

SUMMARY OF FINDINGS

MINE SITE

Kolomela Mine

OPERATING COMPANY

Sishen Iron Ore Company

COUNTRY OF OPERATION

South Africa

MARCH 2024

Audit Details

Name of Mine:	Kolomela Mine
Operating Company:	Sishen Iron Ore Company
Mine Owner:	Anglo American
Country of Operation:	South Africa
Mined Material(s):	Iron Ore
# Employees / contractors:	1350 employees / 2901 contractors at the time of audit
IRMA audit page	https://responsiblemining.net/kolomela
Audit Type:	Initial IRMA Verification Audit
Audit Dates:	Stage 1: 20 August – 26 October 2021 Stage 1.5 virtual: 6 – 9 December 2021 Stage 2: 22 – 25 March 2022 Follow-up Assessment: 17 – 20 April 2023
Audit Team:	Lead Auditor (1) Social Auditors (2) Environmental, Health, and Safety Auditors (2) Support team members (3)
Audit Firm Declaration:	<p>✓ The findings in this report are based on an objective evaluation of evidence (through review of documents; first-hand observations at the mine site; and interviews with mine staff, workers and stakeholders) as presented during the Stage 1 and Stage 2 audit activities.</p> <p>✓ The audit team members were deemed to have no conflicts of interest with the mine.</p> <p>✓ The audit team members were professional, ethical, objective and truthful in their conduct of audit activities.</p> <p>✓ The information in this report is accurate according to the best knowledge of the auditors who contributed to the report.</p>
Scope of Audit	Kolomela operations and facilities, including an open pit mine, crusher, beneficiation (gravity separation, cyclone and drum), tailings storage facilities, and waste rock disposal areas.
IRMA Standard Version:	IRMA Standard for Responsible Mining, v.1.0 (June 2018)
Audit firm:	ERM CVS
Audit firm technical reviewer:	Glenn Keays
Decision date:	26 March 2024
IRMA Reference Number:	IRMA-STD-ERM-001-V-3448.IRMA1

Summary of Findings

Detailed audit findings on a requirement-by-requirement basis can be found in Appendix A.

Audit Outcome

The site is recognized as having achieved the level of IRMA 75 based on the performance recorded as a result of the Stage 1 and Stage 2 audit activities.

Scores by IRMA Standard Principle and Chapter

The table below provides a summary of the chapter-specific outcomes, and overall average scores per principle. Note, these scores are weighted based on the number of relevant requirements in each chapter.

	Chapter Relevant*	Actual Score	Possible Score	Percent Score
Principle 1: Business Integrity		98	114	86%
Chapter 1.1—Legal Compliance	Yes	12	14	86%
Chapter 1.2—Community and Stakeholder Engagement	Yes	26	28	93%
Chapter 1.3—Human Rights Due Diligence	Yes	27	28	96%
Chapter 1.4—Complaints Mechanism/Access to Remedy	Yes	20	22	91%
Chapter 1.5—Revenue and Payments Transparency	Yes	13	22	59%
Principle 2: Planning for Positive Legacies		107	134	80%
Chapter 2.1—Env/Soc Impact Assessment and Managem't	Yes	44	58	76%
Chapter 2.2—Free, Prior and Informed Consent	No	-	-	-
Chapter 2.3—Community Support and Benefits	Yes	13.5	16	84%
Chapter 2.4—Resettlement	No	-	-	-
Chapter 2.5—Emergency Preparedness and Response	Yes	11.5	12	96%
Chapter 2.6—Planning/Financing Reclamation & Closure	Yes	38	48	79%
Principle 3: Social Responsibility		169.5	192	88%
Chapter 3.1—Fair Labor and Terms of Work	Yes	57.5	62	93%
Chapter 3.2—Occupational Health and Safety	Yes	40	46	87%
Chapter 3.3—Community Health and Safety	Yes	16.5	22	75%
Chapter 3.4—Conflict-Affected and High-Risk Areas	No	-	-	-
Chapter 3.5—Security Arrangements	Yes	25.5	30	85%
Chapter 3.6—Artisanal and Small-Scale Mining	No	-	-	-
Chapter 3.7—Cultural Heritage	Yes	30	32	94%

Principle 4: Environmental Responsibility		141	168	84%
Chapter 4.1—Waste and Materials Management	Yes	45.5	52	88%
Chapter 4.2—Water Management	Yes	26	38	68%
Chapter 4.3—Air Quality	Yes	17.5	18	97%
Chapter 4.4—Noise and Vibration	Yes	9.5	16	59%
Chapter 4.5—Greenhouse Gas Emissions	Yes	14	14	100%
Chapter 4.6—Biodiversity, Eco. Serv. and Protected Areas	Yes	28.5	30	95%
Chapter 4.7—Cyanide Management	No	-	-	-
Chapter 4.8—Mercury Management	No	-	-	-

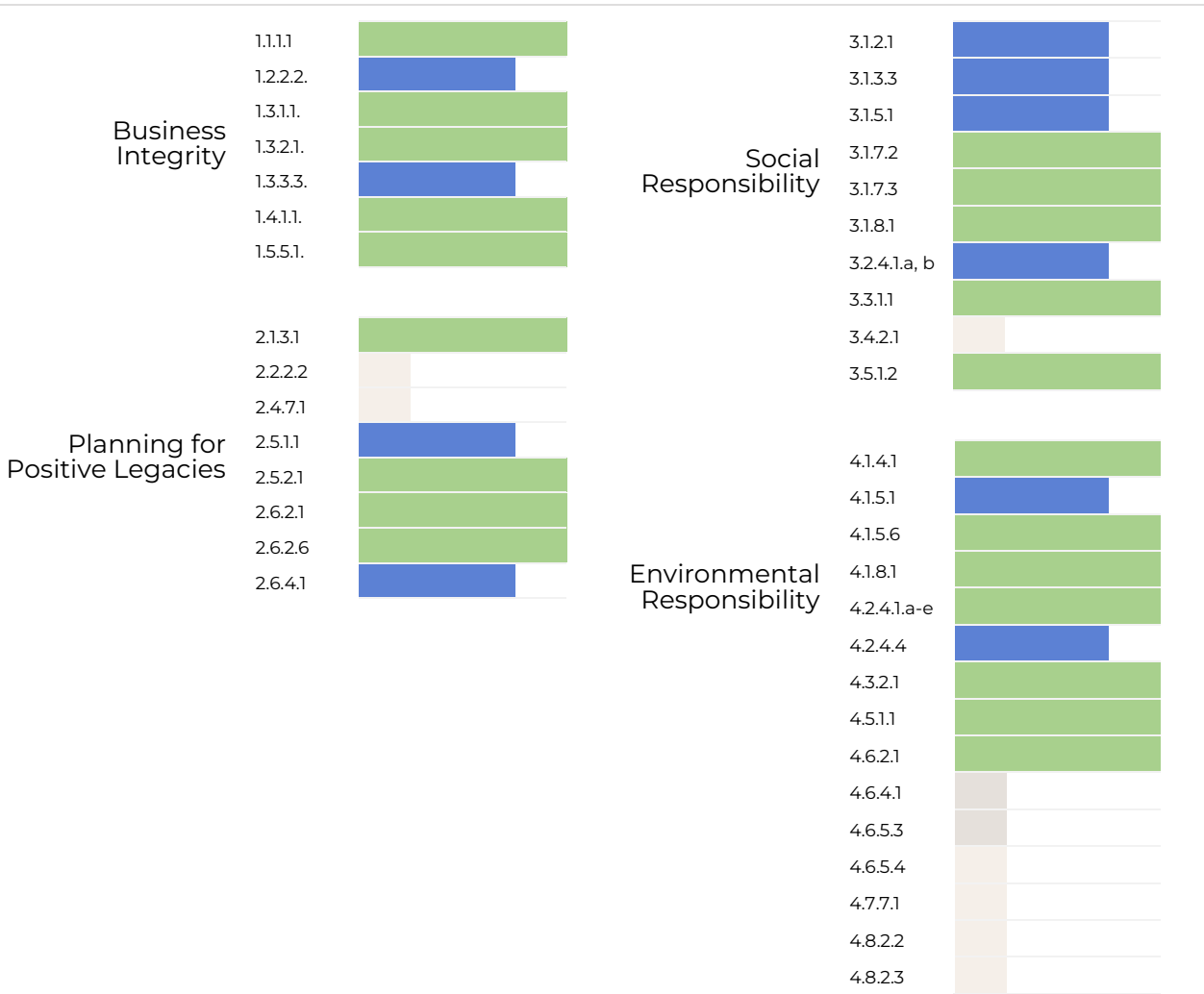
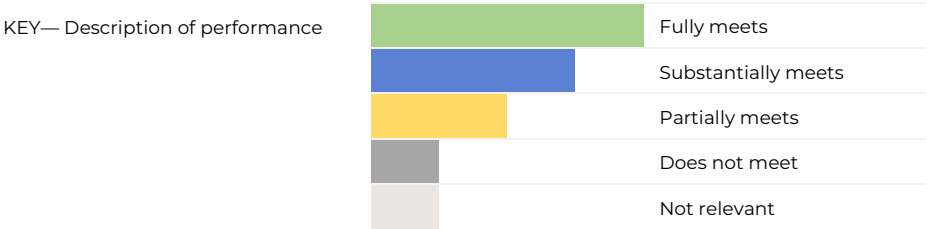
* Chapters are marked as not relevant if auditors have verified that the issues addressed in the chapter are not applicable at the mine site. For example, if the mine can demonstrate that there is no artisanal and small-scale mining (ASM) occurring near the mine, and the mine does not source materials from ASM operations then Chapter 3.6 would be marked as not relevant.

Chapters deemed Not Relevant do not factor into the Principle Scores.

Performance on Critical Requirements

Critical requirements consist of a set of 40 requirements that have been identified by the IRMA Board of Directors as being core requirements that any mine site claiming to be following good practices in mining should be meeting. Mines seeking to achieve full certification (IRMA 100) mines must fully meet all critical requirements, and mines achieving IRMA 50 or IRMA 75 must substantially meet all critical requirements, demonstrate progress over time, and fully meet all critical requirements within specified time frames.

Snapshot of Performance on 40 Critical Requirements






Performance on 40 Critical Requirements

RATING LEGEND







Description of performance

	Fully meets
	Substantially meets
	Partially meets
	Does not meet
	Not relevant



Principle 1: Business Integrity

1.1.1.1	The operating company shall comply with all applicable host country laws in relation to the mining project.	
1.2.2.2.	The mine fosters two-way dialogue and meaningful engagement with stakeholders	
1.3.1.1.	The operating company has a policy in place that acknowledges its responsibility to respect all internationally recognized human rights.	
1.3.2.1.	and an ongoing process to identify and assess potential and actual human rights impacts from mining project activities and business relationships.	
1.3.3.3.	The operating company is taking steps to remediate any known impacts on human rights caused by the mine.	
1.4.1.1.	Stakeholders have access to operational-level mechanisms that allows them to raise and seek resolution or remedy for complaints and grievances that may occur in relation to the mining operation.	
1.5.5.1.	The operating company has developed, documented and implemented policies and procedures that prohibit bribery and other forms of corruption by employees and contractors.	

Principle 2: Planning for Positive Legacies

2.1.3.1	The operating company has carried out a process to identify potential impacts (social and environmental) of the mining project.	
2.2.2.2.	New mine sites have obtained the FPIC of indigenous peoples, and existing mines either have obtained FPIC or can demonstrate that they are operating in a manner that supports positive relationships with affected indigenous peoples and provides remedies for past impacts on indigenous peoples' rights and interests.	—
2.4.7.1.	If resettlement has occurred, the mine monitors and evaluates its implementation and takes corrective actions until the provisions of resettlement action plans and/or livelihood restoration plans have been met.	—
2.5.1.1.	All operations related to the mining project shall have an emergency response plan	
2.5.2.1.	and there is community participation in emergency response planning exercises.	
2.6.2.1.	Reclamation and closure plans are compatible with protection of human health and the environment,	
2.6.2.6.	and are available to stakeholders.	
2.6.4.1.	Financial surety instruments are in place for mine closure and post-closure (including reclamation, water treatment and monitoring).	

Principle 3: Social Responsibility

3.1.2.1	Workers' freedom of association is respected.	
3.1.3.3.	Measures are in place to prevent and address harassment, intimidation, and/or exploitation, especially in regard to female workers.	

3.1.5.1.	Workers have access to operational-level mechanisms that allows them to raise and seek resolution or remedy for complaints and grievances that may occur in relation to workplace-related issues.	
3.1.7.2.	No children (i.e., persons under the age of 18) are employed to do hazardous work	
3.1.7.3.	and no children under the age of 15 are employed to do non-hazardous work.	
3.1.8.1.	There is no forced labor at the mine site or used by the operating company.	
3.2.4.1.a, b	Workers are informed of hazards associated with their work, the health risks involved and relevant preventive and protective measures.	
3.3.1.1.	The risks to community health and safety posed by the mining operation are evaluated and mitigated.	
3.4.2.1.	If operating in a conflict-affected or high-risk area, the mine has committed to not support any parties that contribute to conflict or the infringement of human rights.	—
3.5.1.2.	The mine has policy and procedures in place that align with best practices to limit the use of force and firearms by security personnel.	

Principle 4: Environmental Responsibility

4.1.4.1.	A risk assessment has been done to identify chemical and physical risks associated with existing mine waste (including tailings) facilities.	
4.1.5.1.	Mine waste facility design and mitigation of identified risks shall be consistent with best available technologies and best available/applicable practices.	
4.1.5.6.	The operating company regularly evaluates the performance of mine waste facilities to assess the effectiveness of risk management measures, including critical controls for high consequence facilities.	
4.1.8.1.	The mine does not use riverine, submarine or lake disposal for mine wastes.	
4.2.4.1.a-e	Water quality and quantity are being monitored at the mine site	
4.2.4.4	and adverse impacts resulting from the mining operation are being mitigated.	
4.3.2.1.	When significant potential impacts on air quality are identified, the mine develops measures to avoid and minimize adverse impacts on air quality, and documents them in an air quality management plan.	
4.5.1.1.	There is a policy being implemented that includes targets for reducing greenhouse gas emissions.	
4.6.2.1.	The mine has carried out screening to evaluate its potential impacts on biodiversity, ecosystem services and protected areas	
4.6.4.1.	and these impacts are being mitigated and minimized.	—
4.6.5.3.	New mines are not located in or adversely affect World Heritage Sites (WHS), areas on a State Party's official Tentative List for WHS Inscription, IUCN protected area management categories I-III, or core areas of UNESCO biosphere reserves	—
4.6.5.4.	and existing mines located in those areas ensure that activities during the remaining mine life cycle will not permanently and materially damage the integrity of the special values for which the area was designated or recognized.	—
4.7.1.1.	Gold or silver mines using cyanide are certified as complying with the Cyanide Code.	—
4.8.2.3.	Mercury wastes are not permanently stored on site without adequate safeguards,	—
4.8.2.2.	are not sold or given to artisanal or small-scale miners, and are otherwise sold only for end uses covered in the Minamata Convention or disposed of in regulated repositories.	—