycle i.e. exploration or Projects vs operating mines?
- Guidance on bridging the gap between **sustainability reports, RPEEE and MF**.
- **ESG criteria must be considered as integral to MRR, not a stand-alone disclosure / section.**
- Consider **new and emerging ESG reporting** guidelines and disclosures.

Guidance considerations

- **Purpose & role** of the Guideline to be clearly articulated.
- **Procedural approach that avoids box-ticking.**
- Principles of **transparency & materiality**.
- Combining SAMESG into the SAMREC Code is preferable.
- **ESG disclosures to be integrated into SAMREC Table 1.**
- **ESG aspects to be considered early on in the MRR process, not a late addition.**
- Focus on **investor as the end-user**.
- **Avoid duplication** of other disclosures e.g. annual sustainability reports.
- Role of **Competent Persons (CPs) and Subject Matter Experts (SMEs)** including determination of competency requirements.
- **Clear statement of expectations** of ESG disclosures at each Mineral Reporting phase.
- **CPR vs other Company** mineral disclosures.
- **Minimum disclosures vs best practice.**
- **Stakeholder engagement** must be inclusive of broad range of stakeholders.
- Address **current lack of awareness** of SAMESG.
- **Training for CPs and SMEs** once Guideline completed.
- Alignment with **CRIRSCO ESG Working Group.**



SAMVAL is principles based – valuation approaches are defined, up to CV to select

JORC ESG WORKING GROUP

Followed four work streams:

- Landscape and stakeholder mapping
- Value methodologies (qualitative and quantitative considerations for assigning value to ESG)
- Definition of material ESG Modifying Factors and reporting requirements
- ESG competent persons accreditation and education

Employed a full-time project manager

SAMCODES ESG WORKING GROUP

Purpose

- Prepare a revised SAMESG Guideline, and
 - Update applicable sections of the SAMCODES to ensure material ESG considerations are systematically considered and included in Public Reports [“best in class” and “leading edge”].
- ESG considerations must be practical and maintain balanced reporting.

Process

- From ESG Inquisition,
 - Aversion to data dumping
 - Contextualise business and regulator expectations
 - Categorise findings plus SAMESG learnings
 - Distill key conclusions and learnings
- ESG matters should be examined from a South African perspective (different from JORC/PERC countries)
 - Key principles for end users are materiality, risk and assurance
- Define material ESG Modifying Factors and reporting requirements
- ESG Subject Matter Experts (accreditation / qualifications)

SAMCODES ESG WORKING GROUP COMPOSITION

CHAIR:
Chair of SAMCODES Standards Committee

Industry Professionals (major Mining Companies):
Seef Vermaak
Tim Rowland
Nicole Wansbury
Charlene Wrigley

Consultants/Competent Persons/SMEs:
SAMREC:

- Maria Antoniades
- Ken Lomborg (SAMREC Chair)
- Dr Tania Marshall
- Sifiso Siwela (Vice-Chair, SSC)

SAMVAL:

- Kelly Poulton-Wuth
- Andy McDonald (Chair, SSC)

SAMESG

- Teresa Steele-Schober (Chair SAMESG)

Mari Wolmarans (part-time)

Regulator (JSE):
Annalie de Bruyn



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THE SOUTH AFRICAN CODE FOR THE REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES
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THE SOUTH AFRICAN CODE FOR THE REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES
(THE SAMREC CODE)
June 2024 Proposed
DRAFT EDITS

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SAMCODES
THE SOUTH AFRICAN MINERAL REPORTING CODES
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“Golden Thread” of ESG disclosure interspersed through the SAMREC Code

This version of the SAMREC Code incorporates Environmental, Social and Governance (ESG) Factors relevant to public reporting of Exploration Results, Mineral Resources and Mineral Reserves in South Africa. ESG Factors and minimum disclosure requirements for early-stage exploration through development are included in the SAMCODES ESG Working Group in association with the SSC, under the auspices of the SSC.

Page 1

Minimum ESG disclosure requirements for reporting of Exploration Results, Mineral Resources and Mineral Reserves are interwoven into the SAMREC Code using the following approach:

Page 2

ESG Factors and risks are expected to be identified, assessed and reported on in a project or operation develops. Where more information is available, risks viewed as material should be disclosed. Management controls, measures, systems and processes could be made available to public reports where such details are readily available.

Guidance Page 8

Materiality: A Public Report contains all the relevant information that investors and their professional advisors would reasonably require to make a reasoned and balanced judgement on the Exploration Results and Mineral Reserves being reported. An appropriate analysis of the ESG Factors that may be material to investors and that they have been ranked to show materiality and prioritisation for disclosure. Despite implementing proposed mitigation measures, issues likely to remain material to the mineral reporting must be included for completeness.

Page 9

11 Definition: A Subject Matter Expert (SME) is a person who is a corporate member of a recognised professional organisation which maintains a minimum education and experience qualifications for membership and subscribes to the code of ethics of the organisation.

12 Definition: A deposit under consideration is a deposit of exploration results and the type of deposit under consideration.

Subject Matter Expert Page 13

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS IN THE REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES

78 → This part of the Code sets out the requirements for reporting ESG Factors. The requirements are systematic and consistent. ESG Factors have the potential to affect the financial metrics, regulatory, operational, and/or financing.

It is recommended that CPs consult the SAMESG Guideline, which is issued in support of the Code and which provides detailed guidance to assist companies and CPs in assessing ESG Factors for Public Reporting.

ESG Factors (New Section) Pages 50 - 52

Recommended ESG Integration in SAMREC:

ESG Integration into SAMCODES

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS IN THE REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES

78 This part of the Code addresses matters specific to considering ESG Factors relevant to public reporting of Exploration Results, Mineral Resources and Mineral Reserves. The minimum disclosures described in this part of the Code are intended to guide practical and pragmatic reporting of ESG Factors.

THE SOUTH AFRICAN CODE FOR THE REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES
(THE SAMREC CODE)
June 2024 Proposed
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SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Comment	
1.6	Environmental, Social and Governance (ESG)	(i)	Identify, assess and discuss legal and permitting requirements and timelines.	Identify, assess and discuss legal and permitting requirements and timelines for current and future phases. Include compliance costs in budgets and assess impacts of delays.		
		(ii)	-	Disclose proportion of Mineral Resources contingent on permits.	Disclose proportion of Mineral Reserves contingent on permits.	
		(iii)	Disclose adoption of voluntary responsible mining standards and ESG targets.			
		(iv)	Describe ESG organisational structure.			
		(v)	Describe stakeholder identification and engagement processes and identified issues.			
		(vi)	Disclose material ESG Factors relevant to the	Disclose material ESG Factors relevant to	Disclose material ESG Factors relevant to	
(vii)				and social monitoring costs in budget and plans.		
(viii)				ation objectives.		
(ix)				considering the catchment areas of extreme weather events.		
(x)				change related risks and considerations in the		
(xi)				chemical risks related to and adopted mitigation measures.		
(xii)				comply with mandatory requirements and		
(xiii)						
(xiv)		Describe the mechanisms in place for stakeholders to raise complaints.	Describe the mechanisms in place for stakeholders to raise complaints. Provide a summary of material issues raised and resolutions implemented.			
(xv)		Disclose material social factors and basis of assumptions.				
(xvi)						
(xvii)		Disclose community and occupational health and safety programmes.	Disclose community and occupational health and safety programmes related to project concept as described in the technical study.	Disclose community and occupational health and safety programmes and results related to the operating mine or project concept as described in the technical study.		
(xviii)		Identify exploration programme closure risks and possible future mine closure risks.	Identify possible future mine closure risks and estimate costs.	Describe anticipated future mine closure risks and estimate costs.		
(xix)		Disclose potential liabilities related to unplanned closure of exploration programme.	Discuss potential impacts related to unplanned closure of development or mining project including management of associated liabilities.			

Main Recommended Change in SAMREC Table 1 –

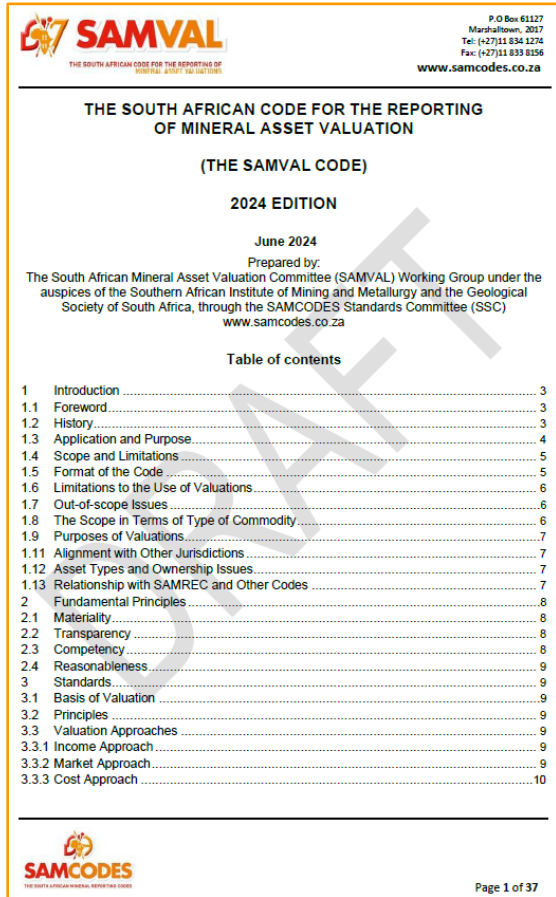
Environmental, Social and Governance items moved from section 5.5 to new section 1.6

Consolidates all ESG aspects in 19 items (i) to (xix)



Recommended ESG Integration in SAMVAL:

ESG Integration into SAMCODES



“Golden Thread” of ESG disclosure interspersed through the SAMVAL Code

The SOUTH AFRICAN CODE FOR THE REPORTING OF MINERAL ASSET VALUATION (the SAMVAL Code or the Code) sets out minimum standards for the Reporting of Mineral Asset Valuation in South Africa. This Code incorporates consideration of Environmental, Social and Governance (ESG) factors that are relevant to the valuation of mineral assets in South Africa.

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The underlying reason for having a Code for the valuation of Mineral Assets is to provide consistency and minimum standards, as well as guidance, for Mineral Asset Valuation professionals. The minimum standards and guidance are expanded to cater for ESG Factors that can impact on the valuation of or the liability associated with a mineral asset. This limits unscrupulous valuations, which could compromise the interests of investors and potential investors.

Pages 5 & 6

valuation of petroleum assets. The minimum ESG disclosure requirements for Exploration Properties, Mineral Assets Resources and Mineral Reserves are set out in the SAMREC Code, with further guidance and explanation provided in the Southern African Institute of Mining and Metallurgy Reporting of Environmental, Social and Governance (ESG) Factors on the valuation of mineral assets (Appendix A), with further guidance and explanation in the area of Public

Subject Matter Expert
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The Code sets out a required process for the reporting of Mineral Asset Valuations. This applies to both Public Reports, such as listings, financing, etc., and to other reports for various purposes, such as the SAMVAL Code, in conjunction with the SAMREC Code or other relevant Codes, such as the Mineral Resource and Mineral Reserve Codes and SAMESG Guidelines. The Code sets the impact of the minimum ESG disclosure requirements on the valuation of mineral assets at any point along the value curve.

information, which is as comprehensive as possible, in their Public Reports. Inclusion of ESG Factors in a Mineral Asset Valuation Report is not intended to replicate what appears in a company's sustainability report but rather to assess the impact of these factors on the valuation of the mineral assets.

It is the responsibility of the valuer to ensure that they have the necessary skills in accordance with the Code for the valuation of a particular commodity, and the scope of the assignment. Valuers may engage Subject Matter Experts (SMEs) or Competent Persons to provide technical inputs and ESG Factors that may impact on the valuation. Valuations which the CV may not have (for example, where valuations at a company level are required, and which may include valuation of personal property, businesses, and financial interests).

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For purposes of the SAMVAL Code, all valuations shall not be limited to, premises, assumptions, restrictions, legal, environmental, social, and other factors, that are applied when converting Mineral Resources to Mineral Reserves. These factors are collectively as Modifying Factors.

T1.8¶ Exploration Results and Exploration Targets	Exploration programmes, their location, results, interpretation, and significance shall be described.¶ Exploration Targets shall be discussed.¶ Material ESG Factors that could impact on the eventual viability and hence valuation of an Exploration Programme shall be identified.
T1.10¶ Modifying Factors and Key Assumptions	A statement of the Modifying Factors and Key Assumptions shall be provided. The CV shall rely upon the Modifying Factors and Key Assumptions provided to the CV. The CV shall identify all material assumptions and limiting factors. Valuation of the impacts of ESG Factors should be done by reference to the ESG reporting parameters as required by the Southern African Minerals Environmental, Social and Governance SAMESG Guideline (SAMESG) or other recognised code, e.g. Equator Principles or the ESG disclosure requirements of other CRIRSCO-affiliated mineral reporting codes.

SAMVAL Table 1.
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SAMOG and ESG:

SAMOG Code is based on the Petroleum Resources Management System (PRMS).

Reporting in SAMOG Code must be done in line with PRMS.

SAMOG Code is principle based, in line with PRMS. ESG matters are required to be considered but are not explicitly mentioned.

There is no need for SAMCODES ESG integration into the SAMOG Code.

Oil and Gas references would be removed from the SAMESG Guideline.



SAMESG Guideline V2.0 vs SAMREC:



PERC	JORC	SAMCODES
ESG section in Code	n/a	ESG Section in SAMREC
Table 1: Section 5.5 13 items	Table 1: Section 5.5 14 items	Table 1: Section 1.6 19 items
n/a	Guidance ESG Matrix	Guidance & Expanded Table 1

SAMREC Table 1 entries (example for 1.6 (i) and (ii))

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Comment
1.6	Environmental, Social and Governance (ESG)	(i)	Identify, assess and discuss legal and permitting requirements and timelines.		Identify, assess and discuss legal and permitting requirements and timelines for current and future phases. Include compliance costs in budgets and assess impacts of delays.
		(ii)	-	Disclose proportion of Mineral Resources contingent on permits.	Disclose proportion of Mineral Reserves contingent on permits.

SAMESG Table 1 expanded entries (example for 1.6 (i) and (ii))

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves
1.6	Environmental, Social and Governance (ESG)	(i)	Identify, assess and discuss legal and permitting requirements and timelines. Identify the necessary permits that are or will be required for the <u>exploration programme</u> , note their current status, and where not yet obtained, describe the assumptions on which the company concludes that there is a reasonable basis to believe that all necessary permits will be obtained.	Identify, assess and discuss legal and permitting requirements and timelines. Identify the necessary permits that are or will be required for the <u>exploration programme and planned mining project</u> , note their current status, and where not yet obtained, describe the assumptions on which the company concludes that there is a reasonable basis to believe that all necessary permits will be obtained.
		(ii)	-	Disclose proportion of Mineral Resources contingent on permits. Proportion of resources that are contingent on environmental permitting and land access approvals (resettlement, cultural heritage etc.). And if so, provide a statement about how this uncertainty would be addressed.



SAMESG Guideline V2.0 vs SAMVAL:



Guidance provided is to highlight the possible range of aspects that must be considered in developing a valuation for a mineral property.

Valuation of ESG
 SAMVAL is principles based – onus is on the CV to select the appropriate valuation approach(es) to be used

ENVIRONMENTAL ASPECTS	SOCIAL ASPECTS	GOVERNANCE ASPECTS
Environmental baseline and impact assessments	Social baseline and impact assessments	Permitting costs
Environmental management plan requirements (including biodiversity offsets if relevant)	Social management plan requirements (including resettlement costs if relevant)	Management system implementation and maintenance
Concurrent rehabilitation obligations	Social & Labour Plan Commitments	Integration of corporate ESG targets into project designs e.g. Carbonisation, zero water discharge etc.
Monitoring during construction and operations	Local Economic Development Commitments	Compliance with legal obligations e.g. Mining Charter in South Africa
Ongoing impact assessments and specialist studies	Community Social Responsibility Commitments	Internal assurance programmes
Closure liabilities and transitioning costs	Skills development programmes	External assurance programmes
Mine closure financial provisioning obligations	Stakeholder engagement	Costs to implement and comply with selected responsible mining standards
Post-closure monitoring and impact management	Socio-economic transitioning programme	Human resources associated with all ESG obligations

Examples of potentially quantifiable costs that should be considered



Recommendations to Code Committees / Way Forward :

Action	Date
Draft documents in clean version (pdf) and tracked (Word) sent to Chairpersons of SAMREC, SAMVAL, SAMESG	29 July 2024 <i>[complete]</i>
Considered by committees at quarterly meetings (Address questions/queries during discussion)	29 August 2024 <i>[done in part]</i>
Collate/return outstanding queries or suggested edits to Working Group	23 September 2024 <i>[moved to mid-October]</i>
Working Group resolves the matters in conjunction with Code committees	October 2024
Working Group closes off its mandate at the final SSC meeting for 2024	28 November 2024



Concluding Remarks

The recommended changes:

- elevate ESG disclosure in SAMCODES, to satisfy international trends and be “best in class”, while maintaining balanced reporting and not increasing the burden on CPs
- consolidate all ESG aspects into one section in SAMREC Table 1.
- the importance of consideration of ESG aspects through all stages of the project life cycle
- support the fundamental pillars of transparency and materiality in public reports, without “green washing”
- do not replicate sustainability reports.

Thanks to members of the working Group for their support, dedication and input over the past 2 ½ years.

THANK YOU

