

MINE SITE ASSESSMENT PUBLIC SUMMARY REPORT

MINE SITE

Minas-Rio

OPERATING COMPANY

Anglo American Minério de Ferro Brasil

COUNTRY OF OPERATION

Brazil

FEBRUARY 2024

Acknowledgements

IRMA believes that third-party, independent audits are most credible when there is robust participation not only from participating mines, but also from workers and stakeholders, particularly those from affected communities.

Outside stakeholders are not remunerated for their participation, and willingly give their time to provide perspectives and information on mine site performance. IRMA would like to recognize the Minas-Rio mine and plant workers, governmental representatives, and members of affected communities for their participation in this audit.



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Audit Details

Name of Mine:	Minas Rio
Operating Company:	Anglo American Brazil
Mine Owner:	Anglo Brazil, a subsidiary of Anglo American plc
Country of Operation:	Brazil
Mined Material(s):	Iron Ore
# Employees / contractors:	1704 employees/5037 contractors at the time of audit
IRMA audit webpage:	https://responsiblemining.net/minasrio
Audit Type:	Initial Verification Audit
Audit Dates:	Stage 1: November 2021 Stage 2: December 8 – December 13, 2021 Corrective Action Verification (2.4.7.1): September 2022
Audit Team:	Guillermo Cruz (Lead and Health & Safety Auditor), Susan Courter (Environmental, Health and Safety Auditor), Felipe Ramirez (Environmental Auditor), Adrian Juarez (Engineer, Auditor), Marvin Rosales (Hydrologic Engineer Auditor), Mauricio Inostroza (Social Auditor), Eddy Gomez (Technical Support and Translation); Catarina Oliveira (Social Auditor for Resettlement Corrective Action Plan)
Lead Auditor Declaration:	✓ 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.
	√ The audit team members were deemed to have no conflicts of interest with the mine.
	√ The audit team members were professional, ethical, objective, and truthful in their conduct of audit activities.
	\checkmark The information in this report is accurate according to the best knowledge of the auditors who contributed to the report.
Scope of Assessment	Iron ore extraction and production, waste storage, and associated maintenance and ancillary services at Anglo American's Minas-Rio Mine, Brazil
IRMA Standard Version:	IRMA Standard for Responsible Mining, v.1.0 (June 2018)
Certification Body (CB):	SCS Global Services
CB Technical Reviewer:	Simone Gaab
IRMA Achievement Level:	IRMA 75
Achievement Decision Date:	07 February 2024
Achievement Valid Until	06 February 2027 (contingent upon outcome of surveillance audit and continuous compliance with the IRMA independent audit processes)
IRMA Reference Number:	IRMA-STD-SCS-002-V-00002



1. Mine Site Overview

1.1. Overview of location

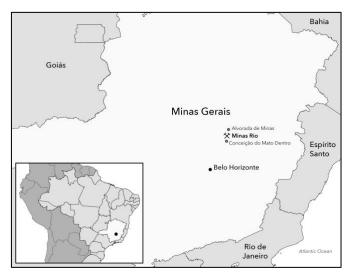


Figure 1: Locality of the Minas-Rio Mine, Brazil

Minas Gerais is a state in southeastern Brazil, whose name, translated into English, means "General Mines" (Figure 1).

Anglo American's (Anglo) Minas-Rio iron ore mining operation in Minas Gerais is located northeast of the city of Belo Horizonte in the municipalities of Conceição do Mato Dentro and Alvorada de Minas.

Rock wall paintings and archaeological remains found in caves at Ferrugem Ridge Natural Monument (Monumento Natural Serra da Ferrugem) (Figure 2) indicate that this area has been inhabited since around 5,000 BC.

Gold strikes in the late 1700s were the first to attract settlers, primarily Portuguese and enslaved Africans, to the region. The importance of this colonial period can be seen in local demographics and in the names of historic mining places such as Alvorada de Minas (dawn of mines) and Diamantina. As its name suggests, Diamantina was a center of diamond mining preserved today as a UNESCO World Heritage Site for its unique Brazilian Baroque architecture. Mining remains a significant mainstay of the local economy. Minas-Rio one of several mines in Minas Gerais contributing to Brazil's position as a leader in iron ore production.

The Minas-Rio operation is located in the Espinhaço mountain range, an area commonly referred to as the "Brazilian Highlands" with elevations ranging from 1,100 meters to 1,700 meters above sea level. The Espinhaço Range is part of the transitional zone between the Atlantic Forest biome and the Cerrado Grassland biome, both priority areas for global conservation. Besides economic mineral interests and mining, the rural highlands provide a source of fresh water, food provisioning (self-sufficient agriculture and grazing), timber (domestic fuelwood and charcoal), recreation, and biodiversity and ecosystem services preservation. Biodiversity areas including the Ferrugem Ridge Natural Monument, created in 2007 by the mine as part of the licensing process for the Mina do Sapo expansion project, and the Salão de Pedras Municipal Park are protected areas of ecological significance and host a variety of wildlife such as birds, reptiles, amphibians, insects, fish, and mammals, many of which are endemic to the region (Figure 2).

The region experiences a mild climate, with the warmest months from January to March (average 25°C/77°F), the coldest months from June to August (average 20°C/68°F) and a distinct rainy season beginning in October and ending in March. The rainy season concentrates most of the precipitation, with the highest amounts received in December

(average 250 mm) and the driest month in July (average 13 mm). The dry season extends from April to September.

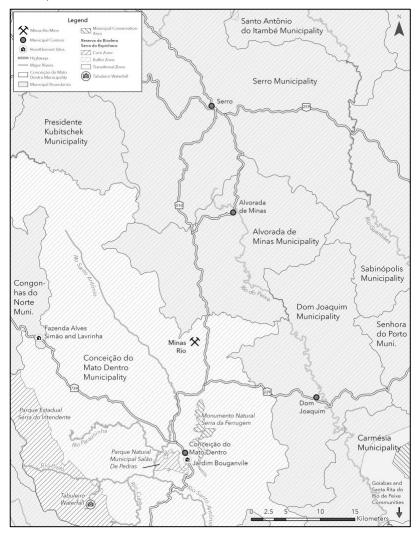
The Minas-Rio mine concession occupies an area along BR-010 within the Santo Antônio River watershed. In general, surface water and groundwater in the vicinity of the site follows topography, moving from upland areas to lowland areas, either to the west (towards the Santo Antônio River), or east, northeast towards the Peixe River, a tributary of the Santo Antônio River (Figure 2).

The Santo Antônio River, widely known for its waterfalls including Tabuleiro Falls, a popular tourist destination, is the main source of public water supply for the city of Conceição do Mato Dentro.

The city Conceição do Mato Dentro (pop. 23,162), located south of the mine concession, and Serra (pop. 21,952), located to the north are the primary urban centers in the area (2022 census). The villages of Dom Joaquim and Alvorada de Minas, with populations of 4,899 and 4,159, respectively, are followed size the smaller in communities of São Sebastião do Bom Sucesso, Cabeceira do Turco, Turco, Sapo, Gondó, Água Quente, Passa Sete, Beco, Córregos, São José da Ilha, Itapanhoacanga and São José do Jassém (Figure 3). addition, there is intermittent, low density, rural residential housing in some areas, particularly around roads.

Some, former of the members of the communities of Sapo,

The Santo Antônio River, widely Figure 2: Location of Minas-Rio mine and surrounding known for its waterfalls municipalities



Turco, Cabeceira do Turco and Beco were resettled by the company between 2018 and 2021 either to an urban area of Conceição Mato Dentro (named Jardim Bouganvile), or to two rural areas located in Congonhas do Norte (Fazenda Alves Simão and Lavrinha), along with other areas of individual interest.

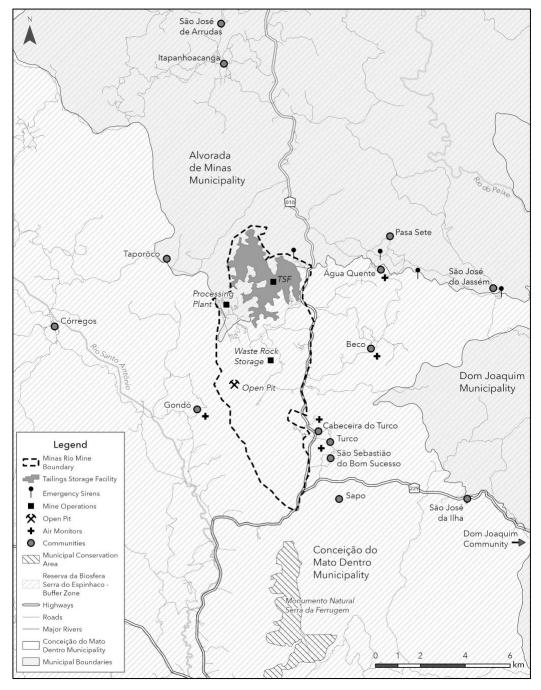
Population densities in the municipalities of Conceição do Mato Dentro, Serro and Dom Joaquim include eighteen quilombola communities according to the Ministry of Development and Social Assistance, Family and Fight against Hunger. Quilombolas are descendants of African slaves who escaped and banded together to resist recapture during Brazil's colonial

period. These communities originally served as a refuge for freedom where they could practice a self-sufficient lifestyle reminiscent of their African roots. The recognition of quilombola communities as tribal peoples under Article 1(1)(a) of ILO Convention No. 169 acknowledges their distinct cultural identity within today's broader landscape.

In the communities around the mine, self-sufficient agriculture and animal rearing or grazing is practiced. The region is known for its production of an artisan cheese known as Queijo do Serro. Other economic branches include mining, cultural tourism, and eco-tourism. Alvorada de Minas and Conceição do Mato Dentro have assets listed by Brazil's National Institute of Historical and Artistic Heritage (IPHAN), which are recognized as historical heritage of the nation and participate in the Monumental Program that helps to recover and preserve cultural heritage.

All cities and communities in the area around the mine have access to electricity and water; not all communities maintain infrastructure such as internet, paved roads or sanitation customary in planned urban settings and developments.

Figure 3: Mine infrastructure and surrounding communities



1.2. Overview of operation

Anglo American purchased the Minas-Rio mine operation from its previous owner, Minerações e Metálicos S.A. (MMX) in 2008. The facility, licensed to operate since October 2014, produces about 24 million tons of iron ore per year.

Mining at Minas-Rio begins with vegetation clearing, topsoil salvaging, and the removal and relocation of overburden to waste rock storage. Once the iron-rich rock has been exposed, it is broken down by drilling and blasting. The 'shot rock' is transported via truck to the primary crusher where it goes through additional stages of reduction and size. The crushed and classified ore is sent to the processing plant where it goes through grinding, flotation, and a concentrate thickener. The wet iron ore concentrate is then transported through a 529 km pipeline, to the iron ore handling and shipping facilities at the Port of Açu, in Rio de Janeiro state.

Water for the operation (i.e., ore processing, product and waste transport via pipeline, dust control and human consumption, etc.) is obtained from the Peixe River, groundwater wells and pit dewatering. Water such as precipitation and wastewater are additionally collected, treated and reused (i.e., dust control, processing, plant irrigation, etc.), or discharged.

Iron ore mining and processing is conducted in the municipality of Conceição do Mato Dentro. Tailings, the sand-like material left when the iron ore is removed, is disposed as a slurry in the tailing storage facility (TSF), located largely in the municipality of Alvorada de Minas situated north of the operation. The TSF is monitored by the company 24-hours per day, including visual, physical and geotechnical aspects and climate conditions, with sirens for potential alerts near the communities of Água Quente, São José de Jassém, Dom Joaquim, Goiabas, and Santa Rita do Rio do Peixe in the TSF self-rescue zone. The self-rescue zone is a region close to a TSF where it is considered that there is not enough time for authorities to intervene in case there is an emergency. Thus, all residents need to know the escape route and the nearest muster station for self-rescue.

In 2021, the Minas-Rio project employed a total of 2,216 direct employees of which 24% were female and 76% male, and 5,287 contractors of which 92% were in long-term contracts and 8% were seasonal contractors. The number of employees fluctuates with expansion projects and not all of them work on-site.

1.2.1. Scope of activities and facilities included in audit

The scope of this IRMA Assessment is for Anglo American's Minas-Rio Mine including extraction of iron ore from its open pit, crushing, screening and processing facilities, waste rock storage, tailings storage facility, sediment and water control dams, fuel handling and storage areas, water and wastewater treatment plants, vehicle and equipment maintenance facilities, operations building, monitoring stations and control rooms, security guard house, warehouses, locker rooms, clinic, laboratory, restaurant, administrative office building, and select groundwater wells, archeological and environmental monitoring, transportation routes and emergency preparedness locations.

As part of the audit, a sample of relevant stakeholders were contacted and interviewed. This sample included residents of the municipalities of Dom Joaquim, Serro, Alvorada de Minas and Conceição do Mato Dentro (communities of São Sebastião do Bom Sucesso, Cabeceira do Turco, Turco, Sapo, São José da Ilha, Gondó, Água Quente, Beco, Córregos, Passa Sete and São José do Jassém), and embraced neighborhood associations, community cooperatives and



government officials, as well as workers (employees and contractors) living in areas mentioned or illustrated in the overview above.

1.2.2. Scope of activities and facilities excluded from the audit

The pipeline and port are not included in the IRMA assessment scope.

2. Mine Site Assessment Process

2.1. Overview of IRMA Process

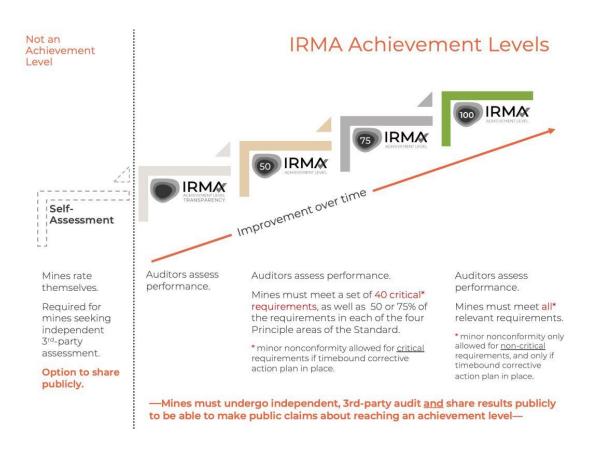
The mine site assessment process begins with mines completing a self-assessment and uploading evidence into an online tool (Mine Measure). When the self-assessment has been completed, the independent, third-party assessment may begin.

Stage 1 of the independent, third-party assessment is a desk review carried out by an IRMA-approved Certification Body, which puts together a team of auditors to review the self-assessment ratings and evidence provided by the mine site. During this stage of the audit additional information may be requested by auditors. Mines may also choose to take time to make improvements to practices prior to commencement of Stage 2.

Stage 2 is the on-site visit, which includes facility and site-based observations, additional review of materials, and interviews with mine site personnel, workers, stakeholders, and meetings with affected communities.

Based on observations, interviews and information evaluated during Stage 1 and Stage 2, auditors determine if mines are fully, substantially, partially, or not meeting each of the IRMA Standard requirements relevant at the mine site. The decision regarding a mine site's achievement level is made by the Certification Body.

IRMA recognizes four levels of achievement. For a complete description of the assessment process and achievement levels, see IRMA's Certification Body Requirements, available on IRMA's web site.



2.1.1. Scope and Limitation of Audits

Within the IRMA system, independent, third-party assessment is a process by which mines are assessed against the IRMA Standard for Responsible Mining by external auditors. Audits are conducted by auditors who: have undergone IRMA training, meet IRMA competency requirements and have been deemed to have no conflicts-of-interest with the mine site under assessment.

Audits are carried out in general conformance with established industry practice for independent audits (i.e., ISO 19011). In addition to document review, audits include on-site visits of relevant facilities, review of records, and interviews with site personnel and relevant stakeholders.

Auditor evaluations are based on the collected audit evidence assessed against the requirements of the IRMA Standard for Responsible Mining.

Professional judgments expressed in auditor comments are based on the facts available at the time of the audit within the limits of the existing data, scope of work, budget, and schedule.

Audit evidence is based on samples of available information. Therefore, there is an element of uncertainty in auditing, and those acting upon the audit conclusions should be aware of this uncertainty.

2.1.2. IRMA Complaints Process

If any IRMA stakeholder wishes to file a complaint related to the mine site assessment process, they may do by visiting the IRMA website. Details on the complaints process can be found in IRMA's Issues Resolution Procedure.

2.2. Audit Process and Timeline

- May 2021 Anglo American completed the initial self-assessment for Minas-Rio
- November 2021 SCS Global Services (SCS) carried out an initial Stage 1 desktop audit
- December 2021 SCS carried out a Stage 2 on-site audit
- September 2022 SCS reviewed corrective actions and completed onsite verification through interviews.
- August 2022 May 2023 IRMA reviewed applicability of Chapter 2.6 requirements, including 2.6.4.1. critical item
- August 2023 November 2023 SCS performed desktop review of a selection of Minas-Rio corrective actions and supplemental evidence for Chapter 2.6.

2.3. Stakeholder Engagement

IRMA requires that stakeholders be engaged as part of the mine site assessment process. Audits are announced by IRMA and certification bodies, and prior to the on-site audit there is additional outreach carried out by certification bodies.

2.3.1. Written comments/inquiries

Stakeholders were notified at least thirty (30) days prior to the audit date; however, no written inquiries were received. Stakeholder outreach was conducted via posters placed in community



centers within the nearby towns. Additionally, no comments were recorded via the SCS website public notification.

2.3.2. Mine Staff

Individuals in the following positions were interviewed as subject matter experts in one or more topics relevant to the IRMA standard. The positions included those held at the time of the audit.

Position/Role
Agile Business Analysis Specialist
Biodiversity Coordinator
Chief Safety Officer
Communications Analyst
Communications Specialist
Community Relations Officer
Corporate Environmental Manager
Cultural Heritage Specialist
EHS Instructor
Environmental Assistant
Environmental Coordinator
Environmental Engineer
Institutional Relations and Corporate Affairs Specialist
Geotechnical and Hydrology Manager
Geotechnical Manager
Governance Manager
Labor Relations Coordinator
Operation Coordinator
Operations Manager
Plant Engineer
Safety Manager
Security Manager
Social Performance manager
Social Specialist
Sustainable Development Analyst
Sustainable Impact Coordinator
Tailings Program Manager

2.3.3. Workers/Contractors

Onsite interviews were conducted from December 9 to December 13, 2021, with both permanent and contract employees, key community, government, and other stakeholders. Additionally, some interviews were held online before the site visit. Interviewees included a cross-section of roles, gender, ages, representing the key areas of the operation.

Mine	Employees 33 individuals (10 female, 23 male) Contractors 16 (male)
	,

2.3.4. Government Agencies

Interviews were conducted with the following public sector institutions on December 10 and 13, 2021. Due to sanitary restrictions both meetings were held online.

Government Institution
Serro City Government
Dom Joaquim City Government
Public Prosecutor's Office of the State of Minas Gerais
Public attorney's office of Conceição do Mato Dentro

2.3.5. Participating Communities and NGOs

Interviews were conducted with 51 external community stakeholders on two dates: December 11th - 12th, 2021 and from the 20th to 22nd of September 2022, including one online meeting. The community interviews considered a cross-section of members including men, women, youth, and vulnerable groups where practically possible.

Community Name	Location	Total Number of Attendees
Cooperativa dos Produtores Rurais do Serro - CooperSerro	online	1 male
Associação dos Produtores Artesanais Dom Cipó	Dom Joaquim	5 (4 female, 1 male)
Associação de Catadores de Dom Joaquim	Dom Joaquim	3 (2 female, 1 male)
Associação de Moradores de São José da Ilha	Dom Joaquim	4 (1 female, 3 male)
Fazenda Piraquara	Conceição do Mato Dentro	5 (3 female, 2 male)
Jardim Bouganville	Conceição do Mato Dentro	12 (7 female, 5 male)
Fazenda Santo Antônio	Conceição do Mato Dentro	6 (1 female, 5 male)
Fazenda Simão Lavrinhas – Congonhas do Norte	Conceição do Mato Dentro	10 (2 female, 8 male)
Itapanhoacanga	Alvorada de Minas	4 (3 female, 1 male)

2.4. Summary of Mine Facilities Visited

The following areas were visited or observed during the on-site visit:

	open pit		
	crushing, screening and processing facilities		
	waste rock and tailings storage facilities		
	sediment and water control dams		
	fuel handling and storage		
	water and wastewater treatment		
	vehicle and equipment maintenance facilities		
Operational areas	operations/control rooms and administrative offices		
areas	security shack and check-in locations		
	warehouses		
	locker rooms		
	dining area/restaurant		
	clinic		
	laboratory		
	infrastructure (i.e., roads, electricity, parking, etc.)		
	archeological sites		
Other select	geotechnical and environmental monitoring equipment (air, water, we		
areas visited (e.g.,	piezometers)		
downstream watercourses,	land use(s) around the mine (i.e., agriculture, grazing, forestry, mining, ruresidential housing)		
off-site facilities)	emergency preparedness and response infrastructure (escape and mus signage, sirens)		
	Conceição do Mato Dentro Municipality Cities, Villages and Communities		
	Conceição do Mato Dentro		
	São Sebastião do Bom Sucesso		
	Cabeceira do Turco		
Surrounding	• Turco		
Communities	• Sapo		
	Alvorada de Minas Municipality Cities, Villages and Communities		
	Itapanhoacanga		
	Dom Joaquim		
	• Serro		

Note: Due to the challenges posed by the COVID-19 pandemic, the onsite component of the audit, encompassing interviews with community members, was conducted under stringent social distancing restrictions. These circumstances impacted the logistics of the audit process, and led to a smaller sample size of interviewees, compelling a more limited selection of participants for in-person interviews. Despite these constraints, every effort was made to maintain the integrity and rigor of the audit, with a focus on ensuring the safety and well-being of both auditors and community members throughout the onsite process. During the surveillance audit, the audit team will broaden their stakeholder sampling for interviews, thereby ensuring a comprehensive and thorough examination of relevant perspectives.

3. Summary of Findings

Detailed audit findings on a requirement-by-requirement basis can be found in Appendix 1.

3.1. Audit outcome

The site is recognized as having achieved the level of IRMA 75 based on the performance recorded during the Stage 1 and Stage 2 audits.

3.2. Scores by IRMA Standard principle and chapter

	Chapter Relevant*	Actual Score	Possible Score	Percent Score
Principle 1: Business Integrity		96.5	122	79%
Chapter 1.1—Legal Compliance	Yes	10	14	71%
Chapter 1.2—Community and Stakeholder Engagement	Yes	28	30	93%
Chapter 1.3—Human Rights Due Diligence	Yes	23.5	30	78%
Chapter 1.4—Complaints Mechanism/Access to Remedy	Yes	16.5	22	75%
Chapter 1.5—Revenue and Payments Transparency	Yes	18.5	26	71%
Principle 2: Planning for Positive Legacies		102.5	132	78%
Chapter 2.1—Env/Soc Impact Assessment and Management	Yes	29.5	32	92%
Chapter 2.2—Free, Prior and Informed Consent	No	Not Relevant	Not Relevant	Not Relevant
Chapter 2.3—Community Support and Benefits	Yes	12.5	16	78%
Chapter 2.4—Resettlement	Yes	30.5	34	90%
Chapter 2.5—Emergency Preparedness and Response	Yes	8.5	10	85%
Chapter 2.6—Planning/Financing Reclamation & Closure**	Yes	21.5	40	54%
Principle 3: Social Responsibility		152.5	194	79%
Chapter 3.1—Fair Labor and Terms of Work	Yes	56	66	85%
Chapter 3.2—Occupational Health and Safety	Yes	41.5	46	90%
Chapter 3.3—Community Health and Safety	Yes	17.5	22	80%
Chapter 3.4—Conflict-Affected and High-Risk Areas	No	Not Relevant	Not Relevant	Not Relevant
Chapter 3.5—Security Arrangements	Yes	21	36	58%
Chapter 3.6—Artisanal and Small-Scale Mining	No	Not Relevant	Not Relevant	Not Relevant
Chapter 3.7—Cultural Heritage	Yes	16.5	24	69%

Principle 4: Environmental Responsibility		142	172	83%
Chapter 4.1—Waste and Materials Management	Yes	40.5	54	75%
Chapter 4.2—Water Management	Yes	30.5	38	80%
Chapter 4.3—Air Quality	Yes	18	18	100%
Chapter 4.4—Noise and Vibration	Yes	15	16	94%
Chapter 4.5—Greenhouse Gas Emissions	Yes	14	14	100%
Chapter 4.6—Biodiversity, Eco. Serv. and Protected Areas	Yes	24	32	75%
Chapter 4.7—Cyanide Management	No	Not Relevant	Not Relevant	Not Relevant
Chapter 4.8—Mercury Management	No	Not Relevant	Not Relevant	Not Relevant

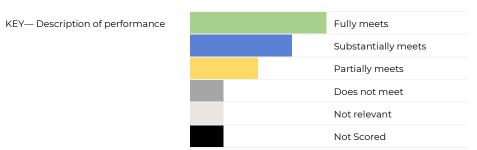
^{*} Chapters are marked as not relevant if auditors have verified that the issues addressed in the chapter are not applicable at the mine site.

^{**}not all requirements were scored in accordance with IRMA guidance dated May 23, 2023.

3.3. 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.

3.3.1. Snapshot of performance on 40 critical requirements





3.3.2. Performance on 40 critical requirements.

RATING LEGEND Description of performance

•	Fully meets
•	Substantially meets
•	Partially meets
0	Does not meet
_	Not relevant
_	Not scored

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 about 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.	_

4. Next Steps

Corrective Action Plans

In the IRMA system, mines are allowed a 12-month corrective action period if they are interested in addressing non-conformities with critical or other requirements to reach a higher achievement level or gain recognition for improved performance. This enables them to implement changes and have them verified by auditors without waiting until the surveillance or recertification audit.

During the 12-month period Anglo American's Minas-Rio operation implemented a series of corrective actions to address major non-conformities with critical and other requirements in Chapter 2.4. - Resettlement. The audit team confirmed the implementation of these corrective actions during an on-site follow-up assessment in September 2021.

To improve the IRMA level of achievement following the initial audit, Minas-Rio prepared a corrective action plan (included in Appendix B) to address minor non-conformities with critical requirements. The audit team will assess the implementation of the corrective action plan during the surveillance audit.

Disclosure of Summary Audit Report

IRMA requires that all mines that undergo independent, third-party auditing disclose a summary audit report within 12 months of an audit to maintain good standing in the IRMA system. Minas-Rio Mine's public summary report will be posted on the IRMA web site.

4.3 Timing of Future Audits

The mine's surveillance audit will take place no more than 18 months after the publication of this IRMA Initial Assessment Report.

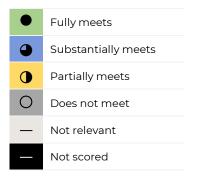
APPENDIX A – Results by Requirement

Note: The following section include the results for each requirement of the Standard. In total, the evidence included around 2,000 files (MS Word, MS Excel, pdf, shapefiles, kmz, maps, photographs and mp3); only the most relevant files are considered in this section.

Principle 1: Business Integrity

RATING LEGEND

Description of performance



Chapte	er 1.1—Legal Compliance		Basis for rating
1.1.1.1.	Critical The operating company shall comply with all applicable host country laws in relation to the mining project.	•	The company has implemented a system to identify and track compliance with host country laws relevant to mining operations and associated facilities. Evidence of compliance is provided in the form of an MS Excel matrix (Report IOB-19.04.21, April 2021) and screenshots of the Qualificia Legal software, which monitors changes in legal requirements. Independent auditor reports from 2022 provide evidence of the company's efforts to maintain and improve compliance.
1.1.2.1.	The operating company shall comply with whichever provides the greatest social and/or environmental protections of host country law or IRMA requirements. If complying fully with an IRMA requirement would require the operating company to break host country law then the company shall endeavor to meet the	_	Not relevant as no conflicts between the host country law and the IRMA requirements were identified.

Chapter	1.1—Legal Compliance		Basis for rating
	intent of the IRMA requirement to the extent feasible without violating the law.		
1.1.3.1.	If non-compliance with a host country law has taken place, the operating company shall be able to demonstrate that timely and effective action was taken to remedy the non-compliance and to prevent further non-compliances from recurring.	•	The evidence, Report IOB-19.04.21 (April 2021) screenshots of the Qualificia Legal software, includes a list of the legal requirements applicable to the mine and associated facilities and a list of the corrective actions in case of non-compliance. The evidence does not include the status of corrective actions and their follow-up.
1.1.4.1.	The operating company shall demonstrate that it takes appropriate steps to ensure compliance with the IRMA Standard by contractors engaged in activities relevant to the mining project.	•	The evidence, Responsible Sourcing Standard for Suppliers (2020), indicates that the company is taking appropriate steps to ensure compliance with some of the IRMA Standard requirements regarding health and safety, environment, human and labor rights, stakeholder engagement and fair business practices by contractors engaged in activities relevant to the mining project. The evidence includes an evaluation procedure for suppliers (2022) and a procedure for awarding outstanding supplier performance (2022), indicating that the company monitors the contractor's compliance with their standards. Although the requirements of the sourcing standard are formulated more broadly than the requirements in the IRMA Standard, the content is comparable.

Chapte	er 1.1—Legal Compliance		Basis for rating
1.1.5.1.	The operating company shall maintain records and documentation sufficient to authenticate and demonstrate compliance and/or non-compliance with host country laws and the IRMA Standard.	•	The evidence, an excel sheet that lists all relevant regulations and tracks the company's compliance against them (Report IOB-19.04.21, April 2021), presents the company's system to track compliance with host country laws. The operation's management mentioned their commitment to ensure compliance with the applicable legislation and the IRMA Standard during interviews. The evidence does not include records and documentation to authenticate and demonstrate the company's compliance and/or non-compliance with the IRMA Standard.
1.1.5.2.	Records related to compliance and/or non-compliance with host country laws shall be made available to IRMA auditors and shall include descriptions of non-compliance events and ongoing and final investigations, allegations, discussions, and final remedies.	•	The evidence is a matrix of legal requirements (Report IOB-19.04.21, April 2021) that includes the status of compliance / non-compliance with applicable legislation. Some legal requirements in this matrix do not indicate compliance status, and others do not have enough detail to assess if final investigations, allegations, discussions, and final remedies were in place.
1.1.5.3.	Upon request, operating companies shall provide stakeholders with a summary of the mining project's regulatory non-compliance issues that are publicly available.	0	No evidence was provided to confirm that the company has provided information to stakeholders regarding regulatory non-compliance issues upon request nor confirmation if related requests have been received. The evidence does not include a policy or procedure that requires the company to provide the information upon request.
1.1.5.4.	Where the operating company claims that records or documentation contains confidential business information, it shall: a. Provide to auditors a general description of the confidential material and an explanation of the	•	The evidence includes the Global IM Policy (no date), Global Information Security Policy Statement (2013), Information Security – General Guidelines (2014), and Group Data Policy (2021), which indicate how the company manages claims as in (a).

Chapter 1.1—Legal Compliance	Basis for rating
reasons for classifying the information as confidential; and b. If a part of a document is confidential, only that confidential part shall be redacted, allowing for the release of non-confidential information.	The company provided evidence that was considered confidential and omitted only confidential parts allowing for the release of non-confidential information as in (b). The evidence does not include a description of the confidential material and an explanation of the reasons for classifying the information as confidential.

-	1.2—Community and older Engagement		Basis for rating
1.2.1.1.	The operating company shall undertake identification and analysis of the range of groups and individuals, including community members, rights holders and others (hereafter referred to collectively as "stakeholders") who may be affected by or interested in the company's mining-related activities.	•	The evidence includes a Stakeholder Engagement Plan (PES) – Minas-Rio (December 2020), an excel list of stakeholders (November 2019), a Socioeconomic Aspects Monitoring Program (November 2016) and an Annual Report on the company's implementation of that program for 2020 (March 2021), indicating that the company has identified stakeholders that may be affected by its operation. A stakeholder analysis is not included in the evidence. Interviews are needed during the surveillance audit to confirm that the company has identified a reasonable range of affected and interested stakeholders.
1.2.1.2.	A stakeholder engagement plan scaled to the mining project's risks and impacts, and stage of development shall be developed, implemented and updated as necessary.	•	The evidence (Stakeholder Engagement Plan (PES) – Minas-Rio, December 2020) indicates that a stakeholder engagement plan scaled to the risks and impacts of the project has been developed and is in place. A Community Committee Meeting Minutes sample from November 19th, 2019, indicate that the risk and impact plan is being implemented and updated as necessary. Interviews with key staff and a sample of stakeholders indicated that the company has: - identified and prioritized key stakeholders. - Provided a strategy and timetable for sharing information and consulting each of these groups; and - Described how they will incorporate stakeholder engagement activities into a company's management system.



_	1.2—Community and Ider Engagement		Basis for rating
1.2.1.3.	The operating company shall consult with stakeholders to design engagement processes that are accessible, inclusive, and culturally appropriate, and shall demonstrate that continuous efforts are taken to understand and remove barriers to engagement for affected stakeholders (especially women, marginalized and vulnerable groups).		The evidence, a Report on the Socio-Economic Assessment Toolbox – Minas-Rio (December 2017), and copies of 47 meeting minutes, from Minute No. 42 (February 2017) to Minute No. 95 (December 2021) of the Coexistence Committee, indicates the company has a continuous process in place to engage with stakeholders. Observations from the site visit indicate that the company implements measures to be culturally appropriate such as:
		•	 using appropriate language, respecting and adapting cultural norms and communication styles of stakeholders, using terminology and formats that are respectful of cultural differences, selecting suitable locations and times for the meetings. The company has several tools, such as such as a phone number, local delegates, e-mail, and the company's website, to ensure that stakeholders can reach out to
			the company. The evidence does not provide detail to confirm that the company has evaluated barriers to engagement (i.e., lack of cell service) or how project information reaches stakeholders. Interviews with stakeholders are needed and grievances reviewed during the surveillance audit to confirm barriers to participation in the development of
			engagement processes are accessible for affected stakeholders especially women, marginalized and vulnerable groups.



	r 1.2—Community and older Engagement		Basis for rating
1.2.1.4.	The operating company shall demonstrate that efforts have been made to understand community dynamics in order to prevent or mitigate community conflicts that might otherwise occur as a result of company engagement processes.	•	The evidence, a Socioeconomic Aspects Monitoring Program (December 2016), indicates that the company strives to understand community dynamics to prevent conflicts that might otherwise occur because of the engagement processes. The methodology to understand community dynamics is considered adequate and aligned with good international practices, including consulting with stakeholders on issues related to community dynamics and consulting with external experts to understand better if there are any cultural or social factors that could create unintended conflicts within communities.
1.2.2.1.	Stakeholder engagement shall begin prior to or during mine planning, and be ongoing, throughout the life of the mine. (Note: existing mines do not need to demonstrate that engagement began prior to mine planning)	•	The evidence indicates that stakeholder engagement planning has been developed since the beginning of the mining activity. The evidence, a documented Social Communication Program (July 2014), includes the planning of activities related to disseminating information and the process of effective participation of communities, landowners, producers, and rural workers located in the area of influence. In addition, the company is committed to and currently engages with stakeholders continuously as indicated by several meeting minutes of the Coexistence Committee from January 2018 to December 2021.

Chapter 1.2—Community and Stakeholder Engagement		Basis for rating
1.2.2.2.	Critical The operating company shall foster two-way dialogue and meaningful engagement with stakeholders by: a. Providing relevant information to stakeholders in a timely manner; b. Including participation by site management and subject-matter experts when addressing concerns of significance to stakeholders; c. Engaging in a manner that is respectful, and free from manipulation, interference, coercion or intimidation; d. Soliciting feedback from stakeholders on issues relevant to them; and e. Providing stakeholders with feedback on how the company has taken their input into account.	The evidence includes copies of 47 meeting minutes, from Minute No. 42 (February 2017) to Minute No. 95 (December 2021) of the Coexistence Committee, and a Socioeconomic Aspects Monitoring Program Report (March 2022), indicating that the company has an open dialogue with stakeholders, including: a. Providing relevant information in a timely manner; and b. Participation by site management and subject-matter experts in the meetings with stakeholders; and c. Engaging in a manner that is respectful and free from manipulation. Complementary evidence indicates that the company is: d. Soliciting feedback from stakeholders through annual stakeholder surveys as part of the Socioeconomic Aspects Monitoring Program (2022) and feedback forms on the company's meetings (Face-to-face Meeting Minutes (2022); and e. Providing stakeholders with feedback on how the company has taken their input into account, such as public reports on delaying a blast and on the installation of water treatment systems that the company sent to the stakeholders in response to their requests (Report on Blast Cancellation, 2022 and Report on Water Treatment Systems, 2023). Interviews are needed during the surveillance audit (community) to confirm the company solicits feedback on issues relevant to community stakeholders and provides them with feedback on how their input is considered.



Chapter 1.2—Community and Stakeholder Engagement			Basis for rating
1.2.2.3.	The operating company shall collaborate with stakeholders, including representatives from affected communities to design and form stakeholder engagement mechanism(s) (e.g., a permanent advisory committee, or committees dedicated to specific issues), to provide stakeholder oversight of the mining project's environmental and social performance, and/or input to the company on issues of concern to stakeholders.	•	The evidence, 47 meeting minutes, from Minute No. 42 (February 2017) to Minute No. 95 (December 2021) of the Coexistence Committee, indicates collaboration and activities involving stakeholders and representatives from affected communities. The evidence indicates that the company collects their opinions and complaints and provides stakeholders with continuous oversight of the mining project's environmental and social performance. Interviews are needed during the surveillance audit (community) to confirm stakeholder participation in the development of stakeholder engagement mechanisms.
1.2.2.4.	Engagement processes shall be accessible and culturally appropriate, and the operating company shall demonstrate that efforts have been made to include participation by women, men, and marginalized and vulnerable groups or their representatives.	•	The evidence, a documented Methodology on classifying vulnerable groups (March 2018), Coexistence Committee Meeting Planning (January 2021), and Social Management Plan (Table 12.4 - Approved Projects: Ambassadors for Good, 2019), indicates the participation of men and women, including marginalized and vulnerable groups. The evidence indicates that the company conducts activities with the community in an inclusive manner regarding gender, age, economic status, stakeholder sectors. The evidence does not include detail to confirm that women, men, and marginalized and vulnerable groups are involved in the process of defining the activities.
1.2.2.5.	When stakeholder engagement processes depend substantially on community representatives, the operating company shall demonstrate that efforts have been made to confirm whether or not such persons represent the views and interests of affected community members and can be relied upon to faithfully communicate relevant information to them. If this is not the case, the operating company shall undertake additional engagement processes to enable more meaningful participation by and information sharing with the broader community.	•	The evidence, copies of 47 meeting minutes, from Minute No. 42 (February 2017) to Minute No. 95 (December 2021) of the Coexistence Committee, indicates that the company meets with leaders and influential people from local communities. Community representatives of the coexistence committee are elected from a group of local representatives and by local communities every four years. Interviews with a sample of stakeholders during the site visit confirmed that elected community representatives adequately represent the views/interests of the community and periodically provide feedback to the community.



Chapter 1.2—Community and Stakeholder Engagement			Basis for rating
1.2.2.6.	The operating company shall document engagement processes, including, at minimum, names of participants, and input received from and company feedback provided to stakeholders.	•	The company provided nine (9) minutes of several meetings with stakeholders in surrounding communities from the years 2022 and 2023. The minutes include the names of participants, the scope of each meeting and input received by stakeholders. Stakeholder input is also documented as part of the annual Socioeconomic Aspects Monitoring Program (March 2022). Evidence of public reports on delaying a blast and on the installation of water treatment systems in response to stakeholders' requests (Report on Blast Cancellation, 2022, and Report on Water Treatment Systems, 2023) indicate that the company provided feedback to the stakeholders using appropriate channels.
1.2.2.7.	The operating company shall report back to affected communities and stakeholders on issues raised during engagement processes.	•	The evidence, Minutes of Meetings with Families, shows records of meetings with stakeholders in affected communities and indicates that periodical meetings were held in 2020 and 2021. The evidence includes examples on how the company reports back to stakeholders on issues raised during the engagement processes, and examples of KPIs (Community Relationship Management, 2021) summarizes the number of stakeholders contacted, the most recurrent topics, means of contact, and localities.
1.2.3.1.	The operating company shall offer to collaborate with stakeholders from affected communities to assess their capacity to effectively engage in consultations, studies, assessments, and the development of mitigation, monitoring and community development strategies. Where capacity gaps are identified, the operating company shall offer appropriate assistance to facilitate effective stakeholder engagement.	•	The evidence, Improvement of Community Engagement (no date), and an annual Report on Implemented Activities of the Social Communication Program (March 2021), indicates that the company offers appropriate assistance to facilitate effective stakeholder engagement where gaps are identified. Interviews with a sample of stakeholders suggests that the company assesses the needs of stakeholders and strengthens their capacity (including training and providing support) so that they can fully participate in mining-project-related engagement activities.

Chapter 1.2—Community and Stakeholder Engagement			Basis for rating
1.2.4.1.	Any information that relates to the mine's performance against the IRMA Standard shall be made available to relevant stakeholders upon request, unless the operating company deems the request to be unreasonable or the information requested is legitimate confidential business information. If part of a document is confidential only that confidential part shall be redacted, allowing for the release of nonconfidential information.	•	The company has not shared nor received any requests for information related to the mine's performance against the IRMA Standard, as they do not yet have formal information pertaining to their results. The company indicates that they will share IRMA results when available and share any additional documents requested by stakeholders, provided the requested information is not confidential. The company's performance against the IRMA Standard will be published and publicly available on the IRMA website once the audit report has been approved. The company also has other channels to share information with its stakeholders upon request such as the grievance system (Contact us) and community meetings.
1.2.4.2.	If original requests for information are deemed unreasonable, efforts shall be made by the operating company to provide stakeholders with overviews or summaries of the information requested.	_	There is no indication of requests for information that were deemed unreasonable.
1.2.4.3.	Communications shall be carried out and information shall be provided to stakeholders in a timely manner, and shall be in formats and languages that are culturally appropriate and accessible to affected communities and stakeholders		The evidence includes examples of the company's communication such as a Radio Announcement (2021), the company's magazine Dialogue Magazine No. 34 (July/August 2020), example flyers, and grievances filed in the grievance system Fale Conosco (2021), indicating that the company uses culturally appropriate and accepted methods, which allow stakeholders and affected communities to be informed in a timely, accessible manner and in formats and languages that are accessible and understandable.
			Interviews with a sample of stakeholders indicate awareness of the company's means of communication and the recent information provided by the company.
			Interviews are needed during the surveillance audit to confirm the company's communication continues to be effective.

	1.2—Community and Ider Engagement		Basis for rating
1.2.4.4.	If requests for information are not met in full, or in a timely manner, the operating company shall provide stakeholders with a written justification for why it has withheld information.	•	The company provided records from the grievance system Fale Conosco (2021), indicating that they provide stakeholders with a written justification for why they might withhold information.

Chapte	r 1.3—Human Rights Due Diligence		Basis for rating
1.3.1.1.	Critical The operating company shall adopt a policy commitment that includes an acknowledgement of its responsibility to respect all internationally recognized human rights	•	The evidence, Group Human Rights Policy (version 2, 2018), indicates that the company adopted a Human Rights policy that includes an acknowledgement to respect all internationally recognized human rights.
1.3.1.2.	The policy shall: a. Be approved at the most senior level of the company; b. Be informed by relevant internal and/or external expertise; c. Stipulate the operating company's human rights expectations of personnel, business partners and other parties directly linked to its mining project; d. Be publicly available and communicated internally and externally to all personnel, business partners, other relevant parties and stakeholders; e. Be reflected in the mining project's operational policies and procedures.	•	 a. That the Group Chief Executive and the Chief Executives of the business units are accountable for the implementation of the policy. b. That the policy was drafted by an independent expert and is available on the company's website at https://www.angloamerican.com/esg-policies-and-data/download-centre c. The policy is applicable to personnel, business partners, and other parties. d. During on-site interviews, staff and contractors acknowledged that the policy was communicated internally. e. The Anglo American Social Way Group Policy (version 3, January 2020), and the company's Code of Ethics (version 4, May 2020), are among the documents that directly reference human rights or the company's Human Rights Policy. The evidence does not include the means to verify stakeholders were informed of the company's human rights commitments in formats understandable to them (d). Interviews are needed during the surveillance audit (community) to confirm that the policy is publicly available and is communicated to stakeholders.
1.3.2.1.	Critical The operating company shall establish an ongoing process to identify and assess potential human rights impacts (hereafter referred to as human rights "risks") and actual human rights impacts from mining project activities and business relationships. Assessment of human rights risks and impacts shall be updated periodically, including, at minimum, when	•	The evidence, Analysis of Social and Human Rights Risks and Impacts (SHIRA), indicates the company incorporates the principles and objectives of a Human Rights Due Diligence (HRDD) approach into its risk assessment methodology. The company evaluates potential human rights risks caused by their activities annually within their Workplace Risk Assessment and Control (WRAC) tool as indicated by WRAC registers from 2019 to 2022. The complementary evidence provided includes a Social Consequence Matrix (January 2020), and SHIRA



Chapte	er 1.3—Human Rights Due Diligence		Basis for rating
	there are significant changes in the mining project, business relationships, or in the operating environment.		(2023), which indicate that the company correlates operational risks with human rights. Outside of the annual assessments, the company has assessed human rights risks and impacts associated with the mining operation including key infrastructure in 2014 and 2019, as indicated by the Gap Analysis of the Implementation of Voluntary Human Rights Principles (2014), and Human Rights Due Diligence (February 2019). Since the end of 2022, an independent, third-party consultancy group has been assessing any increases in existing mining-generated impacts and new impacts on the community to account for any risk changes since the beginning of the operation. This is done through community interviews and workshops (Amplo Study Plan and Presentation Condition 47, 2021). Interviews with company personnel confirm that the company conducts human rights risk assessments. This requirement, as well as 1.3.2.2, 1.3.2.3, and 1.3.2.4, and 1.3.2.5 will be revisited during the surveillance audit to confirm continued identification and assessment of human rights risks and actual human rights impacts related to the company's mining activities, including when there are significant changes to the mining project or the operating environment.
1.3.2.2.	Assessments, which may be scaled to the size of the company and severity of human rights risks and impacts, shall: a. Follow a credible process/methodology; b. Be carried out by competent professionals; and c. Draw on internal and/or external human rights expertise, and consultations with potentially affected rights holders, including men, women, children (or their representatives) and other vulnerable groups, and other relevant stakeholders.	•	The evidence, including the Technical Proposal for a Human Rights Due Diligence of the Mine, Pipeline and Port (May 2018), and the Human Rights Due Diligence Report (February 2019), indicates that the company has recently: a. implemented a credible process using standard methodology to assess human rights risks, that b. was developed by competent professionals; and c. included consultation with vulnerable stakeholders. Interviews are needed during the surveillance audit (community) to confirm that stakeholders, especially rights holders, women, vulnerable groups and minority groups, were meaningfully engaged as part of the human rights risk and impact assessment consultations.
1.3.2.3.	As part of its assessment, the operating company shall document, at minimum: a. The assessment methodology; b. The current human rights context in the country and mining project area; c. Relevant human rights laws and norms; d. A comprehensive list of the human rights risks related to mining project activities and business	•	The evidence, the Technical Proposal for a Human Rights Due Diligence (HRDD) of the Mine, Pipeline and Port (May 2018), and the Human Rights Due Diligence Report (February 2019), presents documentation of: a. The assessment methodology implemented during the HRDD performed;



Chapter	1.3—Human Rights Due Diligence		Basis for rating
1.3.2.4.	relationships, and an evaluation of the potential severity of impacts for each identified human rights risk; e. The identification of rights holders, an analysis of the potential differential risks to and impacts on rights holder groups (e.g., women, men, children, the elderly, persons with disabilities, indigenous peoples, ethnic or religious minority groups, and other disadvantaged or vulnerable groups), and a disaggregation of results by rights holder group; f. Recommendations for preventing, mitigating and remediating identified risks and impacts, giving priority to the most salient human rights issues. At minimum, stakeholders and rights holders who		 b. The human rights context in the country and mining project area at the time of the HRDD; c. Applicable human rights regulation; d. A list of the human rights risks related to mining project activities and the severity of impacts. e. The identification of rights holders and potential risks and differential impacts on them. f. Recommendations for preventing, mitigating, and remediating identified risks and impacts. Interviews are needed during the surveillance audit (community) to confirm that stakeholders have been sufficiently consulted in the human rights risk and impact assessment. The evidence, feedback on the Results of the 2017 SEAT Research Cycle (April
	participated in the assessment process shall have the opportunity to review draft key issues and findings that are relevant to them, and shall be consulted to provide feedback on those findings.	•	2019), and interviews with a sample of stakeholders, indicate that stakeholders were consulted about key issues and asked to provide feedback. Interviews are needed during the surveillance audit (community) to confirm relevant stakeholders continue to participate in the assessment process.
1.3.2.5.	The operating company shall demonstrate that steps have been taken to effectively integrate assessment findings at the mine site operational level.	•	The evidence, Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment (November 2019), includes examples of the company's measures taken to effectively integrate assessment findings at the operational level and indicate their successful implementation.

Chapter	Chapter 1.3—Human Rights Due Diligence		Basis for rating
1.3.3.1.	Mining project stakeholders shall have access to and be informed about a rights-compatible grievance mechanism and other mechanisms through which they can raise concerns and seek recourse for grievances related to human rights.	•	The evidence includes a company-initiated Radio Announcement (2019) describing the grievance mechanism, and an example of a flyer (Dialogo Extra MG-010, 2021) that includes the grievance phone number. The evidence indicates that stakeholders are fully informed via written material and radio advertisement of grievance mechanisms and procedures through which they can raise concerns and seek recourse related to human rights. Interviews with stakeholders (community) are needed during the surveillance audit to confirm the effectiveness of the grievance mechanism related to human rights.
1.3.3.2.	Responding to human rights risks related to the mining project: a. If the operating company determines that it is at risk of causing adverse human rights impacts through its mining-related activities, it shall prioritize preventing impacts from occurring, and if this is not possible, design strategies to mitigate the human rights risks. Mitigation plans shall be developed in consultation with potentially affected rights holder(s). b. If the operating company determines that it is at risk of contributing to adverse human rights impacts through its mining-related activities, it shall take action to prevent or mitigate its contribution and use its leverage to influence other contributing parties to prevent or mitigate their contributions to the human rights risks. c. If the operating company determines that it is at risk of being linked to adverse human rights impacts through its business relationships, it shall use its leverage to influence responsible parties to prevent or mitigate their risks to human rights from their activities.	•	The evidence, including the Social Management Plan (2020), indicates that risks and impacts related to the mining operation are properly assessed for all phases of the mine life cycle, and that these results are incorporated into the mitigation strategy design and implementation indicating that the company complies with sub-requirements (a) to (c). The document Social Management Plan (2020) describes all potential impacts (positive and negative) associated with mining expansions, including security, environmental, legal, social, and reputational risks. Interviews are needed during the surveillance audit (community) to confirm that stakeholders were informed of risks to their human rights from the mining project and such risks, if any, were satisfactorily prevented or reduced through mitigation.



1.3.3.3. Critical Responding to actual human rights impacts related to the mining project:

a. If the operating company determines that it has caused an actual human rights impact, the company shall:

Cease or change the activity responsible for the impact; and

In a timely manner, develop mitigation strategies and remediation in collaboration with affected rights holders. If mutually acceptable remedies cannot be found through dialogue, the operating company shall attempt to reach agreement through an independent, third-party mediator or another means mutually acceptable to affected rights holders;

- b. If the operating company determines that it has contributed to an actual human rights impact, the company shall cease or change any activities that are contributing to the impact, mitigate and remediate impacts to the extent of its contribution, use its leverage to influence other contributing parties to cease or change their activities, and mitigate and remediate the remaining impact;
- c. If the operating company determines that it is linked to an actual human rights impact through a business relationship the company shall use its leverage to prevent or mitigate the impact from continuing or recurring; and
- d. The operating company shall cooperate with other legitimate processes such as judicial or State-based investigations or proceedings related to human rights impacts that the operating company caused, contributed to, or was directly linked to through its business relationships.

The evidence, Executive Summary, SMP and SEP (ERM, 2020), January 2021, a Power Point summary prepared by a consultant presenting updates to the site's Social Management Plan and Stakeholders Engagement Plan based upon human rights risks, and Mines-River Pipeline Incidents (2018), Santo Antonio do Grama, Minas Gerais, a Power Point prepared by Anglo American summarizing 2018 pipeline incidents in which a pipeline transporting iron ore slurry from the site to the harbor burst twice. The incidents Power Point provides an example in which the company mitigated, and remediated impacts as in (a):

- i. All production activities were ceased, stopping the flow of iron ore slurry down the pipeline (page 2).
- ii. Mitigation strategies were developed timely, and the company collaborated with the local authorities and supplied affected communities with water (page 2). Stakeholders in the affected area were updated regularly throughout the mitigation, remediation, and following monitoring process (pages 2, 4, 6, 13) and gathered information from stakeholders on adopting complementary actions (page 8). The evidence indicates that the company provided the affected persons with the necessary assistance (page 13) until remediation was complete.
- b. All activities contributing to the impact ceased, and the remaining impact was mitigated and remediated soon after.
- c. The evidence does not include information to confirm the company being linked to an actual human rights impact through a business relationship.
- d. Causes of the incident were investigated by the company in partnership with the Federal University of Minas Gerais (UFMG) and the Institute of Technological Research (IPT). Only after the authorization of IBAMA did the company resume operations (pages 6 and 8).

Evidence of implementation of mitigation and remedy for human rights impacts identified in Social Management Plan and Stakeholders Engagement Plan Update (January 2021 Power Point) was not included as evidence.

Interviews with a sample of stakeholders during the on-site assessment did not suggest human rights impacts or concerns in the area of the mine. This will be re-evaluated with stakeholders at the time of the surveillance assessment. Note that the pipeline is not included in the IRMA assessment scope and thus interviews may not reflect the views of all stakeholders.

Chapter	1.3—Human Rights Due Diligence		Basis for rating
1.3.4.1.	The operating company shall monitor whether salient adverse human rights risks and impacts are being effectively addressed. Monitoring shall include qualitative and quantitative indicators, and draw on feedback from internal and external sources, including affected rights holders.	•	The evidence, including records from the Enablon software, and the 2019 report on Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment, indicates that salient impacts are monitored and addressed throughout the mining cycle. This monitoring is continuous, as mandated by Anglo American Social Way Requirement 3B. Feedback from employees who interact with external stakeholders is shared monthly within the multidisciplinary Social and Environmental Management Working Group (GSA). Evidence also includes a SHIRA Matrix (2021) example and the executive summary of the GSA (2020), indicating risk assessment performance using qualitative and quantitative indicators. Since the end of 2022, an independent, third-party consultancy group has been assessing any increases in existing mining-generated impacts and new impacts on the community to account for any risk changes since the beginning of the operation. This is done through community interviews and workshops (Amplo Study Plan and Presentation Condition 47, 2021). Interviews are needed during the surveillance audit to confirm that monitoring is ongoing, and that feedback from internal and external sources, including relevant stakeholders, is considered.
1.3.4.2.	External monitoring of an operating company's human rights due diligence shall occur if the company's due diligence efforts repeatedly fail to prevent, mitigate or remediate actual human rights impacts; or if its due diligence activities failed to prevent the company from unknowingly or unintentionally causing, contributing to or being linked to any serious human rights abuse. Additionally: a. The company shall fund the external monitoring; and b. The form of such monitoring, and selection of external monitors, shall be determined in collaboration with affected rights holders.	•	Although no evidence indicates that the efforts to support human rights due diligence have failed, the company provided examples of contracts and programs developed by third party independent consultants with communities. During the surveillance audit, monitoring and grievance records will be reviewed and interviews (community) conducted, to assess whether the company has been implicated in the repeated infringement of human rights or serious human rights abuses.



Chapte	r 1.3—Human Rights Due Diligence		Basis for rating
1.3.5.1.	The operating company or its corporate owner shall periodically report publicly on the effectiveness of its human rights due diligence activities. At minimum, reporting shall include the methods used to determine the salient human rights issues, a list of salient risks and impacts that were identified, and actions taken by the operating company to prevent, mitigate and/or remediate the human rights risks and impacts.	0	The evidence is a public report (Society Report, 2017) that describes the company's commitment to internationally recognized human rights and the mechanisms in place to prevent and address human rights risks and impacts. The evidence does not include public reports on the effectiveness of its human rights' due diligence activities.
1.3.5.2.	If relevant, the operating company shall publish a report on external monitoring findings and recommendations to improve the operating company's human rights due diligence, and the operating company shall report to relevant stakeholders and rights holders on its plans to improve its due diligence activities as a result of external monitoring recommendations.	0	The evidence is a public report (Society Report, 2017) that describes the company's commitment to internationally recognized human rights and the mechanisms in place to prevent and address human rights risks and impacts. The evidence does not include a public report that discloses findings and recommendations of external monitoring and how these inform the company's human rights due diligence process.
1.3.5.3.	Public reporting referred to in 1.3.5.1 and 1.3.5.2 may exclude information that is politically sensitive, confidential business information, or that may compromise safety or place any individual at risk of further victimization.	0	No information was provided to assess this item.

Chapter 1.4—Complaints and Grievance Mechanism and Access to Remedy			Basis for rating
1.4.1.1.	Critical The operating company shall ensure that stakeholders, including affected community members and rights holders (hereafter referred to collectively as "stakeholders") have access to an operational-level mechanism that allows them to raise and seek resolution or remedy for the range of complaints and grievances that may occur in relation to the company and its mining-related activities.	•	The evidence, Records from the grievance system Fale Conosco (2021), Radio Announcements (2019), Coexistence Program (2017 to 2021), and a Satisfaction Survey (2021) indicate that stakeholders, including affected community members and rights holders have access to an operational-level grievance mechanism. The evidence does not include meeting minutes or a guide for applying the operational-level grievance tool Fale Conosco (Contact Us). Interviews with a sample of stakeholders indicate that community members recognize the communication methods to contact the mine, but that response is not always satisfactory.
1.4.2.1.	The operating company shall consult with stakeholders on the design of culturally appropriate complaints and grievance procedures that address, at minimum: a. The effectiveness criteria outlined in Principle 31 of the United Nations Guiding Principles on Business and Human Rights, which include the need for the mechanism to be: (a) Legitimate, (b) Accessible, (c) Predictable, (d) Equitable, (e) Transparent, (f) Rights-compatible, (g) A source of continuous learning, and (h) Based on engagement and dialogue;		The evidence, records from the grievance system, Contact Us/ Fale Conosco, 2021, indicates that the company has culturally appropriate complaints and grievance procedures that are presented in the local language and acknowledged by stakeholders, and address most sub-requirements (a) to (g) (effectiveness criteria, filing/investigation/resolution, confidentiality, anonymity, options for recourse, tracking). The company has consulted stakeholders on the design of the procedures, as indicated by evidence GSA – Socio-Environmental Management Group (Slides 4 and 5, March 2021) and Fale Conosco - Communities (no date).
	 b. How complaints and grievances will be filed, acknowledged, investigated, and resolved, including general timeframes for each phase; c. How confidentiality of a complainant's identity will be respected, if requested; d. The ability to file anonymous complaints, if deemed necessary by stakeholders; e. The provision of assistance for those who may face barriers to using the operational-level grievance mechanism, including women, children, and marginalized or vulnerable groups; f. Options for recourse if an initial process does not result in satisfactory resolution or if the mechanism is inadequate or inappropriate for handling serious human rights grievances; and 	•	The evidence does not include details to confirm which communities have participated in which meeting, and how the company assists those who may face barriers as in (e). Interviews are needed during the surveillance audit (community) to confirm that stakeholder consultation relating to complaints and grievances are effective.



-	r 1.4—Complaints and Grievance Mechanism cess to Remedy		Basis for rating
	g. How complaints and grievances and their resolutions will be tracked and recorded.		
1.4.2.2.	The operating company shall ensure that all complaints and grievance procedures are documented and made publicly available.	•	The evidence includes records from the grievance platform Fale Conosco (2021) which is publicly available on the company's website (https://brasil.angloamerican.com/pt-pt/site-services/fale-conosco) and contains all complaints and grievance procedures. This platform allows the public to enter, sort, and track grievances.
1.4.3.1.	No remedy provided by an operational-level grievance mechanism shall require aggrieved parties to waive their right to seek recourse from the company for the same complaint through other available mechanisms, including administrative, non-judicial or judicial remedies.	•	The company's Grievance System Procedure (2022) indicates that no remedy requires aggrieved parties to waive their right to seek recourse from the company for the same complaint through other available mechanisms, including administrative, non-judicial, or judicial remedies. The company provided evidence of a grievance response reminding the aggrieved party that third-party remedies may be utilized (2020). Interviews are needed during the surveillance audit (company, stakeholders) to confirm that acceptance of remedy through the operational-level mechanism do not require claimants to waive their rights to seek remedy on the same complaint through other non-judicial or judicial mechanisms.
1.4.4.1.	Complaints and grievances and their outcomes and remedies shall be documented.	•	The evidence (Spreadsheet Fale Conosco, 2021) indicates that the company records complaints and grievances as well as their respective outcomes and remedies. The system also provides for a secure and confidential manner to handle records.

	r 1.4—Complaints and Grievance Mechanism cess to Remedy		Basis for rating
1.4.4.2.	The operating company shall monitor and evaluate the performance of the operational-level complaints and grievance mechanism over time to determine: a. If changes need to be made to improve its effectiveness as per 1.4.2.1.a; b. If changes in company activities can be implemented to prevent or mitigate similar grievances in the future; and c. If outcomes and remedies provided through the mechanism accord with internationally recognized human rights.	•	The company monitors and evaluates the performance of the operational-level complaints and grievance mechanism as part of the grievance resolution workflow as outlined in the Grievance Mechanism procedure (2022) over time to determine: a. If changes need to be made to improve its effectiveness. An assessment of effectiveness is also accomplished through satisfaction surveys of aggrieved parties after the resolution of a grievance, a survey on improvement opportunities of the complaint mechanism in 2022, and internal reviews and updates to the Grievance Mechanism procedure. b. If changes in company activities can be implemented to prevent or mitigate similar grievances in the future as described in more detail in the company's Incident Investigation and Learning Procedure (2023); and c. If outcomes and remedies provided through the mechanism accord with internationally recognized human rights. Interviews are needed during the surveillance audit (company, community) to confirm grievances are reviewed with stakeholders to ensure outcomes and remedies aligned to internationally recognized human rights.
1.4.4.3.	Stakeholders shall be provided with clearly communicated opportunities to submit feedback on the performance of the complaints and grievance mechanism.	•	The evidence, GSA – Socio-Environmental Management Group (Slides 4 and 5, March 2021) and Fale Conosco - Communities (no date) indicates that the company provides opportunities to submit feedback on the performance of the complaints and grievance mechanism.
1.4.5.1.	The operating company shall take reasonable steps to inform all stakeholders of the existence of the operational-level complaints and grievance mechanism, its scope, and its procedures.	•	The evidence, a flyer addressed to the community that explains the grievance mechanism Fale Conosco, and its procedure, scope, and contact information (2021), indicates that the company has informed stakeholders on where they can file a grievance. Interviews with a sample of stakeholders acknowledged to be aware of the procedure. The evidence does not indicate if stakeholders have been formally informed about options for anonymity.
1.4.5.2.	The operating company shall neither state nor imply that participation in an operational level grievance mechanism precludes the stakeholder from seeking redress through administrative, judicial or other non-judicial remedies.	•	The evidence, a Flyer about the Fale Conosco grievance mechanism (2021), and grievance records (2021), indicates that stakeholders may seek redress through administrative, judicial, or other remedies.



	1.4—Complaints and Grievance Mechanism less to Remedy		Basis for rating
			Interviews with a sample of stakeholders acknowledged knowing the grievance procedure and that it does not preclude them from seeking redress through administrative, judicial, or other non-judicial remedies.
1.4.5.3.	The operating company shall inform relevant personnel who interact with stakeholders of the proper procedures for handling stakeholder complaints and grievances, and ensure that personnel directly involved in the operational-level mechanism receive instruction on the respectful handling of all complaints and grievances, including those that may appear frivolous.	•	The evidence, a Training Schedule (no date), includes training material that prepares company personnel to deal with stakeholder complaints. The evidence does not include records of personnel training or performance monitoring. Observations during the on-site audit indicated that not all grievances received through channels that are outside of the operational-level mechanism were handled in a timely fashion as required by the company's Grievance Mechanism Procedure (2022). Interviews are needed during the surveillance audit to confirm that personnel who interact with stakeholders understand the grievance process, including those that may appear frivolous.
1.4.6.1.	Periodically, the operating company shall report to stakeholders on grievances received and responses provided. This shall be done in a manner that protects the confidentiality and safety of those filing grievances.	0	The evidence, Fale Conosco – Communities (2022), a presentation detailing the grievance process and channels, provides a historical overview of grievances filed, categorizes them by topic, shows the monthly count, and updates on their status. It respects confidentiality and safety of the filers. The title of the presentation indicates that it is intended to be shared with the community. The evidence does not include meeting minutes or correspondence with stakeholders to confirm that this information was shared with the community. Interviews are needed during the surveillance audit to assess conformity to this requirement.

Chapte	r 1.5—Revenue and Payments Transparency		Basis for rating
1.5.1.1.	The operating company shall comply with 1.5.1.2 and 1.5.1.3, and/or demonstrate how it complies with equivalent reporting and disclosure requirements of the European Union Accounting Directive (2013/34/EU) and the European Union Transparency Directive (2013/50/EU), or an equivalent mandatory transparency regime.	_	Not relevant. The company does not voluntarily follow the EU Directives or an equivalent mandatory transparency regime. See comments in 1.5.1.2 and 1.5.1.3.
1.5.1.2.	On a yearly basis, the operating company shall publish a report that discloses all material payments made by itself and its corporate owner to the government of the country in which the mining project is located. The report shall be made public within 12 months after the end of each financial year.	•	Anglo American participates in the Extractive Industries Transparency Initiative (EITI) and publishes country-level reporting on payments made to the Brazilian government in its annual Tax and Economic Contribution Report. The evidence, Tax and Economic Contribution Report 2021, was published within 12 months of the reporting year on March 3 rd , 2022, and is available on Anglo American's website. The evidence also includes publicly available financial reports such as the Annual Tax Contribution Report (2020) and Anglo American Country-by-Country Report (2020). They contain general information regarding payments made to the government of Brazil and were all published within 12 months of the reporting year.
1.5.1.3.	 The types of payment disclosed shall include as a minimum, as applicable: a. The host government's production entitlement; b. National state-owned enterprise production entitlement; c. Profits taxes; d. Royalties; e. Dividends; f. Bonuses, such as signature, discovery and production bonuses; g. License fees, rental fees, entry fees and other considerations for licenses and/or concessions; h. Payments for infrastructure improvements; and i. Any other significant payments and material benefits to government, including in kind payments. 	•	The evidence, Anglo American plc Tax and Economic Contribution Report 2021 (published on March 3 rd , 2022), lists the following information: - Total tax and economic contribution - Wages and related payments - Corporate social investment - Total country procurement - In-country procurement - Capital expenditure - Total taxes and royalties borne and Taxes collected - Corporate income tax - Royalties and mining taxes - Other payments borne - Taxes collected The evidence indicates that the report includes the following types of payments: (c), (d), (g), and (i). The evidence does not provide the detail necessary to confirm whether the remaining types of payments are included in the report or if they correspond to

Chapte	er 1.5—Revenue and Payments Transparency		Basis for rating
1.5.1.4.	At minimum, this information shall be broken down by recipient government body (where applicable), by project (where applicable), and by payment type.	•	The evidence, an excel template (Base Template 28 A.C., 2020), includes a payment form to government agencies, which is published annually on the company's website. The use of abbreviations, acronyms, and initials hinders the readability and understanding of the content. Anglo American's 2020 Tax Contribution Report mentions the EITI principles. The payment form includes information on payments as indicated in the requirement but does not include the details contemplated in letters (a), (b), (e), (f), and (h) of the previous requirement (1.5.1.3).
1.5.2.1.	The operating company shall demonstrate its compliance with the reporting requirements specified in Chapter 10 of the European Union Directive 2013/34/EU or an equivalent mandatory transparency regime, and/or shall comply with the requirements listed under 1.5.2.2 below.	•	The evidence, (Tax Contribution Report. 2020), indicates that Anglo American is subject to UK regulations SI2014/3209, in accordance with Chapter 10 of Directive 2013/34/EU. The information provided is not as detailed as required in 1.5.2.2.
1.5.2.2.	The operating company shall ensure that the following information at the mining project level is reported on an annual basis and is readily accessible to the public: a. Mine production, disaggregated by product type and volume; b. Revenues from sales, disaggregated by product type; c. Material payments and other material benefits to government as listed in paragraph 1.5.1.3, disaggregated according to the receiving government entity (e.g., national, regional, local entity; name of government department); d. Social expenditures, including the names and functions of beneficiaries; e. Taxes, tariffs or other relevant payments related to transportation of minerals; f. Payments to politicians' campaigns, political parties or related organizations; and	•	The evidence is an independent audit report on the company's Financial Statements (2019), which is prepared annually in accordance with Brazilian regulations. The report includes information on taxes (e) and some information on revenues (b), however it is not disaggregated by product type. The report does not include details to confirm that information on (a), (c), (d), (f) and (g) is reported on an annual basis and readily available to the public.

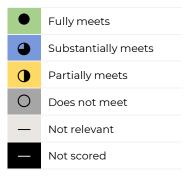
Chapte	r 1.5—Revenue and Payments Transparency		Basis for rating
	g. Fines or other similar penalties that have been issued in relation to the project.		
1.5.2.3.	The operating company shall publish annual accounts, following international accounting standards.	•	The evidence is the company's Financial Report (2019), which is an independent audit report on the financial statements of December 2019, carried out by Deloitte, and follows the regulations of the recipient country (Brazil). The report refers to compliance with international standards without specifying them (IFRS, IASB or others).
1.5.3.1.	If the mining project is located in a country without a mandated transparency regime, the operating company shall demonstrate support for the EITI by publishing a clear public statement endorsing the EITI Principles on its external website.	•	The evidence (Tax Contribution Report, 2020) provided during Phase 2 of the IRMA Audit, includes reference to the EITI principles.
1.5.3.2.	If the mining project is located in a country without a mandated transparency regime and the EITI is active in that country, the operating company shall: a. Commit to engage constructively with and support implementation of the EITI consistent with the multi-stakeholder process adopted in its country of operation; and b. Provide links on its external website to completed and up-to-date Company Forms for its operation, if the EITI implementing country has completed at least one validation.	•	The evidence (Payments to Government, 2020), indicates that the company has a corporate commitment to engage with the EITI initiative. Also, during the site visit, access was granted to partial information on compliance with the requirements indicated in letter b). Evidence on website links to completed and up-to-date Company Forms was not provided.

Chapte	r 1.5—Revenue and Payments Transparency		Basis for rating
1.5.4.1.	The material terms for mineral exploration, development and production agreed between the operating company and government entities shall be freely and publicly accessible, with the exception of confidential business information, in the national language(s) of the country in which the mining project is located. a. Where these terms are negotiated, rather than governed by law, the company shall make the relevant agreements, licenses or contracts freely and publicly accessible. b. Where these terms are governed by law, free, public access to the relevant statutory documentation is deemed sufficient to meet the IRMA requirement.	•	The evidence, a link to a website of the government of the host country ANM (Brazil) and an Excel spreadsheet (IRMA Assessment phase 1-310821), indicates that the operating company has made all material negotiated terms for mineral exploration, development, and production accessible in the national language of the country of operation (Portuguese, Brazil). Currently, the document is shared upon request. The report follows the requirements established by the National Mining Agency (ANM), which indicate that the Annual Mining Report must describe material terms for mineral exploration, development and production agreed between the operating company and government. The evidence does not indicate that the company's Annual Mining Report is publicly accessible on company or government website.
1.5.4.2.	The beneficial ownership of the operating company shall be publicly accessible.	0	The company indicated that the information is publicly available and aligned with international best practices. The evidence does not include details to confirm that the company publicly discloses its beneficial owners.
1.5.5.1.	Critical The operating company shall develop, document and implement policies and procedures that prohibit bribery and other forms of corruption by employees and contractors.	•	The evidence includes the Business Integrity Policy (September 2019) and the Policy of Conduct and Procedures (April 2020). Both are Anglo American Group policies on the prohibition of bribery and other forms of corruption, in accordance with this requirement. The company indicates that this policy is verbally communicated to employees and contractors. This is supported by interviews with a sample of workers including contractors, which acknowledge that bribery and anti-corruption policies are in place.
1.5.5.2.	Procedures shall include: a. A requirement to internally report and record any undue pecuniary or other advantage given to, or received from, public officials or the employees of	•	The evidence, a Business Integrity Policy (September 2019), a Standard for Disciplinary Measures (October 2019), and a Standard for Interaction with Public Agents (no date), indicates that the company's procedures includes:

Chapter	1.5—Revenue and Payments Transparency		Basis for rating
	business partners, directly or through third parties; and b. Disciplinary actions to be taken if cases of bribery or corruption are discovered.		a. a requirement to internally report and record any undue pecuniary or other advantage given to, or received from, public officials or the employees of business partners, directly or through third parties; and b. disciplinary actions to be taken if cases of bribery or corruption are discovered. Interviews with workers' reps are needed during the surveillance audit to confirm procedure effectiveness.
1.5.5.3.	Relevant employees and contractors shall be trained in the application of the operating company's policy and procedures.	•	According to the evidence (Policies, Directives, Standards, Procedures, and Records, and 13.08.2021 Spreadsheet), the company trains employees and contractors on the company's policies and procedures and maintains associated records on its online platform. This is supported by interviews with a sample of workers including contractors, which acknowledge that bribery and anticorruption policies are in place.

Principle 2: Planning for Positive Legacies

RATING LEGEND Description of performance



Note on Chapter 2.1:

In October 2020, the IRMA Board approved changes in the way Chapter 2.1 was to be audited for existing mines. The table below now shows where expectations are different for new versus existing mines. Existing mines are only required to meet a core set of requirements related to the assessment of environmental and social risks (called CORE requirements). However, existing mines have the option to be audited against the new mine requirements. If they have opted to do so, that will be reflected in the 'Basis for Rating' column. Existing mines are still required to have in place an environmental and social management system.

	r 2.1—Environmental and Social Impact ment and Management		Basis for rating
2.1.1.1	An Environmental and Social Impact Assessment (ESIA), appropriate to the nature and scale of the proposed mining project and commensurate with the	_	The Minas-Rio mine was permitted in 2007 and developed by the company between 2008-2013, several years before 2019, which is the point in time established by IRMA to distinguish between new and existing mines. The

¹For more information, see the IRMA Guidance Note on Chapter 2.1: https://responsiblemining.net/wp-content/uploads/2021/07/Chapter-2.1-ESIA-Guidance-Final-2020.pdf



acts, f any ject. pacts all all be	_	company had the option to choose how the mine should be assessed and decided that Minas-Rio should be assessed as an existing mine, which is being scored against IRMA's core ESIA requirements. See Note in Chapter 2.1. Some requirements do not apply (2.1.1 to 2.1.6) and will be labeled as "Not relevant", except for 2.1.3.1 which is assessed. Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
all -	_	
-	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
en al ble to blders	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
h the ort	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
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	r 2.1—Environmental and Social Impact ment and Management		Basis for rating
	proposed actions to mitigate any negative impacts; c. A description of the main steps of the ESIA process that will be carried out, the estimated timeline and the range of opportunities for stakeholder participation in the process; and d. Contact details for the person or team responsible for management of the ESIA.		
2.1.3.1.	Critical (New Mines) The operating company shall carry out a scoping process to identify all potentially significant social and environmental impacts of the mining project to be assessed in the ESIA. Critical (Existing Mines) The operating company shall demonstrate that it has undertaken a comprehensive evaluation of potential environmental and social impacts associated with the mining operation.	•	The company has conducted an evaluation of potential environmental impacts associated with the operation of Minas-Rio and its Mina Do Sapo Expansion. The evidence includes: - EIA for the Minas-Rio project, 2007 - EIA for the Mina do Sapo expansion project, 2015-2017. Both studies include an evaluation of social impacts such as public safety, traffic, change of local culture, impacts on local tourism industry etc.
2.1.3.2.	During scoping, the operating company shall identify stakeholders and rights holders (hereafter, collectively referred to as "stakeholders") who may be interested in and/or affected by the proposed project.	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.1.3.3.	Scoping shall include the consideration of: a. Social impacts (including potential impacts on communities and workers) and environmental impacts (including potential impacts on wildlife, air, water, vegetation and soils) during all stages of the project lifecycle, from pre-construction through post-closure; b. Direct, indirect, and cumulative impacts; and c. Potential impacts of extreme events.	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.1.3.4	Scoping shall result in the identification of: a. Potentially significant environmental and social impacts of the proposed project;	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.

-	er 2.1—Environmental and Social Impact ment and Management		Basis for rating
	 b. Alternative project designs to avoid significant adverse impacts; c. Other actions to mitigate identified adverse impacts; and d. Additional information and data needed to understand and assess the potential impacts. 		
2.1.4.1.	Baseline data describing the prevailing environmental, social, economic and political environment shall be collected at an appropriate level of detail to allow the assessment of the potential impacts of the proposed mining project.	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.1.4.2.	Additional studies shall be carried out as necessary to fulfill the information needs of the ESIA.	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.1.5.1	 The operating company shall: a. Predict in greater detail the characteristics of the potentially significant environmental and social impacts identified during scoping; b. Determine the significance of the predicted impacts; c. Evaluate options to mitigate predicted significant adverse impacts in line with the mitigation hierarchy, prioritizing the avoidance of impacts through consideration of alternative project designs; and d. Determine the relative importance of residual impacts (i.e., impacts that cannot be mitigated) and whether significant residual adverse impacts can be addressed to the satisfaction of affected or relevant stakeholders. 	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.1.6.1.	The operating company shall prepare an ESIA report that includes, at minimum: a. A description of the proposed mining project; b. Detailed description of the direct, indirect and cumulative impacts likely to result from the	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.



-	.1—Environmental and Social Impact ent and Management		Basis for rating
c.	and mitigate significant adverse impacts in line with the mitigation hierarchy, and the recommended measures to avoid or mitigate those impacts; d. A review of the public consultation process, the views and concerns expressed by stakeholders and how the concerns were taken into account; and		
S	The operating company shall develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine.	•	The company has developed a system to manage environmental and social risks and impacts (ESMS), some examples of the evidence include the following plans: Social impacts SHE Way: Safety, health, and environment guidelines Stakeholder engagement Emergency response for the tailings storage facility (TSF) Socioeconomic monitoring Cultural heritage protection and monitoring Training and hiring of local workforce Environmental education Social communication Development of local contractors Coexistence Committee meetings Biodiversity impacts Flora and Fauna management Rehabilitation of degraded areas Removal of vegetation and organic soil Closure plan Physical impacts Environmental control management Noise monitoring Air quality management



Chapter 2.1—Environmental and Social Impact Assessment and Management			Basis for rating
			 Noise management Water resources management Social and environmental risks Procedure for risk analysis Procedure to identify risks The evidence indicates that the system is maintained, some examples include: Health and safety indicators Safety and sustainable development report Reports describing activities for all the plans and programs listed above.
2.1.7.2	An environmental and social management plan (or its equivalent) shall be developed that, at minimum: a. Outlines the specific mitigation actions that will be carried out to address significant environmental and social impacts identified during and subsequent to the ESIA process; b. Assigns personnel responsible for implementation of various elements of the plan; and c. Includes estimates for the resources needed to implement the plan.	•	 The ESMS includes mitigation actions, responsible personnel, and resource estimates for implementation. a. There is evidence that the ESMS is being implemented with specific mitigation actions (see also response to 2.1.7.1.). The company has a committee to review complaints related to environmental impacts to establish mitigation measures. b. The company provided the job description of the two (2) employees in charge of the ESMS and includes their responsibilities. c. The budgets needed to implement the ESMS are estimated and presented annually in their budgets for approval based on the specific activities planned.
2.1.7.3.	The environmental and social management plan shall be implemented and revised or updated as necessary based on monitoring results or other information.	•	The evidence (see response to 2.1.7.1), compliance reports to the government agency, including updates, provides indication of the implementation of the company's ESMS. When the original ESIA was prepared in 2007 the initial ESMS was developed, and it was updated with the ESIA prepared for the expansion Mina do Sapo in 2015.

	r 2.1—Environmental and Social Impact ment and Management		Basis for rating
2.1.8.1.	As part of the ESMS, the operating company shall establish a program to monitor: a. The significant environmental and social impacts identified during or after the ESIA process; and b. The effectiveness of mitigation measures implemented to address environmental and social impacts.	•	The evidence indicates that a monitoring program is being implemented covering the relevant environmental and social aspects. Examples of the implemented programs to mitigate sources of significant impact include noise, vibrations, air quality, water quality, flora and fauna, socioeconomic conditions, and cultural heritage as in (a). The monitoring data reports on the effectiveness of the mitigation measures as in (b).
2.1.8.2.	The monitoring program shall be designed and carried out by competent professionals.	•	The evidence includes the credentials of four (4) leading personnel in charge of executing the air quality management program, the measurement of noise level, and the water resources management program, including surface water quality, effluents, surface water flows, groundwater levels, and aquatic life. The evidence does not include credentials of the professionals who designed the monitoring programs.
2.1.8.3.	If requested by relevant stakeholders, the operating company shall facilitate the independent monitoring of key impact indicators where this would not interfere with the safe operation of the project.	•	The company has facilitated the independent monitoring of key impact indicators. The evidence includes an example of a contract with an independent monitoring organization (Israel Pinheiro Foundation and ATI – Asesoria Tecnica Independiente, November 2021) providing third party support to local communities and requesting support to develop their independent environmental monitoring including providing complementary environmental information and data. The evidence also includes written responses by the company to this request (Response to letter no. SE 054/2021 ATI39 ANGLO, February 2022) in which they provide the requested support and data. Interviews are needed during the surveillance audit (community) to confirm that independent experts have been afforded access to the mine site to carry out independent monitoring, and if deemed necessary, that funding has been provided to enable affected stakeholders to hire experts.
2.1.9.1.	(New Mines) As part of the ESIA process, the operating company shall provide for timely and effective stakeholder and rights holder (hereafter collectively referred to as stakeholder) consultation, review and comment on: a. The issues and impacts to be considered in the	•	The evidence includes attendance lists of EIA presentations (October and November 2007) and of a biodiversity presentation (January 2008), and meeting minutes from January and February 2008, indicating that the company consulted key stakeholders when they prepared the preliminary EIA in 2007 and used it as a discussion basis with key stakeholders and authorities and shared the conclusions in a public meeting. For the Mina do Sapo expansion EIA processes (2015/17) the company conducted
	proposed scope of the ESIA (see 2.1.3);		some consultation with the stakeholders at different moments and has



Chapter 2.1—Enviro Assessment and Ma	nmental and Social Impact anagement		Basis for rating
and soci. c. The findi relevant of the ES d. Options impacts e. Provisior the ESIA f. The final ESIA (see (Existing Min with relevant evaluation of	ologies for the collection of environmental al baseline data (see 2.1.4); ngs of environmental and social studies to the conclusions and recommendations SIA (see 2.1.5.1.a and b); and proposals to mitigate the potential of the project (see 2.1.5.1.c); nal conclusions and recommendations of prior to finalization (see 2.1.6.1); and conclusions and recommendations of the e 2.1.6.1). es) The operating company shall consult stakeholders in the identification and potential environmental and social ciated with the mine		presented conclusions in a public meeting as indicated by Public Hearing Report – Mina do Sapo Expansion Project (August 2017), but it does not include evidence related to the impact assessment process.
and facilitate in the collect development impacts of th ESIA process. (Existing Min encourage ar where possib	The operating company shall encourage stakeholder participation, where possible, ion of data for the ESIA, and in the cof options to mitigate the potential exproject during and subsequent to the es) The operating company shall and facilitate stakeholder participation, ole, in the development of options to potential impacts of the mine.	•	Minas-Rio is an existing mine. The evidence indicates that the company has encouraged and facilitated stakeholder participation in the development of options to mitigate the potential impacts of the mine, including: - regular public meetings to present and discuss the mitigation of impacts with stakeholders and local authorities (Audience Report 20/07/2017), - support of independent monitoring (see answer 2.1.9.1), and - mechanisms in place to get feedback from stakeholders with regards to: • environmental impacts through the grievance mechanism and • monitoring data and management plans through the involvement of NACAB as technical advisor for the communities (AA & Nacab, April 2019: Contract for professional services for 15 months). Interviews are needed during the surveillance audit (company, community) to confirm stakeholder participation in the development of options to mitigate potential impacts is ongoing.



	er 2.1—Environmental and Social Impact ment and Management		Basis for rating
2.1.9.3.	The operating company shall provide for timely and effective stakeholder consultation, review and comment on the scope and design of the environmental and social monitoring program.	•	 The evidence indicates that the company has implemented several channels to disclose and receive comments on the monitoring program: a. the data is available on the Anglo American web page (https://brasil.angloamerican.com/pt-pt/sustentabilidade/meio-ambiente), b. the company pays an independent organization to provide advice to the communities regarding the monitoring data and its interpretation as indicated by a contract with an independent monitoring organization (November 2021) providing third party support to local communities, c. the Social Team of the company has frequent meetings with the stakeholders (Audience Report 20/07/2017), d. the Coexistence Committee meets regularly with stakeholders to discuss a variety of issues including monitoring results as indicated by copies of 47 meeting minutes, from Minute No. 42 (February 2017) to Minute No. 95 (December 2021). Interviews are needed during the surveillance audit (company, community) to confirm provision of timely and effective stakeholder consultation, review and comment on the scope and design of the monitoring program is ongoing.
2.1.9.4.	The operating company shall encourage and facilitate stakeholder participation, where possible, in the implementation of the environmental and social monitoring program.	•	The evidence mentioned in 2.1.9.2 & 2.1.9.3 indicates that the company has implemented several channels to disclose and receive comments on the Monitoring program. Interviews are needed during the surveillance audit (company, community) to confirm ongoing encouragement and facilitation of stakeholder participation in the implementation of the monitoring program.
2.1.9.5.	The operating company shall record all stakeholder comments received in relation to ESIA scoping; implementation; ESIA findings, conclusions and recommendations; and the environmental and social monitoring program. The company shall record how it responded to stakeholder comments.	•	The evidence includes records of meetings conducted in 2007 and 2008 where the company presented to some stakeholders (leaders, businesspeople, and professionals) some aspects of the EIA (water supply to the project and project structures). Other evidence indicates that the company made an effort to explain the impacts of the project to the stakeholders. In 2016 for the project expansion, the company prepared a brochure about the ESIA and in 2017 a report about the public gathering to present and discuss the ESIA for the Mina do Sapo expansion. The report did not include a record of stakeholder comments. The meeting minutes from 2018 recorded stakeholder questions and commentary and recorded how the company responded to those.



Chapter 2.1—Environmental and Social Impact Assessment and Management			Basis for rating
			The evidence does not include comments provided by stakeholders related to the monitoring program.
2.1.10.1.	(New Mines) The ESIA report and any supporting data and analyses shall be made publicly available. Detailed assessments of some issues and impacts may be reported as stand-alone documents, but the ESIA report shall review and present the results of the full analysis in an integrated manner. (Existing Mines) At minimum, a summary of the significant environmental and social impacts and risks associated with the mining operation shall be made public	•	Minas-Rio is an existing mine. The evidence related to the permitting process for Minas-Rio (2007/08) and for the expansion for Minas Do Sapo (2015-17) indicates that the summaries of the environmental and social impacts were made public at different moments during the process to the interested public. Some examples of documents used with discussions with stakeholders and authorities include: - Environmental impact report (RIMA), Mina do Sapo expansion project, 2016 - Report of the public hearing Mina do Sapo expansion project, 2017 - Preliminary EIS for Minas-Rio Project, 2007
2.1.10.2.	The operating company shall make publicly available an anonymized version of the ESIA record of stakeholder comments and its own responses, including how each comment was considered.	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.1.10.3.	The environmental and social management plan shall be made available to stakeholders upon request.	•	The evidence, the documented Coexistence Program (April 2018) and a Report of a Public Hearing – Mina do Sapo Expansion (August 2017) indicates a commitment to disclose all relevant information about impacts and risks to stakeholders. Interviews are needed (company) during the surveillance audit to confirm that these plans are made available to stakeholders upon request.
2.1.10.4.	Summary reports of the findings of the environmental and social monitoring program shall be made publicly available at least annually, and all data and methodologies related to the monitoring program shall be publicly available.	•	Summary reports of environmental and social monitoring programs are sent annually to the regional environmental agency (SUPRAM) as indicated by the provided report Annual Report of Conditions and Programs (March 2021). The information provided to the government agency is available to the public through the Freedom of Information Act. The contract between the company



Chapter 2.1—Environmental and Social Impact Assessment and Management			Basis for rating
			and the Advisory Services to Communities Affected by Dams (NACAB) ensures that the communities are informed and advised on the ESMS.
2.1.10.5.	(New Mines) The existence of publicly available ESIA and ESMS information, and the means of accessing it, shall be publicized by appropriate means. (Existing Mines) The existence of publicly available ESMS information, and the means of accessing it, shall be publicized by appropriate means.	•	The evidence shows that the ESMS is publicly available through the regulatory agency. There is no evidence that the company informed the communities on how to access these documents. Interviews are needed (community) during the surveillance audit to confirm that communities know how to access the ESMS.

According to the current IRMA Standard (Version 1, 2018), the objective of this IRMA Chapter is to demonstrate respect for the rights, dignity, aspirations, culture, and livelihoods of Indigenous people, participate in ongoing dialogue and engagement, and collaborate on strategies to minimize impacts and create benefits for Indigenous people, thereby creating conditions that allow for Indigenous people's free, prior and informed consent and decision-making regarding mining development.

In this Chapter, IRMA asks auditors to confirm there are no Indigenous people whose legal or customary rights or interest may be affected by the company's operations. Examples of rights or interests may include lands, territories, and resources that Indigenous people possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired; livelihood, cultural or spiritual activities or places; or critical cultural heritage.

Minas-Rio is an existing mine and, according to the IRMA Standard, at existing mines where FPIC was not obtained in the past, if this chapter is relevant, the operating company is expected to demonstrate that is operating in a manner that seeks to achieve the objectives of this chapter. For example, the company may demonstrate that it has the free, informed consent of Indigenous people for current operations by providing evidence of signed or otherwise verified agreements, or, in the absence of agreements, demonstrate that it has a process in place to respond to past and present community concerns and to remedy and/or compensate for past impacts on Indigenous people's rights and interests. In alignment with this chapter, such processes should have been agreed to by Indigenous people and evidence should be provided that agreements are being fully implemented by the company. An existing mine shall also obtain the free, prior and informed consent of Indigenous people if there are proposed changes to a company's plans or activities that may significantly change the nature or degree of an existing impact, or result in additional impacts on Indigenous peoples' rights, lands, territories, resources, properties, livelihoods, cultures or religions. Nothing in this chapter is intended to reduce the primary responsibility of the State to consult with Indigenous people in order to obtain their FPIC and protect their rights.

IRMA defines Indigenous people as those who identify themselves and are recognized and accepted by their community as Indigenous; demonstrate historical continuity with pre-colonial and/or pre-settler societies; have strong links to territories and surrounding natural resources; have distinct social, economic or political systems; maintain distinct languages, cultures and beliefs; form non-dominant groups of society; and resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities. In some regions, there may be a preference to use other terms such as: tribes, first peoples/nations, Aboriginals, ethnic groups, Adivasi and Janajati. (The IRMA Standard, Version 1, 2018) According to the UN Guidelines on Indigenous Peoples' issues and the ILO Convention No. 169, Indigenous and tribal peoples are those who self-identify themselves as belonging to a tribal or Indigenous people and have their own cultures, languages, customs and/or institutions, which distinguish them from other parts of the societies in which they find themselves.



The applicability of FPIC for this site was evaluated based on on-site observations, interviews, and the evidence provided. Based on this assessment, there is no indication that there are Indigenous people whose legal or customary rights or interests are adversely affected by the mining operations. Therefore, the audit team considered this chapter as not relevant.

According to the Certificates of Remaining Quilombola Communities, issued in 2016 by the Fundação Cultural Palmares, a Brazilian government agency dedicated to preserving and promoting Afro-Brazilian culture and heritage, there are eighteen (18) "quilombola" communities in the municipalities near the mining project. According to the ILO Convention No. 169 (ratified by Brazil in 2002 by Decree No. 143/2003), the "quilombola" communities are social groups, whose ethnic identity distinguishes them from the rest of society and who are considered "tribal people". Therefore, they are subject to the rights established in ILO Convention No. 169 including the right to free, prior, and informed consent. According to the issued certificates, the following "quilombola" communities are located near the mine:

Traditional communities located in the municipalities near the mine				
Community	Municipality			
Vila Nova	Serro			
São Gonçalo dos Rios das Pedras	Serro			
Capivari	Serro			
Santa Cruz	Serro			
Queimada	Serro			
Milho Verde	Serro			
Baú	Serro			
Ausente	Serro			
Cônego Cachoeira	Dom Joaquim			
Ribeirão	Dom Joaquim			
Xambá	Dom Joaquim			
Três Barras	Conceição do Mato Dentro			
Buraco	Conceição do Mato Dentro			
Cubas	Conceição do Mato Dentro			
Taquaril	Conceição do Mato Dentro			

Candeias	Conceição do Mato Dentro	
Congonhas do Norte	Conceição do Mato Dentro	
Itapanhuacanga	Conceição do Mato Dentro	

Source: Ministry of Development and Social Assistance, Family and Fight against Hunger (https://www.gov.br/mds/pt-br)

The Environmental Impacts Assessment conducted for the mine's most recent expansion, the EIA for the Mina do Sapo expansion project (EIA for the Minas do Sapo expansion project, 2015-2017), assessed potential impacts on the environment, including physical, biotic, and social variables. Social variables included impacts on demographics, economic dynamics, land use, infrastructure, sanitation, health, education, security, quality of life, social organization, political and institutional organization, public finance, and heritage. Within the scope of the EIA (2015), the company assessed its impacts on the "quilombola" communities and indicated that no impacts of the mining operations were identified in any of the listed communities. Stakeholder interviews from the communities of São Sebastião do Bom Sucesso, Cabeceira do Turco, Turco and Sapo (located in the municipality of Conceição do Mato Dentro), as well as stakeholders' interviews from Alvorada de Minas, Dom Joaquim and Serro, did not indicate that there are Indigenous people located near the mine who consider themselves potentially affected by the mining operations. A review of the grievance log for 2020 (Fale Conosco spreadsheet), from the grievance system Fale Conosco, the responses to a company-led Satisfaction Survey of the community (2021), and of the meeting minutes (January 2018 to December 2021) from the Coexistence Committee program, did not identify any complaints related to impacts on Indigenous people.

We invite those with differing views or concerns about the presented information to engage in dialogue by contacting the company, the audit team or IRMA directly for further clarification and discourse. The auditors 'conclusion is limited to the audit timeframe and available evidence. As the mine operation has expanded during the IRMA assessment process, the audit team recommends that the applicability of this chapter should be re-assessed during the following on-site assessment.



	er 2.3—Obtaining Community Support and ing Benefits		Basis for rating
2.3.1.1.	The operating company shall publicly commit to: a. Maintaining or improving the health, social and economic wellbeing of affected communities; and b. Developing a mining project only if it gains and maintains broad community support.	•	The evidence, a presentation on Social Projects supported by the company (November 2020), an e-mail describing social project investments to stakeholders (2020), and the Sustainable Mining Plan (2020), meets several requirements, and the company discloses the results from community support. The evidence does not indicate that the company has publicly committed to maintaining and improving the well-being of communities; although a sample of community stakeholders indicated during interviews that living conditions in the area have been improved because of the mine operation. Broad community support under item (b) cannot be assessed (Minas-Rio is an existing mine) except for expansions.
2.3.2.1.	For new mines, the operating company shall demonstrate that it obtained broad community support from communities affected by the mining project, and that this support is being maintained.	_	Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
2.3.2.2.	For new mines, broad community support shall be determined through local democratic processes or governance mechanisms, or by another process or method agreed to by the company and an affected community (e.g., a referendum). Evidence of broad community support shall be considered credible if the process or method used to demonstrate support:		Not relevant because this is an existing mine that is being scored against IRMA's core ESIA requirements. See Note on Chapter 2.1.
	 a. Occurred after the operating company carried out consultations with relevant stakeholders regarding potential impacts and benefits of the proposed mining project; b. Was transparent; 	_	
	 c. Was free from coercion or manipulation; and d. Included the opportunity for meaningful input by all potentially affected community members, including women, vulnerable groups and marginalized members, prior to any decision or resolution. 		
2.3.2.3.	For existing mines, the operating company shall demonstrate that the mine has earned and is maintaining broad community support.	•	The Socio-Economic Assessment Toolbox (2017, Chapter 6) indicates that out of 175 survey participants, including community representatives and employees, all agreed that the mine benefits the communities with the most cited reasons being the economic development of municipalities and job generation. The report also lists negative effects mentioned by survey participants, such as



	2.3—Obtaining Community Support and ng Benefits		Basis for rating
			unknown impacts on the environment, which concerned 44% of participants. Results from a monthly community survey from May to July 2020 conducted by Anglo American (Stakeholder Engagement Plan, 2020, page 28) indicate that the community's responses were neutral regarding their trust in the company and their support of the mine. The evidence, Coexistence Program (2021), indicates that the company works with the community towards their development.
			Stakeholder interviews and auditor reviews of the evidence indicate the company is developing community support, but it is not yet fully established.
2.3.3.1.	The operating company, in collaboration with affected communities and other relevant stakeholders (including workers and local government), shall develop a participatory planning process to guide a company's contributions to community development initiatives and benefits in affected communities.	•	The evidence, a presentation on Collaborative Regional Development (no date), indicates that the company partners with three organizations to guide contributions to community development (page 11). It also mentions that governmental and institutional stakeholder perspectives will be considered in the development of the participatory process (page 8). The Coexistence Committee meetings provide a participatory process as indicated by the Statute of the Coexistence Meeting (May 2017). Interviewed stakeholders recognized the contributions from the company to infrastructure and providing equipment for medical assistance in local clinics.
			The evidence does not include details to confirm that community members and relevant stakeholders have participated in the design of the participatory planning process for the company's contributions.
2.3.3.2.	2.3.3.2. The planning process shall be designed to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency.		The evidence is a presentation on the company's socioeconomic development program (Growth Program, 2020) and indicates that women and vulnerable groups are considered in the design of the planning process to ensure local participation, social inclusion, good governance, and transparency.
		•	Other documents regarding this topic do not mention the participation of vulnerable groups.
			Interviews are needed (community) during the surveillance audit to confirm if the participatory planning process included local participation and was socially inclusive.
2.3.3.3.	If requested by the community and not provided by the appropriate public authorities, the operating	•	The evidence (Environmental Control Plan (PCA), and Coexistence Program (Revised), 2021) indicates in section 7.3 Technical Consultancies and Communities that the company pays technical advisors to foster the collective



company shall provide funding for mutually agreed upon experts to aid in the participatory process.		
		knowledge of construction practices within the 12 communities in the mine's area of influence. The company shared four other pieces of evidence (meeting minutes), which mention that Anglo American hired the independent company (NACAB) to help with technical advice to communities. Interviews are needed (community) during the surveillance audit to confirm continued access to experts.
 Efforts shall be made to develop: a. Local procurement opportunities; b. Initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups); and c. Mechanisms that can be self-sustaining after mine closure (including the building of community capacity to oversee and sustain any projects or initiatives agreed upon through negotiations). 	•	The evidence including a Project Development and Resource Mobilization (September 2019), a Presentation from Promova (September 2019), and Growth Program records (2020) are examples of programs intended to develop local procurement opportunities and mechanisms benefitting a broad spectrum of the community that can be self-sustaining after mine closure. Interviewed stakeholders confirmed to be aware of these initiatives (supporting honey and cheese manufacturing) and considered them beneficial. The evidence does not include specific initiatives that benefit vulnerable and marginalized groups (women, elderly, children, handicapped).
The planning process and any outcomes or decisions shall be documented and made publicly available.	•	The evidence, Coexistence Committee Meeting Minutes (January 2018) and Community Commission (March 2021), indicates that the planning process, and any outcomes or decisions are documented. The evidence does not explicitly indicate if the information is publicly available or made accessible to the public.
In collaboration with the community, the operating company shall periodically monitor the effectiveness of any mechanisms or agreements developed to deliver community benefits, based on agreed upon indicators, and evaluate if changes need to be made to those mechanisms or agreements.	•	The evidence, the Socio-Economic Aspects Monitoring Program (December 2020), the Annual Report on Socioeconomic Monitoring (March 2021), and the Coexistence Program and Records, March 2021), indicates that the company evaluates whether the community initiatives are delivering benefits to a broad base of the community, and whether benefits to communities are likely to be sustained after the life of the mine through agreed upon indicators. The evidence does not indicate the frequency of monitoring activities.
	 a. Local procurement opportunities; b. Initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups); and c. Mechanisms that can be self-sustaining after mine closure (including the building of community capacity to oversee and sustain any projects or initiatives agreed upon through negotiations). The planning process and any outcomes or decisions shall be documented and made publicly available. In collaboration with the community, the operating company shall periodically monitor the effectiveness of any mechanisms or agreements developed to deliver community benefits, based on agreed upon indicators, and evaluate if changes need to be made 	 a. Local procurement opportunities; b. Initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups); and c. Mechanisms that can be self-sustaining after mine closure (including the building of community capacity to oversee and sustain any projects or initiatives agreed upon through negotiations). The planning process and any outcomes or decisions shall be documented and made publicly available.



Chapte	r 2.4—Resettlement		Basis for rating
2.4.1.1.	If there is the potential that a new mine (including associated facilities) or the expansion of an existing mine or associated facilities may require land acquisition that could result in the involuntary resettlement (for the remainder of this chapter, referred to simply as resettlement) of people, the operating company shall undertake an assessment process to evaluate the potential direct and indirect risks and impacts related to the physical and/or economic displacement of people.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during this assessment period (May 2021 until December 2022) there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. IRMA has provided clarification that existing mines are not expected to demonstrate that all aspects of past resettlements were carried out in accordance with widely agreed international best practices, such as those codified in the IRMA Standard, or in the IFC Resettlement Standard, which came into effect in 2006. However, the companies can ensure that the outcomes of resettlements are in accordance with the objectives of the IRMA Standard and other similar standards, namely, that the livelihoods and standards of living of displaced persons are improved over pre-resettlement conditions. The evidence, Resettlement Action Plan (PAR) for the communities of Sapo, Turco, Cabeceira do Turco e Beco – Sistema Minas-Rio, 2018; and Productive Restructuring Program – Individual Relocation Plan, 2021, indicate that the company has evaluated the potential direct and indirect risks and impacts related to the physical and/or economic displacement of people from past activities and that the company assists households in voluntary resettlement programs.
2.4.1.2.	 The assessment shall: a. Be undertaken during the early stages of mining project planning; b. Include identification of alternative mining project designs to avoid, and if that is not possible, minimize the displacement of people; c. Identify and analyze the social, cultural, human rights, conflict, environmental and economic risks and impacts to displaced persons and host communities for each project design alternative, paying particular attention to potential impacts on women, children, the poor and vulnerable groups; and 	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.



Chapte	r 2.4—Resettlement		Basis for rating
	d. Identify measures to prevent and mitigate risks and impacts, and estimate the costs of implementing the measures.		
2.4.1.3.	The assessment shall be undertaken by competent professionals with experience in resettlement related to large-scale development projects.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.
2.4.1.4.	The operating company shall document decision-making regarding alternative mining project designs and efforts to minimize resettlement.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.
2.4.1.5.	The assessment shall be made public, or, at minimum, be made available to potentially affected people and their advisors.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.
2.4.2.1.	The operating company shall disclose relevant information and consult with potentially affected people and communities, including host communities, during: a. The assessment of displacement and resettlement risks and impacts, including the consideration of alternative mining project designs to avoid or minimize resettlement; b. The development of resettlement and livelihood options; and c. The development, implementation, monitoring and evaluation of a Resettlement Action Plan (RAP) and/or Livelihood Restoration Plan (LRP).	•	The evidence, a presentation on the Optional Trading Program (May 2018 and 2019), and interviews with a sample of community stakeholders, indicate activities with the community disclosing the process of resettlement, its impacts, and the population's necessities. The evidence does not provide details to confirm monitoring and evaluation of a Resettlement Action Plan (RAP).
2.4.2.2.	The operating company shall facilitate access, if desired by potentially affected people and communities, including host communities, to independent legal or other expert advice from the earliest stages of project design and assessment, through monitoring and evaluation of the resettlement process.	•	The evidence, a presentation on the Optional Trading Program (May 2018 and 2019), and three (3) meeting minutes (April, August, and September 2019) from community meetings, indicate that the company is obligated to provide technical support, independent legal or other expert advice as needed to assist potentially affected people as per Condition 39 of their operational license. The evidence indicates that this technical legal support was offered to communities involved in the process.

Chapte	r 2.4—Resettlement		Basis for rating
			Interviews with a sample of community stakeholders indicate they are unaware of this support option.
2.4.2.3.	People from affected communities, including host communities, shall have access to an effective mechanism to raise and seek recourse for concerns or grievances related to displacement and resettlement.	•	The evidence (grievance system Fale Conosco, 2021) is a system used for any kind of grievances, including concerns or grievances related to displacement and resettlement.
2.4.3.1.	When project-related displacement is deemed unavoidable, a census shall be carried out to collect appropriate socio-economic baseline data to identify the people who will be physically or economically displaced by the project and determine who will be eligible for compensation and assistance.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.
2.4.3.2.	In the absence of host government procedures, the operating company shall establish compensation eligibility criteria and a cut-off date for eligibility. Information regarding the cut-off date shall be well documented, and disseminated along with eligibility information throughout the mining project area.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and there are no current proposals for changes to the mining operation, such as expansion projects, which may require resettlement. See item 2.4.1.1.
2.4.3.3.	In the case of physical displacement, the operating company shall develop a Resettlement Action Plan. If the project involves economic displacement only, a Livelihood Restoration Plan shall be developed. In either case, these plans shall, at a minimum: a. Describe how affected people will be involved in an ongoing process of consultation throughout the resettlement/livelihood restoration planning, implementation and monitoring phases; b. Describe the strategies to be undertaken to mitigate the negative impacts of displacement and improve or restore livelihoods and standards of living of displaced people, paying particular attention to the needs of women, the poor and vulnerable groups; c. Describe development-related opportunities and benefits for affected people and communities; d. Describe the methods used for valuing land and other assets; e. Establish the compensation framework (i.e., entitlements and rates of compensation for all	•	The evidence, (Resettlement Action Plan (PAR) of Sapo Communities, December 2018), explains how affected people will be involved in an ongoing process of consultation (a) in the resettlement to mitigate the negative impacts of displacement and improve or restore livelihoods and standards of living of displaced people (b). It includes methods used for valuing land and other assets (d) and establishes the compensation framework (Optional Negotiation Program) (e) and is publicly available (g). The evidence does not describe development-related opportunities and benefits for affected people and communities (c), a budget, or an implementation schedule (f). Interviews are needed (community) during the surveillance audit to confirm the plan was developed in consultation with affected communities.

Chapter	2.4—Resettlement		Basis for rating
	categories of affected people, including host communities) in a transparent, consistent, and equitable manner; f. Include a budget and implementation schedule; and g. Be publicly available.		
2.4.4.1.	 In all cases, when people are physically displaced as a result of the development or expansion of a mine or its associated facilities: a. The operating company shall provide relocation assistance that is suited to the needs of each group of displaced peoples and is sufficient for them to improve or at least restore their standard of living at an alternative site; b. New resettlement sites built for displaced people shall offer improved living conditions; and c. Displaced people's preferences with respect to relocating in pre-existing communities and groups shall be taken into consideration and existing social and cultural institutions of the displaced peoples and any host communities shall be respected. 	•	The evidence, including the Resettlement Action Plan (PAR) of the Sapo Communities, Turco, Cabeceira do Turco and Beco (December 2018), an Individual Relocation Plan (2021), a presentation on the Optional Trading Program (May 2018 and 2019), and other documental evidence, and interviews from a sample of community stakeholders indicates that the company: a. Provides relocation assistance. b. Provides resettlement sites with improved living conditions; and c. Considers the relocation preferences of displaced people. Interviews are needed with company staff and affected stakeholders during the surveillance audit to confirm that relocation assistance was offered, that displaced persons were offered improved living conditions if a resettlement site was built for them, considered the displaced persons' preferences with respect to relocating to pre-existing communities, and respected existing social and cultural institutions of the displaced person and host communities.
2.4.4.2.	In cases where physically displaced people have formal legal rights to the land or assets they occupy or use, or do not have formal legal rights but have a claim to land that is recognized or recognizable under national law: a. The operating company shall offer the choice of replacement property (land and assets) of at least equal value and characteristics, security of tenure, and advantages of location; and b. If cash compensation is appropriate and preferred by the affected people, compensation shall be sufficient to replace lost land and other assets at full replacement cost in local markets	•	The evidence, Resettlement Action Plan (PAR) of Sapo Communities (Chapter 7 - Eligibility Criteria, page 121, December 2018), indicates the fulfillment of the requirement.
2.4.4.3.	In cases where physically displaced people have no recognizable legal right or claim to the land or assets they occupy or use, the operating company shall: a. Offer options for adequate housing with security of tenure; and	•	The evidence, Resettlement Action Plan (PAR) of Sapo Communities (December 2018), indicates the company offers options for adequate housing (a) and compensation for the loss of assets other than land at full replacement cost as specified (b).

Chapter	2.4—Resettlement		Basis for rating
	b. Compensate for the loss of assets other than land at full replacement cost, provided that the people had been occupying the project area prior to the cut-off date for eligibility.		
2.4.5.1.	If project-related land acquisition or restrictions on land use result in economic displacement, regardless of whether or not the affected people are physically displaced, the operating company shall apply the following measures: a. When commercial structures are affected, the business owners shall be compensated for the cost of re-establishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery, or other equipment, and the employees shall be compensated for lost income; b. When affected people have legal rights or claims to land that are recognized or recognizable under national law, replacement property of equal or greater value shall be provided, or, where appropriate, cash compensation at full replacement cost; and c. Economically displaced people who are without legally recognizable claims to land shall be compensated for lost assets other than land at full replacement cost.	•	The evidence, the Environmental Control Plan – Coexistence Program (April 2018), meeting minutes with the community from 2019, and interviews with a sample of community stakeholders indicate that the company includes land and businesses loss (physically or economically) as compensable a-c).
2.4.5.2.	All economically displaced people whose livelihoods or income levels are adversely affected shall be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living, and transitional support shall be provided based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living. Additionally: a. For people whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost shall be offered as a matter of priority;	•	The evidence, Resettlement Action Plan (PAR) of Sapo Communities (December 2018), Optional Negotiation Program (PNO (January 2021), Socio-Economic Aspects Monitoring Program (November 2016), and Program for the Productive Restructuring of Economic Activities (July 2014), and interviews with a sample of community stakeholders indicates that the company has met the requirements of sub-requirement (a) and (c) to improve or restore their means of income generation and standard of living and provide transitional support. The evidence does not include information on equivalent livelihood-earning potential and accessibility.

Chapte	r 2.4—Resettlement		Basis for rating
	 b. For people whose livelihoods are natural resource-based and where project-related restrictions on access apply, continued access to affected resources or access to alternative resources with at least equivalent livelihood-earning potential and accessibility shall be provided; and c. If circumstances prevent the operating company from providing land or similar resources as described above, alternative income earning opportunities shall be provided to restore livelihoods 		
2.4.6.1.	To be certified by IRMA, if a new project will require the displacement of Indigenous peoples the operating company shall obtain the free, prior and informed consent (FPIC) of affected indigenous communities before proceeding with the resettlement and mine development (as per IRMA Chapter 2.2).	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.
2.4.6.2.	If a new mine will require the displacement of non-indigenous peoples, the operating company shall make a good faith effort to negotiate agreements with all households that will be physically or economically displaced by the mining project before proceeding with the resettlement, even if the company has the legal means to acquire land or restrict land use without their consent.	_	Not relevant because this is an existing mine where resettlement occurred in the past, and during the assessment period there were no proposals for changes to the mining operation, such as expansion projects, which required resettlement. See item 2.4.1.1.
2.4.6.3.	Prior to negotiating with affected people, the operating company shall provide or facilitate access to resources necessary to participate in an informed manner. This shall include, at minimum: a. Copies of RAP and/or LRP; b. Details on what to expect at various stages of the resettlement or livelihood restoration process (e.g., when an offer will be made to them, how long they will have to respond, how to access the grievance mechanism if they wish to appeal property or asset valuations, legal procedures to be followed if negotiations fail); and c. Independent legal experts or others to ensure that affected people understand the content of any proposed agreement and associated information.	•	The evidence, Coexistence Committee meeting minutes (2019), and a presentation on the grievances filed in Fale Conosco for 2020 (2021) showing several records related to resettlement, indicates the company has procedures that permit stakeholders easy access to information regarding the resettlement or livelihood restoration process including access to legal experts if needed (b, c). The evidence includes copies of Resettlement Action Plans and Livelihood Restoration Plans given to communities (a). Interviews with a sample of stakeholders indicated that they were not provided independent legal experts (c), as support for the process.

Chapte	r 2.4—Resettlement		Basis for rating
2.4.6.4.	In cases where affected people reject compensation offers that meet the requirements of this chapter and, as a result, expropriation or other legal procedures are initiated, the operating company shall explore opportunities to collaborate with the responsible government agency, and, if permitted by the agency, play an active role in resettlement planning, implementation, and monitoring to mitigate the risk of impoverishment of those affected people.	•	The evidence, a sample of negotiation proceedings (July 2020), indicates the company is collaborating with the responsible government agency in a case where expropriation was not consented to. In these instances, the company gave these families access to a legal advisor. Interviews are needed (community) during the surveillance audit to confirm that the company sought to collaborate with relevant responsible government agencies to the extent allowed.
2.4.6.5.	Forced evictions shall not be carried except in accordance with law and international best practice, and the requirements of this chapter.	•	The evidence, the company's Social Way 3.0 on Land Access, Dislocation and Resettlement (no date), indicates that the company prohibits forced evictions that are not in accordance with the law, international best practices, and the requirements of this chapter. No evidence or interviews from a sample of community stakeholders led to the identification of evictions.
2.4.6.6.	The operating company shall take possession of acquired land and related assets only after compensation has been made available, and, where applicable, resettlement sites and moving allowances have been provided to the displaced people.	•	The evidence and interviews from a sample of community stakeholders) indicate that the company takes possession of acquired land and related assets only after compensation has been made and resettlement sites and moving allowances have been provided to displaced people.
2.4.6.7.	The operating company shall document all transactions to acquire land rights, and all compensation measures and relocation activities.	•	The evidence includes two (2) contracts from 2020 (Contract 838-03 LGPD, and Term of Compromise 838-03 LGPD) that indicate the company's documentation of transactions to acquire land rights, compensation measures and relocation activities.
2.4.7.1.	Critical The operating company shall establish and implement procedures to monitor and evaluate the implementation of a Resettlement Action Plan (RAP) or Livelihood Restoration Plan (LRP), and take corrective action as necessary until the provisions of the RAP/LRP and the objectives of this chapter have been met.	•	The evidence, Resettlement Action Plan (PAR) for Sapo Communities, Turco, Cabeceira do Turco and Beco (December 2018), Closing Audit of the Resettlement of 46 Families (October 2019), Program for the Productive Restructuring of Economic Activities - Annual Report (February 2021), and interviews conducted by SCS with a sample of community stakeholders indicate, that the company has developed a RAP. The RAP includes procedures to monitor and evaluate resettlement implementation. The company provided complementary evidence, including an updated monitoring plan and results as indicated by the evidence Resettlement Action Plan (2022, page 2), Contractual Addendum 836-6 LGPD (December 2021), and 4th Management Plan Monitoring Campaign (September 2021). An additional round of stakeholder interviews was conducted by SCS in September 2022 to assess if the company has established and implemented procedures to monitor and evaluate the implementation of the RAP and Livelihood Restoration Plan. Based on interviews with a sample of stakeholders this monitoring is implemented.



Chapte	r 2.4—Resettlement		Basis for rating
2.4.7.2.	Periodically, the operating company shall report to affected people and other relevant stakeholders on progress made toward full implementation of the RAP or LRP.	•	The evidence (including a copy of the 4th Management Plan Monitoring Campaign) and on-site interviews conducted in September 2022, indicates that the company has a resettlement program in place and that the company reports to affected people and other relevant stakeholders on progress made toward full implementation of the RAP.
2.4.7.3.	 Where resettlement is deemed to pose a risk of significant adverse social impacts the operating company: a. Shall retain competent professionals to verify the operating company's monitoring information and provide advice on additional steps needed to 		The evidence, Closing Audit of the Resettlement of 46 Families (October 2019), indicates the company has commissioned a completion audit and regularly monitors the success of the RAP and LRP (b). The evidence does not include an identification of significant adverse social impacts caused by resettlement. The evidence does not include detail to confirm
	achieve compliance with the requirements of this chapter; and b. Shall commission a completion audit that:		that the monitoring campaigns evaluate direct, indirect, and cumulative impacts, and corrective actions as necessary.
	i. Occurs after the company deems that its RAP/LRP has been fully and successfully implemented;		Interviews are needed (company, community) during the surveillance audit to confirm that significant adverse social impacts have been assessed and, if applicable, the company fulfills sub-requirements (a) and (b).
	ii. Is carried out by external resettlement experts;	•	
	iii. Includes, at a minimum, a review of the mitigation measures implemented by the operating company, a comparison of implementation outcomes against the requirements of this chapter, and a determination as to whether the commitments made in the RAP/LRP have been delivered and the monitoring process can therefore be terminated; and		
	iv. Is made available to affected people and their advisors.		
2.4.8.1.	Where land acquisition and resettlement are the responsibility of the government, the operating company shall collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes that are consistent with this chapter.	_	Not relevant since land acquisition and resettlement are not the responsibility of the government.

Chapter	2.4—Resettlement		Basis for rating
2.4.8.2.	The operating company shall identify government resettlement and compensation measures. If these measures do not meet the relevant requirements of this chapter, the operating company shall prepare a supplemental plan that, together with the documents prepared by the responsible government agency, shall address the relevant requirements of this chapter. The company shall include in its supplemental plan, at a minimum: a. Identification of affected people and impacts; b. A description of regulated activities, including the entitlements of physically and economically displaced people provided under applicable national laws and regulations; c. The supplemental measures to achieve the requirements of this chapter in a manner that is permitted by the responsible agency and an implementation schedule; and d. The financial and implementation responsibilities of the operating company in the execution of its supplemental plan.	_	Not relevant since land acquisition and resettlement are not the responsibility of the government.

Chapter 2.5—Emergency Preparedness and Response			Basis for rating
2.5.1.1.	Critical All operations related to the mining project shall have an emergency response plan conforming to the guidelines set forth in <i>United Nations Environment Programme</i> , Awareness and Preparedness for Emergencies at the Local Level (APELL) for Mining.	•	The company provided emergency response plans for the tailings dam facility (Emergency Plan for the Tailings Dam, 2019), and the processing facilities (Emergency Plan for the Conceição de Mato Dentro area, 2021). The emergency plans align with all the guidelines set forth in the APELL methodology. During the site visit, personnel showed themselves to be prepared in case of other emergencies, although no documental evidence (written procedure) was provided.
			The evidence did not include emergency plans for all operations related to the mining project.
2.5.1.2.	The operating company shall: a. Conduct an exercise to test the plan, with key participants describing how they would respond to a variety of different emergency scenarios, at least every 12 to 24 months; and b. Update the communications contacts of the emergency response plan at least annually.	•	 The evidence includes a general Emergency Preparedness and Response Plan (EPRP), as well as a TSF specific EPRP. These include: Report of an Emergency Drill PFA-2021 Emergency Plan and Emergency Notification Flowchart for the Tailings Dam. During the site visit, the company presented the infrastructure and key staff in charge of executing the calls as part of the EPRP. There is no indication of the periodicity for updating communication contacts.
2.5.2.1.	Critical The emergency response plan shall be developed in consultation with potentially affected communities and workers and/or workers' representatives, and the operating company shall incorporate their input into the emergency response plan and include their participation in emergency response planning exercises.	•	The company provided as evidence several documents including the 3rd Simulation Exercise Potential Situation of a TSF Failure (October 2020), Emergency Action Plan for Mining Dams (PAEBM) (2019), an emergency notification flow chart, and internal emergency drill (2021) roster disclosing emergency scenarios (i.e., for a TSF incident) with participation of key community stakeholders, government agencies and workers. Engagement activities with stakeholders resulted in recommendations such as more community signage, alternative meeting points, and numbered meeting points. The evidence also indicates that there is a low participation rate for some communities and that additional outreach is recommended. The audit team will confirm during the surveillance audit through interviews with stakeholders if the recommendations were considered in the plan updates.
2.5.3.1.	All operations related to the mining project shall be covered by a public liability accident insurance policy that provides financial insurance for unplanned accidental events.	•	The evidence includes a copy of liability accident insurance policies from Fairfax Brasil Zurich (2020) and Liberty Seguros (2020) that provide financial insurance for accidents.



Chapter 2.5—Emergency Preparedness and Response			Basis for rating
2.5.3.2.	The public liability accident insurance shall cover unplanned accidental events such as flood damage, landslides, subsidence, mine waste facility failures, major spills of process solutions, leaking tanks, or others.	•	The evidence includes a copy of liability accident insurance policies from Fairfax Brasil Zurich (2020) and Liberty Seguros (2020 to cover unplanned accidental events.
2.5.3.3.	The accident insurance coverage shall remain in force for as long as the operating company, or any successor, has legal responsibility for the property.	_	Not relevant. There has been no change of ownership since commissioning of the mine.

Chapte and Clo	er 2.6—Planning and Financing Reclamation osure		Basis for rating
2.6.1.1.	The operating company shall guarantee that the cost of implementing reclamation for exploration activities related to the mining development will be met by the company.	•	The company has a Preliminary Mine Closure Plan (PMCP), dated 2019. It does not mention the reclamation of exploration pads. The document Mine Closure Financial Provision provides a good estimation of the closure cost. Interviews with company staff indicated that no exploration drilling occurs outside of the open pit boundary, therefore, the closure plan for the mine covers any reclamation of drill pads.
2.6.1.2.	The operating company shall implement exploration-related reclamation in a timely manner.	•	Interviews with the company staff indicated that no exploration drilling happened outside of the open pit boundary; therefore, the closure plan for the mine covers any reclamation of those drill pads.
2.6.1.3.	Any stakeholder complaints of incomplete or inadequate exploration reclamation, if not resolved by other means, shall be discussed and resolved through the operational-level grievance mechanism (see IRMA Chapter 1.4).	•	Interviews with the company staff indicated that no exploration drilling happen outside of the open pit boundary; therefore, the closure plan for the mine covers any reclamation of those drill pads, and no claims have been received related to reclamation of exploration pads.
2.6.2.1	Critical Prior to the commencement of mine construction activities the operating company shall prepare a reclamation and closure plan that is compatible with protection of human health and the environment and demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining end use.	•	The Preliminary Mine Closure Plan (PMCP) (2019) has the appropriate level of detail for the current stage of the mine. The company stated that the PMCP is a revision of the 2014 version prepared during the planning phase. The original EIA (MMX, 2007) includes a closure concept.
2.6.2.2	At a minimum, the reclamation and closure plan shall contain: a. A general statement of purpose; b. Site location and background Information; c. A description of the entire facility, including individual site features; d. The role of the community in reviewing the reclamation and closure plan; e. Agreed-upon (after-ESIA) post-mining land use and facility use; f. Source and pathway characterization including geochemistry and hydrology to identify the potential discharge of pollutants during closure; g. Source mitigation program to prevent the degradation of water resources;	•	The company provided its Preliminary Mine Closure Plan (2019), which adequately addresses the majority of the sub-requirements. However, it does not fully address sub-requirements (c), (d), (f), (g), (h), and (q).



Chapter 2.6—Planning and Financing Reclamation and Closure	Basis for rating
h. Interim operations and maintenance, including process water management, water treatment, and mine site and waste site geotechnical stabilization;	
 i. Plans for concurrent or progressive reclamation and revegetation, which should be employed wherever practicable; 	
j. Earthwork:	
i. Stabilization and final topography of the reclaimed mine lands;	
ii. ii. Storm water runoff/run-on management;	
iii. Topsoil salvage to the maximum extent practicable;	
iv. Topsoil storage in a manner that preserves its capability to support plant regeneration;	
k. Revegetation/Ecological Restoration:	
i. Plant material selection, prioritizing native species as appropriate for the agreed postmine land use;	
ii. Quantitative revegetation standards with clear measures to be implemented if these standards are not met within a specified time;	
iii. A defined period, no longer than 10 years, when planned revegetation tasks shall be completed;	
iv. Measures for control of noxious weeds;	
v. Planned activities to restore natural habitats (as well as biodiversity, ecosystem services and other conservation values as per Chapter 4.6);	
l. Hazardous materials disposal;	
m. Facility demolition and disposal, if not used for other purposes;	
n. Long-term maintenance;	
o. Post-closure monitoring plan;	

Chapter and Clos	2.6—Planning and Financing Reclamation sure		Basis for rating
	 p. The role of the community in long-term monitoring and maintenance (if any); and q. A schedule for all activities indicated in the plan. 		
2.6.2.3.		•	The company provided its Preliminary Mine Closure Plan (2019), which adequately addresses the majority of the sub-requirements (a) through (f). However, it does not fully address sub-requirements (g) to (j).
	viii. Long-term monitoring and maintenance; i. Indirect Costs:		
	ix. Mobilization/demobilization;		
	x. Engineering redesign, procurement and construction management;		
	xi. Contractor overhead and profit;		
	xii. Agency administration;		
	xiii. Contingency; and		

Chapter 2.6—Planning and Financing Reclamation and Closure			Basis for rating
	j. Either: xiv. A multi-year inflation increase in the financial surety; or An annual review and update of the financial surety.		
2.6.2.4.	The operating company shall review and update the reclamation and closure plan and/or financial assurance when there is a significant change to the mine plan, but at least every 5 years, and at the request of stakeholders provide them with an interim reclamation progress report.	•	The Preliminary Mine Closure Plan (PMCP) (2019) states in section 11 that the plan will be reviewed every three (3) years. The reviewed version is dated 2019 and the next review is in 2022. The PMCP indicates that the previous version was drafted in 2014.
2.6.2.5.	If not otherwise provided for through a regulatory process, prior to the commencement of the construction of the mine and prior to completing the final reclamation plan the operating company shall provide stakeholders with at least 60 days to comment on the reclamation plan. Additionally: a. If necessary, the operating company shall provide resources for capacity building and training to enable meaningful stakeholder engagement; and b. Prior to completing the final reclamation plan, the operating company shall provide affected communities and interested stakeholders with the opportunity to propose independent experts to provide input to the operating company on the design and implementation of the plan and on the adequacy of the completion of reclamation activities prior to release of part or all of the financial surety.	•	Additionally, to the regulatory process as part of the ESIA approval, the company has a Mine Closure Toolbox (2019), which is a corporate framework to develop the mine closure. This framework indicates the guidelines for identifying internal and external stakeholder requirements as key elements of planning for mine closure, developing a stakeholder map, and engaging to seek their input on items related to mine closure such as the closure vision, post-mine land-use, closure criteria, acceptable residual risk profile, success criteria, and social issues. This framework does not include an indication of the timeframe provided for stakeholders' comments. The framework also does not indicate whether the company would provide resources for capacity building if requested and if communities can use independent experts to review and comment on the plan (pages 53 and 54)
			Interviews are needed (company, community) during the surveillance audit to confirm that stakeholders were consulted in the revision of the reclamation and closure plan, and that any relevant capacity building, training, or access to independent experts occurred.



Chapte and Clo	r 2.6—Planning and Financing Reclamation sure		Basis for rating
2.6.2.6.	Critical The most recent version of the reclamation and mine closure plan, including the results of all reclamation and closure plan updates, shall be publicly available or available to stakeholders upon request.	•	The Preliminary Mine Closure Plan (PMCP) (2019) is available at Anglo American's web site. The evidence does not indicate if the PMCP is made available to stakeholders upon request.
2.6.3.1.	Open pits shall be partially or completely backfilled if: a. A pit lake is predicted to exceed the water quality criteria in IRMA Chapter 4.2; and b. The company and key stakeholders have agreed that backfilling would have socioeconomic and environmental benefits; and c. It is economically viable.	•	The Preliminary Mine Closure Plan (section 4.3, 2019) identifies the need to study the option of pits backfilling.
2.6.3.2.	Underground mines shall be backfilled if: a. Subsidence is predicted on lands not owned by the mining company; and b. If the mining method allows.	_	The mine does not and will not have an underground operation.
2.6.4.1.	Critical Financial surety instruments shall be in place for mine closure and post-closure.	_	Not scored. The IRMA guidance states to not score requirements 2.6.4.1, 2.6.4.2, and 2.6.4.3 in countries without a state-hosted financial surety. Although Brazil offers a mechanism to establish partial financial surety through the federal government, it does not fully address all reclamation and closure liabilities.
2.6.4.2.	Financial surety instruments shall be: a. Independently guaranteed, reliable, and readily liquid; b. Reviewed by third-party analysts, using accepted accounting methods, at least every five years or when there is a significant change to the mine plan; c. In place before ground disturbance begins; and d. Sufficient to cover the reclamation and closure expenses for the period until the next financial surety review is completed.	_	Not scored. Although Brazil offers a mechanism to establish partial financial surety through the federal government, it does not fully address all reclamation and closure liabilities.
2.6.4.3	Self-bonding or corporate guarantees shall not be used.	_	Not scored. Although Brazil offers a mechanism to establish partial financial surety through the federal government, it does not fully address all reclamation and closure liabilities.
2.6.4.4.	The results of all approved financial surety reviews, with the exception of confidential business	0	The evidence, Feasibility Agreement (2013), is an agreement between the company and the public ministry of the state of Minas Gerais and indicates that

Chapte and Clo	r 2.6—Planning and Financing Reclamation sure		Basis for rating
	information, shall be made available to stakeholders upon request.		the company deposits money twice a year into a fund until the fund has reached a total of R\$30 million (page 24) to cover mine closure costs. This financial guarantee, however, does not qualify as a legitimate financial surety as per IRMA requirement 2.6.4.3.
2.6.4.5	Prior to the commencement of the construction of the mine, prior to any renewal of the financial surety, and prior to final release of the financial surety the operating company shall provide the public with at least 60 days to comment on the adequacy of the financial surety. Additionally: a. Where the company deems certain financial surety information to be confidential business information it shall make the data available to the IRMA auditor and satisfy the auditor that the grounds for confidentiality are reasonable. If certain information is not included for confidential reasons, the fact that the information has been withheld shall be disclosed along with the financial surety.	0	The Preliminary Mine Closure Plan (2019) and the Mine Closure Toolbox (2019), which is a corporate framework to develop the mine closure, indicate that stakeholders will be consulted during the preliminary stage of mine closure planning. However, the evidence does not indicate whether stakeholders are consulted on the adequacy of the financial surety.
	 b. If necessary, the operating company shall provide resources for capacity building and training to enable meaningful stakeholder engagement; and c. Prior to the beginning of closure reclamation activities, the operating company shall provide affected communities and interested stakeholders with the opportunity to propose independent experts to review the financial surety. 		Interviews are needed (community) during the surveillance audit to confirm the company's consultation of stakeholders on revisions of financial surety and provision of resources for capacity building and training, if deemed necessary.
2.6.4.6.	The terms of the financial surety shall guarantee that the surety is not released until: a. Revegetation/ecological restoration and reclamation of mine and waste sites and have been shown to be effective and stable; and b. Public comment has been taken before partial or final surety release.	0	The evidence, Feasibility Agreement (2013), is an agreement between the company and the public ministry of the state of Minas Gerais and indicates that the company deposits money twice a year into a fund until the fund has reached a total of R\$30 million (p. 24) to cover mine closure costs. This financial guarantee, however, does not qualify as a legitimate financial surety as per IRMA requirement 2.6.4.3.

Chapter and Clos	2.6—Planning and Financing Reclamation sure		Basis for rating
			The evidence does not indicate whether the fund is only to be released once revegetation/ecological restoration and reclamation of mine and waste sites have been shown to be effective and stable and once public comment has been taken.
2.6.5.1.	Monitoring of closed mine facilities for geotechnical stability and routine maintenance is required in post-closure. The reclamation and closure plan shall include specifications for the post-closure monitoring and maintenance of all mine facilities, including, but not limited to: a. Inspection of surface (open pits) and underground mine workings; b. Inspection and maintenance of mine waste facilities including effectiveness of cover and any seepage capture systems; and c. Mechanisms for contingency and response planning and implementation.	•	The Preliminary Mine Closure Plan (section 4.7, 2019) covers the requirements (a) and (b), but not (c).
2.6.5.2.	Monitoring locations for surface and groundwater shall be sufficient to detect off-site contamination from all closed mine facilities, as well as at the points of compliance.	•	The Preliminary Mine Closure Plan (section 4.7, 2019) considers several monitoring locations for surface and groundwater, but it lacks a map showing the monitoring points.
2.6.5.3.	Water quality monitoring locations shall be sampled until IRMA Water Quality Criteria have been met for at least 5 years, with a minimum of 25 years of post-closure data. The 25-year minimum may be waived if ongoing water quality monitoring demonstrates and modeling predicts that no contamination of surface or ground waters is occurring or will occur, respectively.	0	The Preliminary Mine Closure Plan (section 4.7, 2019) includes a water quality monitoring concept, but it needs to be aligned with IRMA´s requirements, for example it does not consider IRMA´s Water quality criteria and the wording of this requirement. The monitoring cost need to be included following IRMA´s closure and post-closure concept.
2.6.5.4.	Biologic monitoring shall be included in post-closure monitoring if required to ensure there is no ongoing post-closure damage to aquatic and terrestrial resources.	•	The Preliminary Mine Closure Plan (section 4.7, 2019) refers only to the monitoring of fauna but not of aquatic life.



Chapte and Clo	r 2.6—Planning and Financing Reclamation sure		Basis for rating
2.6.5.5.	If a pit lake is present, pit lake water quality shall be monitored, and if potentially harmful to people, wildlife, livestock, birds, or agricultural uses, adequate measures shall be taken to protect these organisms.	_	Not relevant. The operation does not have a pit lake and won't establish a pit lake during or after closure.
2.6.6.1.	 Long-term water treatment shall not take place unless: a. All practicable efforts to implement best practice water and waste management methods to avoid long-term treatment have been made; and b. The operating company funds an engineering and risk assessment that: i. Is carried out by an independent third-party: ii. Evaluates the environmental and financial advantages/disadvantages and risks of long-term water treatment versus other mitigation methods; iii. Incorporates data on the failure rates of the proposed mitigation measures and water treatment mechanisms; iv. Determines that the contaminated water to be treated perpetually poses no significant risk to human health or to the livelihoods of communities if the discharge were to go untreated; and v. Includes consultations with stakeholders and their technical representatives during the design of the study, and discussion of findings with affected communities prior to mine construction or expansion. 		Not relevant. According to the Preliminary Mine Closure Plan (2019, page 64) no long-term water treatment is expected.
2.6.6.2	If a decision is made to proceed with long-term water treatment, the operating company shall take all practicable efforts to minimize the volume of water to be treated.	_	Not relevant. According to the Preliminary Mine Closure Plan (2019, page 64) no long-term water treatment is expected.
2.6.7.1.	The operating company shall provide sufficient financial surety for all long-term activities, including: mine closure and post-closure site monitoring, maintenance, and water treatment operations.	0	The evidence, Feasibility Agreement (2013), is an agreement between the company and the public ministry of the state of Minas Gerais and indicates that the company deposits money twice a year into a fund until the fund has reached a total of R\$30 million (p. 24) to cover mine closure costs. The agreement does



Chapte and Clo	r 2.6—Planning and Financing Reclamation sure		Basis for rating
	Financial assurance shall guarantee that funds will be available, irrespective of the operating company's finances at the time of mine closure or bankruptcy.		not mention coverage of post-closure costs and does not establish that funds will be available, irrespective of the operating company's finances at the time of mine closure or bankruptcy. The fund does not qualify as a legitimate financial surety as per IRMA requirement 2.6.4.3.
2.6.7.2.	If long-term water treatment is required post-closure: a. The water treatment cost component of the post-closure financial surety shall be calculated conservatively, and cost calculations based on treatment technology proven to be effective under similar climatic conditions and at a similar scale as the proposed operation; and b. When mine construction commences, or whenever the commitment for long-term water treatment is initiated, sufficient funding shall be established in full for long-term water treatment and for conducting post-closure monitoring and maintenance for as long as IRMA Water Quality Criteria are predicted to be exceeded.	_	Not relevant. According to the Preliminary Mine Closure Plan (2019, page 64) no long-term water treatment is expected.
2.6.7.3.	The post-closure financial surety shall be recalculated and reviewed by an independent analyst at the same time as the reclamation financial surety.	0	This financial guarantee established in Feasibility Agreement (2013) does not qualify as a legitimate financial surety per IRMA requirement 2.6.4.3.
2.6.7.4.	Long-term Net Present Value (NPV) calculations utilized to estimate the value of any financial surety shall use conservative assumptions, including: a. A real interest rate of 3% or less; unless the entity holding the financial surety can document that a higher long-term real interest rate can be achieved; and b. NPV calculation will be carried out until the difference in the NPV between the last two years in the calculations is US \$10.00 or less (or its equivalent in other currencies).	0	This financial guarantee established in Feasibility Agreement (2013) does not qualify as a legitimate financial surety per IRMA requirement 2.6.4.3.

Principle 3: Social Responsibility

RATING LEGEND

Description of performance



Chapter	3.1—Fair Labor and Terms of Work		Basis for rating
3.1.11.	The operating company shall adopt and implement human resources policies and procedures applicable to the mining project that set out its approach to managing workers in a manner that is consistent with the requirements of this chapter and national (i.e., host country) law.	•	The evidence, a Disciplinary Measures Standard (October 2019), a Recruitment and Selection Standard (August 2018), a Fixed Compensation Standard (August 2018), and a Code of Conduct (2020), indicates that the company's human resource policies and procedures establish their approach to managing workers in accordance with National Law and the United Nations Guiding Principles on Business and Human Rights. All employees interviewed indicated their satisfaction regarding working conditions, policies and working procedures. The mine management indicated a strong commitment to improvement.
3.1.2.1.	Critical The operating company shall respect the rights of workers to freedom of association and collective bargaining.	•	The evidence includes the Code of Conduct (2020), the Collective Bargaining Agreement between the worker's association and the company (2020), and human resources policies and procedures. The evidence does not indicate the implementation of the policies. Workers from associations did not attend the opening and closure meetings, nor were present during interviews to confirm the freedom of association-related collective bargaining. The on-site interviews did not include workers' representatives and company representatives, which will be interviewed in the surveillance audit.

Chapte	r 3.1—Fair Labor and Terms of Work		Basis for rating
3.1.2.2.	Where national law substantially restricts workers' organizations, the operating company shall not restrict workers from developing alternative mechanisms to express their grievances and protect their rights regarding working conditions and terms of employment. The operating company shall not seek to influence or control these mechanisms.	•	The evidence, Code of Conduct (2020), indicates that the company permits workers' and their organizations to express their grievances and protect their rights regarding working conditions and terms of employment. This policy is aligned with UN Global Compact and the Guiding Principles on UN Business and Human Rights.
3.1.2.3.	The operating company shall engage with workers' representatives and workers' organizations and provide them with information needed for meaningful negotiation in a timely manner.	•	The evidence is a company e-mail on updates to the collective bargaining agreement (Conexão Extra - Acordo Coletivo 2020/2021) and indicates that the company maintains good communication with worker's organizations on the collective agreements. The evidence did not include meeting minutes and signatures of meetings in which the collective bargaining agreements are discussed. The on-site interviews did not include workers' representatives and relevant company representatives, which will be interviewed in the surveillance audit.
3.1.2.4.	Workers' representatives shall have access to facilities needed to carry out their functions in the workplace. This includes access to designated non-work areas during organizing efforts for the purposes of communicating with workers, as well as accommodations for workers' representatives at fly-in/fly-out or other remotely located mine sites, where relevant.	•	Clauses 14 and 15 of the Collective Bargaining Agreement (2020) indicate that worker's representatives have access to the mine's premises to carry out their functions. The on-site interviews did not include workers' representatives and relevant company representatives, which will be interviewed in the surveillance audit.
3.1.2.5.	The operating company shall remain neutral in any legitimate unionizing or worker-organizing effort; shall not produce or distribute material meant to disparage legitimate trade unions; shall not establish or support a company union for the purpose of undermining legitimate worker representation; and shall not impose sanctions on workers' organizations participating in a legal strike.	•	The Collective Bargaining Agreement (2020) indicates that the company remains neutral in any legitimate unionizing or worker-organizing effort.
3.1.2.6.	Upon employment, the operating company shall: a. Inform workers of their rights under national labor and employment law; b. Inform workers that they are free to join a workers' organization of their choosing without any negative consequences or retaliation from the operating company;	0	Not Assessed. No documents were provided to assess this item, and workers from associations did not participate in the opening and closure meetings or interview to verify this.



Chapter	3.1—Fair Labor and Terms of Work		Basis for rating
	 c. If relevant, inform workers of their rights under any applicable collective agreement; and d. If relevant, provide workers with a copy of the collective bargaining agreement and the contact information for the appropriate trade union (or workers' organization) representative. 		
3.1.2.7.	The operating company shall not discriminate or retaliate against workers who participate, or seek to participate, in legitimate workers' organizations or in a legal strike.	•	The company's Code of Conduct (2020) indicates that all employees are to be treated fairly and with respect. The grievance report system Fale Conosco (2021) did not show any records of complaints about discrimination or retaliation against union workers or participants of legal strikes. Neither the Code of Conduct nor the Collective Bargaining Agreement (2020) contains clauses or language indicating that workers who are part of a labor union or participate in legal strikes shall not be discriminated against or retaliated against.
3.1.2.8.	Where the operating company is a party to a collective bargaining agreement with a workers' organization, the terms of the agreement shall be respected. Where such an agreement does not exist, or an agreement does not address specific requirements in this chapter, the operating company shall meet the relevant IRMA requirements.	•	The company is part of a Collective Bargaining Agreement (2020) with a workers' organization. The are no records of a breach of the collective bargaining agreement in the company's grievance report system Fale Conosco (2021) indicating that the company respects the terms set out in the agreement.
3.1.2.9.	The operating company shall not make use of short-term contracts or other measures to undermine a collective bargaining agreement or worker organizing effort, or to avoid or reduce obligations to workers under applicable labor and social security laws and regulations.	0	Not Assessed. No documents provided to assess this item, and workers from associations did not participate in the opening and closure meetings or interview to verify this.
3.1.2.10.	The operating company shall not hire replacement workers to prevent, undermine or break up a legal strike, support a lockout, or avoid negotiating in good faith. The company may, however, hire replacement workers to ensure that critical maintenance, health and safety, and environmental control measures are maintained during a legal strike.	0	Not Assessed. No documents were provided to assess this item, and workers from associations did not participate in the opening and closure meetings or interview to verify this.

Chapte	er 3.1—Fair Labor and Terms of Work		Basis for rating
3.1.3.1.	The operating company shall base employment relationships on the principles of equal opportunity and fair treatment and shall not discriminate or make employment decisions on the basis of personal characteristics unrelated to inherent job requirements.	•	The company's Code of Conduct (2020) indicates that the company bases employment relationships on the principles of equal opportunity and fair treatment and does not discriminate or make employment decisions on the basis of personal characteristics unrelated to inherent job requirements.
3.1.3.2	 Exceptions to 3.1.3.1 may be made with respect to hiring and recruitment in the case of: a. Targets or quotas mandated by law; b. Targets developed through local agreements for the employment of local residents, indigenous peoples, or individuals who have been historically disadvantaged; or c. Operating company targets for the employment of local residents, indigenous peoples, or individuals who have been historically disadvantaged that are expressed in publicly accessible policies with explicit goals and justification for such targets. 	_	Not relevant as the company fulfills requirement 3.1.3.1.
3.1.3.3.	Critical The operating company shall take measures to prevent and address harassment, intimidation, and/or exploitation, especially regarding female workers.	•	The evidence includes a company-level policy on Bullying, Harassment, and Victimization (April 2018) and monitoring statistics of bullying incidents (2020) that indicate the company has an anti-harassment policy/procedure and anti-discrimination policy. Records indicate that these are implemented, and employees confirmed to be aware of the procedures.
3.1.4.1.	Prior to implementing any collective dismissals, the operating company shall carry out an analysis of alternatives to retrenchment. If the analysis does not identify viable alternatives to retrenchment, a retrenchment plan shall be developed in consultation with workers, their organizations, and, where appropriate, the government. The plan shall be based on the principle of non-discrimination and be implemented to reduce the adverse impacts of retrenchment on workers.	_	Not relevant.
3.1.4.2.	The operating company shall ensure that all workers receive notice of dismissal and severance payments mandated by law and collective agreements in a timely manner. All outstanding back pay, social security benefits, and pension contributions and benefits shall be paid on or before termination of the	•	The evidence includes a notice of Termination of Employment with Compensated Prior Notice, the outstanding payment calculation and respective paycheck (January 2021) with matching compensation, indicating that the company properly compensates dismissed workers.



Chapte	er 3.1—Fair Labor and Terms of Work		Basis for rating
	working relationship, or in accordance with a timeline agreed through a collective agreement. Payments shall be made directly to workers, or to appropriate institutions for the benefit of workers. Where payments are made for the benefit of workers, they shall be provided with evidence of such payments.		
3.1.5.1.	Critical The operating company shall provide a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns. The mechanism, at minimum: a. Shall involve an appropriate level of management and address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned, without any retribution; b. Shall allow for anonymous complaints to be raised and addressed; c. Shall allow workers' representatives to be present, if requested by the aggrieved worker; and d. Shall not impede access to other judicial or administrative remedies that might be available under the law or through existing arbitration procedures, or substitute for grievance mechanisms provided through collective agreements.	•	The evidence, records from the grievance platform Fale Conosco (2021), the Grievance System Procedure (2022) and a Grievance response (June 2020), indicate that the grievance mechanism for workers fulfills the requirements (a)-(d), by: a. Involving an appropriate level of management and responding promptly, without any retribution. b. Allowing for complaints to be raised anonymously. c. Allowing workers' representatives to be present, if requested by aggrieved workers. d. Not impeding access to other judicial or administrative remedies. During interviews, employees indicated to have used it and confirmed that it works.
3.1.5.2.	The operating company shall inform the workers of the grievance mechanism at the time of recruitment and make it easily accessible to them.	•	Fale Conosco (translated: Your Voice) is the company's main grievance filing tool and the company teaches its employees how to use it during the induction training as indicated by the induction training slides (2021). The company reviews the grievance mechanism annually with its employees to improve the awareness of the tool.
3.1.5.3.	The operating company shall maintain a record of grievances and the company's actions taken to respond to and/or resolve the issues.	•	The company's grievance log Fale Conosco (2021) includes records of grievances, company responses to the aggrieved parties and where applicable actions taken to resolve the issues.
3.1.6.1.	The operating company shall have documented disciplinary procedures (or their equivalent) that are made available to all workers.	•	The evidence, a Disciplinary Measures Standard (October 2019), a Group-level Accountability Policy (2020), and a Table of Disciplinary Measures (no date), indicates that the company has disciplinary procedures in place.



Chapte	er 3.1—Fair Labor and Terms of Work		Basis for rating
			The evidence does not indicate whether these procedures are available to all workers. During on-site interviews some workers indicated that they are not aware of these procedures.
3.1.6.2.	The operating company shall not use corporal punishment, harsh or degrading treatment, sexual or physical harassment, mental, physical, or verbal abuse, coercion, or intimidation of workers during disciplinary actions.	•	The company's Code of Conduct (2020) includes policies prohibiting punishment, harsh or degrading treatment, sexual or physical harassment, mental, physical, or verbal abuse, coercion, or intimidation of workers during disciplinary actions. Interviews confirmed that this policy is in place and workers are aware of it.
3.1.6.3.	The operating company shall keep records of all disciplinary actions taken.	•	The evidence consists of the company's Complaint Escalation Mechanism (no date) and Rules on Disciplinary Measures (2019) and indicates that records of all disciplinary actions are kept.
3.1.7.1.	The operating company shall document the ages of all workers.	•	The evidence is a register that lists the birthdays for each employee (no date), indicating that the company maintains the ages of personnel in each person's file, including contractors and seasonal workers.
3.1.7.2.	Critical Children (i.e., persons under the age of 18) shall not be hired to do hazardous work (e.g., working underground, or where there is exposure to hazardous substances).	•	The company's Policy on Human Rights (no date) and Code of Conduct (2020) indicates that the company's policies prohibit the hiring of children. This was confirmed through onsite interviews with employees and contractors.
3.1.7.3.	Critical The minimum age for non-hazardous work shall be 15, or the minimum age outlined in national law, whichever is higher.	•	The employee register (no date) indicates that the company does not employ persons under the age of 18.
3.1.7.4.	When a child is legally performing non-hazardous work, the company shall assess and minimize the risks to their physical or mental health, and ensure that regular monitoring of the child's health, working conditions and hours of work occurs by the national labor authority, or if that is not possible, by the company itself.	_	Not relevant as the company does not employ any children.
3.1.7.5.	If the operating company discovers that a child under the minimum age outlined in 3.1.7.2 and 3.1.7.3 is performing hazardous or non-hazardous work: a. The child shall be removed immediately from his or her job; and b. Remediation procedures shall be developed and implemented that provide the child with support in his or her transition to legal work or schooling,	_	Not relevant as the company does not employ any children.



Chapte	r 3.1—Fair Labor and Terms of Work		Basis for rating
	child and the financial situation of the child's family.		
3.1.7.6.	Where there is a high risk of child labor in the mine's supply chain, the operating company shall develop and implement procedures to monitor its suppliers to determine if children below the minimum age for hazardous or non-hazardous work are being employed. If any cases are identified, the operating company shall ensure that appropriate steps are taken to remedy them. Where remedy is not possible, the operating company shall shift the project's supply chain over time to suppliers that can demonstrate that they are complying with this chapter.	•	The company's Responsible Sourcing Standard (Group Social Way Policy, 2020) outlines the fundamental sustainability prerequisites and operational guidelines for all suppliers, including agents, partners, contractors, and consultants. This includes the prohibition of child and forced labor in accordance with the International Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. The company reserves the right to request relevant information from suppliers at any time during their partnership. Prior to supplier evaluation, the HR department conducts a due diligence process, examining the supplier's labor history, legal infringements, and interactions with the Ministry of Labor to ensure adherence to the Responsible Sourcing Standard as indicated in the Ethics Report Example (2023). The 2021 grievance log indicates no instances of child labor related to the operation. The audit team will verify during the surveillance audit through interviews with company and relevant stakeholders that the company has procedures in place to determine if child workers below the minimum age for hazardous /non-hazardous work are being employed by its suppliers; and if cases have been found, that remedy was provided or the company shifted its supplier.
3.1.8.1.	Critical The operating company shall not employ forced labor or participate in the trafficking of persons.	•	The evidence, including the Policy on Human Rights (no date), the Code of Conduct (2020), documents and records reviewed on-site, and interviews with workers and human resource managers, indicates that the company does not use forced labor or participates in the trafficking of persons, including contractors. Interviews indicate that all employees are paid a living wage, including training and advancement opportunity, and are free to leave their jobs voluntarily.
3.1.8.2.	Where there is a high risk of forced or trafficked labor in the mine's supply chain, the operating company shall develop and implement procedures to monitor it suppliers to determine if forced labor or trafficked workers are being employed. If any cases are identified, the operating company shall ensure that appropriate steps are taken to remedy them. Where remedy is not possible, the operating company shall shift the project's supply chain over time to suppliers that can demonstrate that they are complying with this chapter.	•	The company's Responsible Sourcing Standard (2020) outlines the fundamental sustainability prerequisites and operational guidelines for all suppliers, including agents, partners, contractors, and consultants. This includes the prohibition of child and forced labor in accordance with the International Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. The company reserves the right to request relevant information from suppliers at any time during their partnership. Prior to supplier evaluation, the HR department conducts a due diligence process, examining the supplier's labor history, legal infringements, and interactions with the Ministry of Labor to ensure adherence to the Responsible Sourcing Standard as indicated in the Ethics Report Example (2023).

Chapter	3.1—Fair Labor and Terms of Work		Basis for rating
			The 2021 grievance log indicates no instances of forced labor related to the operation. The audit team will verify during the surveillance audit through interviews with company and relevant stakeholders that the company has procedures in place to determine if forced labor or trafficked workers are being employed by its suppliers; and that if cases are found, remedy was provided and/or the company shifted its supplier.
3.1.9.1.	The operating company shall pay wages to workers that meet or exceed the higher of applicable legal minimum wages, wages agreed through collective wage agreements, or a living wage.	•	The evidence, Clause 3 of the Collective Bargaining Agreement (2020), indicates that the company pays a minimum salary or higher amounts. Stakeholder and worker interviews indicates that it is desirable to have a job at the mine due to the pay scale and benefits, including opportunities for training and advancement. Women in particular indicated opportunities for economic growth and development were greater for them at the mine than in other sectors and areas.
3.1.9.2.	Overtime hours shall be paid at a rate defined in a collective bargaining agreement or national law, and if neither exists, at a rate above the regular hourly wage.	•	Clause 30 of the Collective Bargaining Agreement (2020) indicates that for each overtime hour worked during a normal workday or a non-normal workday, employees are compensated with 1 hour of time-off, that can be scheduled for a later date. If employees get called-up for work on their rest days, they will be compensated with 1 hour and 42 minutes of time off for each hour worked. Employees can accrue 100 hours of compensated time-off, once the limit is reached the hours above that limit will be paid out. The company complies with the Brazilian Labor Law Consolidação das Leis do Trabalho – CLT, Art. 59, which states that overtime can be compensated with an equivalent amount of time-off and that employees and employer can agree upon their own compensation method within a collective bargaining agreement.
3.1.9.3.	All workers shall be provided with written and understandable information about wages (overtime rates, benefits, deductions and bonuses) before they enter employment, and for the pay period each time they are paid.	•	The evidence indicates that the company provides written and understandable information about wages to prospective employees before they enter employment and continues through their paystubs. Employees confirm to have received information about wages in understandable language.
3.1.9.4.	The operating company shall pay wages in a manner that is reasonable for workers (e.g., bank transfer, cash or check).	•	The evidence indicates that the company pays wages in a manner that is reasonable for workers. Workers did not report any issues or inconveniences with the way in which they were paid.



Chapte	r 3.1—Fair Labor and Terms of Work		Basis for rating
3.1.9.5.	The operating company shall ensure that deductions from wages are not made for disciplinary purposes unless one of the following conditions exist: a. Deductions from wages for disciplinary purposes are permitted by national law, and the law guarantees the procedural fairness of the disciplinary action; or b. Deductions from wages for disciplinary purposes are permitted in a freely negotiated collective bargaining agreement or arbitration award.	•	The evidence indicates that the company meets the requirements. No deductions are made as a form of discipline and all reviewed deductions were in line with the law.
3.1.10.1.	 The operating company shall ensure that: a. Regular working hours do not exceed eight hours per day, or 48 per week. Where workers are employed in shifts the 8-hour day and 48-hour week may be exceeded, provided that the average number of regular hours worked over a 3-week period does not exceed 8 hours per day and 48 hours per week; b. Workers are provided with at least 24 consecutive hours off in every 7-day period; and c. Overtime is consensual and limited to 12 hours a week. d. Exceptions to 3.1.10.1.b and c shall be allowed at mines in remote locations if: e. A freely negotiated collective bargaining agreement is in force that allows variances to the rest and/or overtime hours above; and f. Through consultations with workers' representatives, a risk management process that includes a risk assessment for extended working hours is established to minimize the impact of longer working hours on the health, safety and welfare of workers. 	•	Work time policies are defined in the Collective Bargaining Agreement (2020) and where there are no specific conditions in the agreement, the national Consolidated Labor Laws apply. The provided evidence indicates that: a. Regular working hours do not exceed eight hours per day, or 48 hours per week (Collective Labor Agreement, 2020, p. 19, Annex 2). b. The company provides every worker with at least 24 consecutive hours off every seven days (Collective Labor Agreement, 2020, p. 19, Annex 2). c. Overtime is consensual and does not exceed 12 hours (Consolidation of Labor Laws, 2017. p. 25 and 26, Art. 59). d. Not applicable since the site is not remote. The audit team will verify during the surveillance audit through interviews with company management, workers' representatives, and workers that working hours meet the requirements.
3.1.10.2.	 Where neither national law nor a collective bargaining agreement includes provisions for worker leave, the operating company shall, at minimum, provide: a. An annual paid holiday of at least three working weeks per year, after achieving one year of service; and 	•	The evidence, a document listing an employee's holidays and vacation time (2019) and a document on Maternity Leave (2020), indicates that the company meets the requirements (a) and (b).



Chapter 3.1—Fair Labor and Terms of Work	Basis for rating
b. A maternity leave period of no less than 14 weeks.	

Chapte	er 3.2—Occupational Health and Safety		Basis for rating
3.2.1.1.	The operating company shall implement a health and safety management system for measuring and improving the mining project's health and safety performance.	•	The evidence, a Safety, Health, and Environment Policy (2017), indicates that the company has implemented a robust Occupational Health and Safety (OHS) Management System. The policy and procedures are applicable to all sites and activities of the mine, including contractors. The system tracks, records, and manages OHS hazards and risks, and ensures ongoing continuous improvement. Interviews of workers supported the company's commitment outlined in the document.
3.2.2.1.	The operating company shall implement an ongoing, systematic health and safety risk assessment process that follows a recognized risk assessment methodology for industrial operations.	•	The evidence, including a Procedure for Preparation of Task Risk Analysis (2020), Operational Risk Management (2019), Risk Baseline (WRAC) (no date), Presentation on Integrated Risk Management (no date), indicates that the company has procedures to manage operational risks using the Bowtie methodology, which is a recognized risk assessment methodology to manage risk in a systematic way. In addition, the company completes and shares the results of baseline risk assessments, workplace risk assessments, job risk assessments, and SLAM (stop, look, assess, manage) risk assessments. The company employs an onsite physician and provides a clinic. The physicians' duties, include the measurement of baseline health conditions and occupational exposure, and surveillance of fitness-for-duty and health.
3.2.2.2.	The assessment process shall identify and assess the significance/consequence of the full range of potential hazards associated with the mining project, including those related to: a. The design, construction and operation of the workplace, mining-related activities and processes, the physical stability of working areas, the organization of work, use of equipment and machinery, and waste and chemical management; b. All personnel, contractors, business partners, suppliers and visitors; c. Unwanted events;	•	The evidence, Risk Baseline (WRAC) (no date), indicates the company has a process to identify and assess the significance and risk of potential hazards associated with the mining project as it relates to occupational health and safety. A sample of these processes and systems identified in (a)-(e), were reviewed, along with records of incidents and measures of safety performance. In addition, workers, contractors, and mine managers were interviewed to identify vulnerabilities in the risk identification and assessment process. Evidence and interviews indicate that workplace safety culture is one of engagement, risk identification, and ongoing assessment. Note: The evaluation of requirements associated with the physical stability of tailings dams, reservoirs, mine pit, mine waste deposits and any other mining facility, in no case, can be considered as a certification or technical approval. The

Chapte	r 3.2—Occupational Health and Safety		Basis for rating
	 d. Routine and non-routine activities, products, procedures, and services; and e. Changes in duration, personnel, organization, processes, facilities, equipment, procedures, laws, standards, materials, products systems and services. 		documents describe engineering regulations that include aspects of design, location, construction, and operation subject to specific regulations. Audit team note: Validation of the assessment process to identify and assess the significance/consequence of the full range of potential hazards associated with the mining project, (a)-(e), is outside the scope of the IRMA assessment. See additional notes on section 4.1 of the report.
3.2.2.3.	The operating company shall pay particular attention to identifying and assessing hazards to workers who may be especially susceptible or vulnerable to particular hazards.	•	Evidence obtained through interviews with the onsite medical team indicate that vulnerabilities of workers are identified during initial and ongoing health assessments. Interviews with female workers indicate work accommodations and time flexibility are offered to women with newborns (i.e., for breastfeeding) as required by National Law. The company did not provide documental evidence to confirm the information received in the interviews.
3.2.2.4.	The operating company shall develop, implement, and systematically update a risk management plan that prioritizes measures to eliminate significant hazards, and outlines additional controls to effectively minimize negative consequences and protect workers and others from remaining hazards.	•	The evidence, a Procedure on Baseline Risk Management (2020) and several other documents, details the company's Risk Management System and associated activities. The risk management system includes the identification of hazards, the evaluation of risks and the definition of the applicable control measures in accordance with the control hierarchy proposed by ILO. The provided procedures indicate that the company evaluates the effectiveness of the controls and their systematic monitoring to continuously improve its risk management.
3.2.2.5.	In particular, the operating company shall demonstrate that it has developed procedures and implemented measures to: a. Ensure that the mine has electrical, mechanical and other equipment, including a communication system, to provide conditions for safe operation and a healthy working environment; b. Ensure that the mine is commissioned, operated, maintained and decommissioned in such a way that workers can perform the work assigned to them without endangering their safety and health or that of other persons; c. Maintain the stability of the ground in areas to which persons have access in the context of their work;	•	The evidence, a Procedure on Baseline Risk Management (2020) and several other documents, indicates that a risk management system is in place to provide the conditions for a safe and healthy work environment as outlined in (a) to (c) and (f) to (h) ((d) and (e) are not relevant since it is not an underground mine). The evidence includes work procedures and information on risk management performance in accordance with the ILO Convention 176 Safety and Health in Mines guidelines. Interviews with workers and contractors confirm they have the equipment, training, and support to do their job safely, including stopping work when there is a potential risk of harm. During the on-site visit, no H&S deficiencies were noted.



Chapter	3.2—Occupational Health and Safety		Basis for rating
	 d. If relevant, whenever practicable provide two exits from every underground workplace, each connected to separate means of egress to the surface; e. If relevant, ensure adequate ventilation for all underground workings to which access is permitted; f. Ensure a safe system of work and the protection of workers in zones susceptible to particular hazards; g. Prevent, detect and combat accumulations of hazardous gases and dusts, and the start and spread of fires and explosions; and h. Ensure that when there is potential high risk of harm to workers, operations are stopped, and workers are evacuated to a safe location. 		
3.2.3.1.	 Workers shall be informed of their rights to: a. Report accidents, dangerous occurrences and hazards to the employer and to the competent authority; b. Request and obtain, where there is cause for concern on safety and health grounds, inspections and investigations to be conducted by the employer and the competent authority; c. Know and be informed of workplace hazards that may affect their safety or health; d. Obtain information relevant to their safety or health, held by the employer or the competent authority; e. Remove themselves from any location at the mine when circumstances arise that appear, with reasonable justification, to pose a serious danger to their safety or health; and f. Collectively select safety and health representatives. 	•	The evidence indicates workers are informed of their rights, (a) to (f), as part of their new miner orientation and continuous safety training in accordance with the local regulation NR 22 Occupational Health and Safety for Mining Activities. Interviews with a sample of workers and contractors confirms understanding of these rights such as reporting hazards and requesting investigations of workplace hazards to the company and competent authorities; and being informed of potential hazards relevant to personal safety and health. Miners are trained to know they can remove themselves from any circumstance that poses a danger to their safety and health or seek collective representation for the same. It also includes a procedure on occupational health and safety training for new employees entering the company (Procedimento de Ambientacão, 2020) and various procedures to conduct activities safely, in accordance with the guidelines of ILO Convention 176, rights in the selection of their representatives in OSH, among others. Interviewees confirm to be aware of these procedures.
3.2.3.2.	In all cases a worker attempting to exercise any of the rights referred to in 3.2.3.1 in good faith shall be protected from reprisals of any sort.	•	The evidence, OHS Onboarding Procedure (2020), is a procedure on occupational health and safety training for new employees and indicates that employees are protected from reprisal when exercising their rights as listed in 3.2.3.1.

Chapte	er 3.2—Occupational Health and Safety		Basis for rating
3.2.3.3.	The operating company shall develop systems to effectively communicate with and enable input from the workforce on matters relating to occupational health and safety.	•	The documental evidence, including OHS training attendance records (March 2021), a Planned Task Observation (March 2021), a pamphlet on the company's Integrated Management Systems addressing OHS (December 2020), and field interviews indicate that the company complies with this requirement, within the framework of their Integrated Safety, Health, and Environment System. Workers and workers' representatives provide input on matters relating to occupational health and safety.
3.2.3.4.	The operating company shall develop and implement a formal process involving workers' representatives and company management to ensure effective worker consultation and participation in matters relating to occupational health and safety including: a. Health and safety hazard identification and assessment; b. Design and implementation of workplace monitoring and worker health surveillance programs; c. Development of strategies to prevent or mitigate risks to workers through the health and safety risk assessments or workplace and workers' health surveillance; and d. Development of appropriate assistance and programs to support worker health and safety, including worker mental health.	•	The evidence includes the process of participation of key staff and the management in topics related to OHS, through the Internal Commission for the Prevention of Mining Accidents (CIPAMIN – acronym in Portuguese), in accordance with the local regulation (NR-22). Additional documents on the implementation of participation tools are included, such as a Task Risk Analysis record (2020) and Planned Task Observation (March 2021), among others. The evidence, including worker interviews, indicates that employees are consulted and participate in each criterion, (a) to (d), such as identifying, monitoring, and mitigating worker health and safety risks, and health surveillance (hearing, pulmonary function, communicable disease, etc.). The company has made additional effort to support and help worker physical and mental well-being and that of their families as a result of COVID-19 (training, testing, paid sick and quarantine time off, masks, sanitary infrastructure such as outdoor sinks spaced 6-feet apart, cleaning, education outreach, PPE, etc.). In addition, workers are offered nourishing meals made with fresh and local ingredients that support physical health at regular intervals during each shift, night, or day, while working onsite.
3.2.3.5.	The operating company shall provide workers' health and safety representatives with the opportunity to: a. Participate in inspections and investigations conducted by the employer and by the competent authority at the workplace; b. Monitor and investigate safety and health matters; c. Have recourse to advisers and independent experts; and d. Receive timely notice of accidents and dangerous occurrences.	•	The evidence, a Procedure on Incident Investigations (2020), includes the notification and participation of workers in incident or accident investigations. Information relating to investigations is widely shared for learning purposes in the organization. Interviews with workers confirmed that the company meets sub-requirements (a), (b), and (d). The evidence did not indicate that workers have options to consult advisors and independent experts, as required in item (c) of the requirement.
3.2.3.6.	Visitors and other third parties accessing the mining premises shall receive an occupational health and safety briefing, and be provided with relevant	•	The evidence, Term of Commitment and Responsibility (2021), presents the safety orientation procedure for visitors., and the auditing team received a brief induction and PPE while at site. The procedure was observed in practice at the mine site. Individuals entering the site are greeted at the gate, provided with



Chapte	er 3.2—Occupational Health and Safety		Basis for rating
	protective equipment for areas of the mine site that or associated facilities that they will be entering.		site-specific safety training (video) and appropriate protective equipment for the areas of the mine site they will be entering. This training is different from new miner or contractor training, which is more in-depth.
			The company did not provide records to confirm that visitors always receive an induction and PPE.
3.2.4.1.	 Critical (a and b) The operating company shall implement measures to protect the safety and health of workers including: a. Informing workers, in a comprehensible manner, of the hazards associated with their work, the health risks involved and relevant preventive and protective measures; b. Providing and maintaining, at no cost to workers, suitable protective equipment and clothing where exposure to adverse conditions or adequate protection against risk of accident or injury to health cannot be ensured by other means; c. Providing workers who have suffered from an injury or illness at the workplace with first aid, and, if necessary, prompt transportation from the workplace and access to appropriate medical facilities; d. Providing, at no cost to workers, training/education and retraining programs and comprehensible instructions on safety and health matters as well as on the work assigned; e. Providing adequate supervision and control on each shift; and f. If relevant, establishing a system to identify and track at any time the probable locations of all persons who are underground. 	•	The evidence, a Procedure for Supplying, Maintaining, Repairing, and Operating PPE, a presentation on HSE results (November 2020), an HSE Daily Dialogue record (March 2021), an e-mail on Incident Lessons Learned (February 2018), a OHS Job & Function Matrix (no date), an Emergency Care Training Plan (February 2020), and Training Plans for an Introduction to surface activities related to OHS (October 2018), among others, indicates that the company has implemented a mechanisms to inform workers about the dangers associated with their work and the pertinent preventive measures (a) at no cost (d), and that PPE is provided at no cost (b). On-site observations and interviews with workers and contractors indicate the effectiveness of the implemented measures including adequate supervision on each shift (e). The evidence indicates that employees who have suffered a workplace injury or illness have access to first aid at an on-site clinic and transportation to appropriate medical facilities (c). Sub-requirement (f) is not applicable as this is not an underground mine.
3.2.4.2.	If the risk assessment process reveals unique occupational health and safety risks for certain groups of workers (e.g., pregnant women, children, HIV-positive, etc.) the operating company shall ensure that additional protective measures are taken, and trainings and health promotion programs are available to support the health and safety of those workers.	•	The evidence indicates that the needs of special groups are accommodated in work environments. This includes women and those that are HIV-positive through the Occupational Health Medical Control Program (2021) and qualified medical providers at the site.



Chapte	r 3.2—Occupational Health and Safety		Basis for rating
3.2.4.3.	The operating company shall provide workers with clean toilet, washing and locker facilities (commensurate with the number and gender of staff employed), potable drinking water, and where applicable, sanitary facilities for food storage and preparation. Any accommodations provided by the operating company shall be clean, safe, and meet the basic needs of the workers.	•	According to the evidence and on-site observations, the company provides clean water, lunchrooms, and lavatories commensurate with the number and gender of staff employed. Nutritious meals made from fresh ingredients are served every shift. Accommodations have been made to increase sanitary conditions since COVID-19 including the use of masks (all times, indoor or out), the presence of washing stations, the availability of hand sanitizer, and plexiglass partitions to maintain safe conditions while unmasked at meals. Contracted services for cleaning, maintenance, and the operation of canteens for feeding workers are periodically evaluated and verified by Anglo American. During the on-site audit, it was observed that the services are performed in an adequate manner, and workers always have access to drinking water and clean sanitary facilities.
3.2.4.4.	 The operating company shall ensure that workers are provided with compensation for work-related injuries and illnesses as follows: a. In countries where workers' compensation is not provided through government schemes or a collective bargaining agreement: b. The operating company shall compensate workers for work-related injuries or illnesses at a rate that, at minimum, covers medical expenses and wages during the recovery and rehabilitation period; c. If a worker is not able to return to work due to the severity of the work-related injury or illness, the operating company shall compensate for lost earnings until the worker qualifies for an adequate pension (i.e., 2/3 or more of the salary they would otherwise normally receive if healthy and working); or d. [flag] If an occupational illness manifests after a worker has retired, the operating company or its corporate owner shall, at minimum, compensate the worker for medical expenses, unless the operating company or its corporate owner can establish that the occupational illness was not connected to the worker's employment at the mining project. 	•	The evidence, Collective Bargaining Agreement (2020), includes compensatory benefits in case of work-related injuries and illnesses in addition to those required by local regulation fulfilling sub-requirements (a) to (f).

Chapter	3.2—Occupational Health and Safety		Basis for rating
	e. In countries that do not provide for worker rehabilitation as part of their workers' compensation schemes, the operating company shall ensure that workers have free or affordable access to rehabilitation programs to facilitate an expeditious return to work; and f. Where a worker dies as a result of a work-related injury or disease, the operating company shall, at minimum, provide to spouses and dependent children benefits to cover funeral expenses and transportation of the worker's body, if appropriate, as well as compensation that is equal to or greater than three months' salary of the deceased worker.		
3.2.5.1.	The operating company and workers' representatives on a joint health and safety committee, or its equivalent, shall perform regular inspections of the working environment to identify the various hazards to which the workers may be exposed, and to evaluate the effectiveness of occupational health and safety controls and protective measures.	•	The evidence consists of records of inspection activities for some workplaces with the participation of the workers. The evidence indicates that the company has a Health and Safety Committee in which company representatives and workers participate and carry out inspection and monitoring activities of the safety management and its effectiveness, in accordance with a pre-established plan and in compliance with applicable legal provisions. This was confirmed during interviews with workers.
3.2.5.2.	 The operating company shall carry out workplace monitoring and worker health surveillance to measure exposures and evaluate the effectiveness of controls as follows: a. Workplace monitoring and worker health surveillance shall be designed and conducted by certified industrial hygienists or other competent professionals; b. Health surveillance shall be carried out in a manner that protects the right to confidentiality of medical information, and is not used in a manner prejudicial to workers' interests; c. Samples collected for workplace monitoring and health surveillance purposes shall be analyzed in an ISO/IEC 17025 certified or nationally accredited laboratory; d. Sample results shall be compared against national occupational exposure limits (OELs) and/or biological exposure indices (BEIs), if they exist, or OELs/BEIs developed by the American Conference 	•	The evidence, Occupational Health Medical Control Program (2020), indicates that the company has a workplace monitoring and worker health surveillance plan for its workers. In accordance with the information provided, the company carries out activities to monitor the workplaces and health of its workers, developed by competent and accredited professionals, with whom service contracts validated by government agencies are maintained. The collected information is stored in a digital database, protected and with restricted access to protect the confidentiality of the workers' data. The results of these evaluations provide information on the effectiveness of the controls and allow adjustments to be made to maintain worker exposure at safe levels

Chapte	r 3.2—Occupational Health and Safety		Basis for rating
	of Governmental Industrial Hygienists (ACGIH); and e. If an OEL/BEI is exceeded, the affected worker(s) shall be informed immediately, and controls shall be reviewed and revised in a timely manner to ensure that future exposure levels remain within safe limits.		
3.2.5.3.	Controls, protective measures, health risk assessments, risk management plans, and training and educational materials shall be updated as necessary based on inspection and monitoring results.	•	The evidence includes procedures for Operational Health and Safety risk management (2020), workshops on critical risk management and activities of lessons learned from incidents, including the corresponding records, updates and maintenance indicating that the company updates its OHS material as necessary and based on monitoring results.
3.2.5.4.	The operating company shall ensure that all workplace injuries, fatalities, accidents and dangerous occurrences, as defined by national laws or regulations, are documented, reported to the competent authority, investigated and that appropriate remedial action is taken.	•	The evidence, Internal Incident Investigation and Learning Procedure (2012), indicates the company aims to ensure that all workplace injuries, fatalities, accidents, and dangerous occurrences, as defined by national laws or regulations, are documented, reported to the competent authority, investigated and that appropriate remedial action is taken. Evidence also included a Preliminary Incident Investigation Report (2020) and its respective Work Accident Report (2020) to the government authority for one incident. The evidence indicates the company investigates incidents in cooperation with competent authorities and take appropriate remedial action.
3.2.6.1.	The operating company shall maintain accurate records of health and safety risk assessments; workplace monitoring and workers' health surveillance results; and data related to occupational injuries, diseases, accidents, fatalities and dangerous occurrences collected by the company and submitted to competent authorities. This information, except for data protected for medical confidentiality reasons, shall be available to workers' health and safety representatives.	•	In accordance with the documentation provided by the company, the information related to the safety and health records of the workers, including data on injuries, occupational diseases, health surveillance, dangerous events, and others, are managed by software (Sistema Global Antares). In the case of requests for confidential information of protected data, the procedure is governed in accordance with the Code of Medical Ethics and the Health and Safety Standard NR-7 of the country.
3.2.6.2.	The operating company shall establish a data management system that enables worker health data to be readily located and retrieved, and data protected by medical confidentiality to be securely stored. Data shall be retained for a minimum of 30 years, and responsible custodians shall be assigned to oversee the heath data management system.	•	The company maintains a health data management system for all workers called Sistema Global Antares, where the data is stored and protected in accordance with the applicable security and confidentiality regulations. The evidence does not include details to confirm that the company has elected a responsible custodian that oversees the data management and that the



Chapter 3.2—Occupational Health and Safety			Basis for rating
			company has implemented measures to ensure that the data is retained for at least 30 years.
3.2.6.3.	The operating company shall allow workers access to their personal information regarding accidents, dangerous occurrences, inspections, investigations and remedial actions, health surveillance and medical examinations.	0	Supporting documents do not indicate if workers are allowed access to their personal information on accidents, dangerous events, inspections and corrective actions, health surveillance and medical examinations.

Chapter	r 3.3—Community Health and Safety		Basis for rating
3.3.1.1.	Critical The operating company shall carry out a scoping exercise to identify significant potential risks and impacts to community health and safety from mining-related activities. At minimum, the following sources of potential risks and impacts to community health and/or safety shall be considered: a. General mining operations; b. t. Operation of mine-related equipment or vehicles on public roads; c. Operational accidents; d. Failure of structural elements such as tailings dams, impoundments, waste rock dumps (see also IRMA Chapter 4.1); e. Mining-related impacts on priority ecosystem services (see also IRMA Chapter 4.6); f. Mining-related effects on community demographics, including in-migration of mine workers and others; g. Mining-related impacts on availability of services; h. Hazardous materials and substances that may be released as a result of mining-related activities (see also IRMA Chapter 4.1); and i. Increased prevalence of water-borne, water-based, water-related, and vector-borne diseases, and communicable and sexually transmitted diseases (e.g., HIV/AIDs, tuberculosis, malaria, Ebola virus disease) that could occur as a result of the mining project.		The company carried out a scoping exercise as indicated by their Environmental Impact Assessments (EIAs) from the year 2007 and 2015, in which the company identified significant potential risks and impacts to community health and safety from mining-related activities. The sources of potential risks and impacts to community health and/or safety included: a. General mining operations (Chapter 6); b. Operation of mine-related equipment or vehicles on public roads (p. 908); c. Operational accidents (Chapter 8.4); d. Failure of structural elements such as tailings dams and waste rock storage facilities were identified in Memorandum on Consequence Classification of Failure of the Tailings Dam (May 2023) and Ground Control Plan (2020, Chapter 6.2); more details on structural elements can be found in IRMA Chapter 4.1; e. Mining-related impacts on priority ecosystem services (Chapter 6.3.2); more details on ecosystem services can be found in IRMA Chapter 4.6; f. Mining-related effects on community demographics, including in-migration of mine workers and others (Chapter 6.3.3); g. Mining-related impacts on the availability of services (Chapter 6.3.3); and h. Hazardous materials and substances that may be released as a result of mining-related activities (Chapter 6), more details on chemical classification of waste and mine-related contaminants can be found in IRMA Chapter 4.1. The evidence does not include: i. Increased prevalence of water-borne, water-based, water-related, and vector-borne diseases, and communicable and sexually transmitted diseases (e.g., HIV/AIDs, tuberculosis, malaria, Ebola virus disease) that could occur as a result of the mining project. Interviews are needed during the surveillance audit to confirm that the mine has consulted communities relating to issues (a) through (i) relating to potential risks to community health or safety.
3.3.1.2.	Scoping shall include an examination of risks and impacts that may occur throughout the mine lifecycle (e.g., construction, operation, reclamation, mine closure and post-closure).	•	The evidence includes a Baseline Risk and Impact Exercise (no date) for the operations, the Preliminary Mine Closure Plan (2019), and a Socio-Economic Risk Sheet (2018) relating to mine closure activities.
			The evidence does not include detail to confirm that risks, impacts and their control measures were examined for all life cycles of the mine.



Chapter 3.3—Community Health and Safety			Basis for rating
3.3.1.3.	Scoping shall include consideration of the differential impacts of mining activities on vulnerable groups or susceptible members of affected communities.	•	The evidence, a Risk Baseline (WRAC) (2019), includes an identification of potential major events and considers impacts on the community. The evidence includes results of the analysis of relevant risks, such as bow tie diagrams such as for possible COVID-19 infections (no date) and considers the differential impact on vulnerable groups. The evidence does not include detail to confirm that all vulnerable or susceptible
			groups have been considered during scoping.
3.3.2.1.	 The operating company shall carry out an assessment of risks and impacts to: a. Predict the nature, magnitude, extent and duration of the potential risks and impacts identified during scoping; b. Evaluate the significance of each impact, to determine whether it is acceptable, requires mitigation, or is unacceptable. 	•	The evidence includes the Stakeholder Engagement Plan (2020), which is based on the company's Social Performance Policy (no date), the company's Safety, Health, and Environment Management System (SHE Way, 2017), and other risk management documents that indicate the company complies with subrequirements (a) and (b).
3.3.3.1.	The operating company shall document and implement a community health and safety risk management plan that includes: a. Actions to be taken to mitigate the significant risks and impacts identified during its risk and impact assessment; and b. Monitoring that will be conducted to ensure that measures to prevent or mitigate impacts remain effective.	•	The evidence indicates that the company has adopted a methodology to identify and assess the risks to the safety and health of the affected communities (including COVID-19) and the monitoring of the established control measures (a, b). This is supported by a Risks and Impacts Matrix (no date) in which the company records and evaluates potential risks and impacts related to stakeholders, which are managed in accordance with the Operational Risk Management System (ORM).
3.3.3.2.	Mitigation measures shall prioritize the avoidance of risks and impacts over minimization and compensation.	•	The evidence includes a worksheet for risks identification and assessment, as an input for their management in accordance with the company's Operational Risk Management System (ORM). It also includes some examples of the application of the Bow Tie methodology to assess risks and establish control measures, prioritizing prevention controls over minimization and compensation. The evidence indicates that the company prioritizes the avoidance of risks and impacts over minimization and compensation.
3.3.3.3.	The community health and safety risk management plan shall be updated, as necessary, based on the results of risk and impact monitoring.	•	The evidence includes the Engagement Plan for Stakeholders, the Operational Risk Management Plan (2021), and an Update of Controls resulting from monitoring activities of potential risks and impacts on the community and others, indicating that it's community health and safety risk management plan is updates as necessary.



Chapte	er 3.3—Community Health and Safety		Basis for rating
3.3.4.1.	If the operating company's risk and impact assessment or other information indicates that there is a significant risk of community exposure to HIV/AIDS, tuberculosis, malaria or another emerging infectious disease related to mining activities, the operating company shall develop, adopt and implement policies, business practices, and targeted initiatives: a. In partnership with public health agencies, workers' organizations and other relevant stakeholders, create and fund initiatives to educate affected and vulnerable communities about these infections and modes of prevention of them, commensurate with the risks posed by mining; b. Operate in an open and transparent manner and be willing to share best practice for the prevention and treatment of these diseases with workers' organizations (e.g., trade unions), other companies, civil society organizations and policymakers; and c. Make information publicly available on its infectious disease mitigation program.	•	The evidence includes three (3) health indicator evaluation reports (2021), carried out in partnership with the municipalities of the mine's Area of Influence, in compliance with the Operation License (OL) issued by the regional environmental body (SUPRAM – acronym in Portuguese). It also includes a report on the health and well-being status aligned with the Sustainable Development Goals (SDGs) of the UN. The evidence indicates that the company monitors the relevant health indicators in the affected communities, through studies carried out by the Mining Center for Epidemiological and Environmental Studies contracted by the company, including financial support for education, and sharing relevant preventive information. No specific evidence was found on the indicators of HIV / AIDS, tuberculosis, malaria, or other emerging infectious disease related to mining activities, except preliminary data on the impact of COVID-19, where actions have been developed in association with government agencies. municipalities, community, and other stakeholders. Interviews are needed (company, community, government) during the surveillance audit to confirm the company has implemented HIV/AIDS, TB and/or malaria initiatives, and the sharing of best practices on treatment and prevention, if there is a significant risk of community exposure to these diseases because of mining-related activities.
3.3.4.2.	If the assessment demonstrates a significant risk of community exposure to HIV/AIDS, tuberculosis or malaria from mining-related activities, the following prevention and mitigation strategies shall be applied, as appropriate: a. In relation to HIV/AIDS, the operating company shall, at minimum: i. Provide free, voluntary and confidential HIV testing and counseling for all mine workers and employees; ii. Provide HIV/AIDS treatment for workers and employees where it cannot reasonably be assumed that this will be provided in an effective manner by public or private insurance schemes at an affordable rate;	•	The company is developing general health programs as required by legislation and as part of the Health and Safety program of employees. These include training and awareness of diseases, for example HIV/AIDS, malaria, yellow fever, among others (see answer in 3.3.4.1). The company has also supported local hospitals by providing funding and equipment. No specific information was provided regarding the implementation of these programs together with local authorities. Interviews are needed (company, community, regulatory) during the surveillance audit to confirm the company provides healthcare as outlined in subrequirements (a) through (c), if there is a significant risk of community exposure to these diseases because of mining-related activities.



Chapter 3.3—Community Health and Safety		Basis for rating
iii. Provide access for contractors to educati and other preventative programs, and to with the operating company's or facility's contracting companies or others to ident ways for contract workers to access afford treatment; and	work	
iv. Work with public health authorities, communities, workers' organizations and other stakeholders towards ensuring universal access to treatment for depend of mine workers/employees and affected community members.	ents	
b. In relation to tuberculosis, the operating com shall, at minimum, provide free and voluntary testing for mine workers/employees where it not reasonably likely to be provided by public private health programs at an affordable rate.	is or	
c. In relation to malaria, the operating company shall, at minimum: i. Develop a vector control plan;		
ii. Ensure that company facilities are not breeding environments for malaria-carry mosquitoes; and	ng	
iii. Provide protection from infection by mal carrying mosquitoes in company facilities any company-provided housing.		
3.3.5.1. The operating company shall collaborate with relections community members and stakeholders, including workers who live in affected communities and individuals or representatives of vulnerable groups		The company collaborates with relevant community members and stakeholders, including workers who live in affected communities and individuals or representatives of vulnerable groups regarding sexual and reproductive health, gender violence, alcohol and drugs, teenage pregnancy, and others, in:
 a. Scoping of community health and safety risks impacts related to mining; b. Assessment of significant community health safety risks and impacts related to mining; c. Development of prevention or mitigation strategies; 	and •	 a. partially scoping community health and safety risks and impacts related to mining; b. partially assessing significant community health and safety risks and impacts related to mining; c. partial development of prevention or mitigation strategies;
d. Collection of any data needed to inform the h risk and impact assessment process; and	ealth	d. partial collection of data needed to inform the health risk and impact assessment process; and

Chapte	Chapter 3.3—Community Health and Safety		Basis for rating	
	e. Design and implementation of community health and safety monitoring programs.		e. partial design and implementation of community health and safety monitoring programs.	
			During the interviews, community members expressed their concerns about the health and safety risks associated with traffic accidents. The company did not provide evidence of discussing this topic with the community, indicating that there is a gap between the actual and perceived needs of the community and gaps in the respective collaborative scoping, assessment, mitigation, and monitoring process of health and safety risks.	
3.3.6.1.	The operating company shall make information on community health and safety risks and impacts and monitoring results publicly available.		The evidence consists of three (3) Meeting Minutes with the Secretariats of the Municipalities of Alvorada de Minas, Conceição do Mato Dentro and Dom Joaquin (2019), which indicate that results from the Health Reports were communicated.	
		•	No evidence indicated that the information on these topics was published in publicly accessible media (such as digitally, physically, or on the company's website).	
			Interviews are needed (company, community) during the surveillance audit to confirm that information on mining-related health risks and impacts to communities, including monitoring data, are publicly available.	

Chapter 3.4—Mining and Conflict-Affected or High-Risk Areas	Basis for rating
Chapter not assessed	IRMA is not scoring this chapter in 2022 but is collecting — information to help inform future guidance on chapter implementation.

Chapte	er 3.5—Security Arrangements		Basis for rating
3.5.1.1.	The operating company shall adopt and make public a policy acknowledging a commitment to respect human rights in its efforts to maintain the safety and security of its mining project; and a commitment that it will not provide support to public or private security forces that have been credibly implicated in the infringement of human rights, breaches of international humanitarian law or the excessive use of force.	•	The company's policy on human rights is available on its website (https://www.angloamerican.com/~/media/Files/A/Anglo-American-Group-v5/PLC/sustainability/our-strategy/human-rights-policy-document-english.pdf) and indicates that they are part of the Voluntary Principles on Security and Human Rights (VPSHR). The company indicates that it is committed to maintaining interactions between employees and public and private security that are respectful of human rights. The Voluntary Principles on Security and Human Rights (VPSHR) require from their participants that their public and/or private security has not been credibly implicated in the infringement of human rights or breaches of international humanitarian law and that they shall not make use of excessive force. Interviews are needed (community) during the surveillance audit to determine if the company may be operating in contravention to its policy commitments.
3.5.1.2.	Critical The operating company shall have a policy and procedures in place regarding the use of force and firearms that align with the best practices expressed in UN Basic Principles on the Use of Force and Firearms. At minimum, the company's procedures shall require that: a. Security personnel take all reasonable steps to exercise restraint and utilize non-violent means before resorting to the use of force; b. If force is used it shall not exceed what is strictly necessary, and shall be proportionate to the threat and appropriate to the situation; and c. Firearms shall only be used for the purpose of self-defense or the defense of others if there is an imminent threat of death or serious injury.	•	The evidence, the Property Supervision Procedure for Minerio de Ferro Brasil (January 2022), the company's Guide on Human Rights (no date), the contract between the private security force and the company (June 2018), and slides from a Training on Voluntary Principles of Human Rights (October 2022), indicates that the company has policies and procedures in place that align with the best practices of the UN Basic Principles on the Use of Force and Firearms and require that: a. Security personnel take all reasonable steps to exercise restraint and utilize non-violent means before resorting to the use of force; b. If force is used it shall not exceed what is strictly necessary, and shall be proportionate to the threat and appropriate to the situation; and c. Firearms shall only be used for the purpose of self-defense or the defense of others if there is an imminent threat of death or serious injury.
3.5.1.3.	If private security is used in relation to the mining project, the operating company shall have a signed contract with private security providers that at minimum: a. Sets out agreed on principles that are consistent with the Voluntary Principles on Security and Human Rights and the operating company's procedures on the use of force and firearms; b. Delineates respective duties and obligations with respect to the provision of security in and around	•	The contract between the private security provider and the company (June 2018) indicates that: a. the security provider shall comply with the Voluntary Principles on Security and Human Rights, b. the duties and obligations within the mine and along transportation routes are delineates, c. the training requirements for security personnel are outlined.



Chapter	Chapter 3.5—Security Arrangements		Basis for rating
	the mining project and, if relevant, along transport routes; and c. Outlines required training for security personnel.		
3.5.1.4.	If public security forces are used to provide security to the mining project and/or transport routes, the operating company shall make a good faith effort to sign a Memorandum of Understanding (MoU) or similar agreement with public security providers that includes similar provisions to those in 3.5.1.3.	0	As indicated in the Inspection Policy (no date) and the Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment (2019) public security forces may be called by the company to respond to and prevent crime, such as trespassing of the company's premises or when imminent risk of physical assault or fatality is present. The company also interacts with public security forces through donations made to the military police, and training on human rights organized by Anglo American.
			The company did not provide a signed memorandum of understanding or similar with the public security forces. The Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment (2019) indicates that the company is aware of this shortcoming and considers developing and signing a MoU or similar agreements with public security providers.
3.5.2.1.	The operating company shall assess security risks and potential human rights impacts that may arise from security arrangements. Assessments of security-related risks and impacts shall be updated periodically, including, at minimum, when there are significant changes in mining-related activities, security arrangements, or in the operating environment.	•	The evidence, Human Rights Due Diligence (2019), Voluntary on Security and Human Rights (2019), and Risk Management Company Security (2019), indicates that the company assesses security risks and potential human rights impacts that may arise from security arrangements, including public security arrangements.
			The evidence did not indicate whether the risk assessment is reviewed and updated on a regular basis or whenever changes in operation prompt a reassessment.
3.5.2.2.	Assessments, which may be scaled to the size of the company and severity of security risks and potential human rights impacts, shall: a. Follow a credible process/methodology;	•	The evidence, Human Rights Due Diligence (2019), Voluntary on Security and Human Rights (2019), and Risk Management Company Security (2019), indicates that the assessments follow a credible methodology (a).
	b. Be carried out and documented by competent professionals; and		The evidence does not include details to confirm:



Chapte	r 3.5—Security Arrangements		Basis for rating
	c. Draw on credible information obtained from a range of perspectives, including men, women, children (or their representatives) and other vulnerable groups, relevant stakeholders and expert advice.		b) competency of the professionals who developed the assessments, and c) information obtained from a range of perspectives (women, men, children, or representatives).
3.5.2.3.	The scope of the security risk assessment shall include, but need not be limited to: a. Identification of security risks to the company, workers and communities, paying particular attention to risks to women, children and other vulnerable groups; b. Analysis of the political and security context in the host country context (e.g., the human rights records of the government and public and private security forces; adherence to the rule of law; corruption); c. Analysis of current and potential conflicts or violence in the host country and affected communities; and d. Risks associated with equipment transfers.	•	The evidence, Human Rights Due Diligence (2019), Voluntary on Security and Human Rights (2019), and Risk Management Company Security (2019), indicates the scope of the security risk assessment includes workers and equipment. The evidence does not include details to confirm the identification of risks to women, children, and other vulnerable groups and the analysis of current and potential conflicts or violence in the affected communities.
3.5.2.4.	The operating company shall develop and implement a risk management plan that includes actions to be taken to prevent or mitigate identified risks and monitoring that will be conducted to ensure that mitigation measures are effective.	•	The evidence, Risk Management – company Security (2019) is a management plan that includes actions to be taken to prevent or mitigate identified risks. The evidence does not include security management for transportation (materials, equipment, regular staff, visits) outside of the company properties or monitoring to ensure the measures are effective.
3.5.2.5.	If the security risk assessment reveals the potential for conflicts between mine security providers and affected community members or workers, then the operating company shall collaborate with communities and/or workers to develop mitigation strategies that are culturally appropriate and that take into consideration the needs of women, children, and other vulnerable groups. If specific risks to human rights are identified in the assessment, the mitigation strategies shall conform with requirements in IRMA Chapter 1.3.	0	The evidence, Human Rights Due Diligence (2019) indicated risks of human rights impacts caused by the use of public security. The company provided donations to the local police force so that they would be equipped for routine patrolling and other public security activities. Per the report, this could result in a perceived lack of independence of the police force. The Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment (2019) indicates that the company has not collaborated with stakeholders on mitigation strategies.



Chapte	er 3.5—Security Arrangements		Basis for rating
			Interviews are needed (company, community) during the surveillance audit to confirm that prevention or mitigation strategies were or were not developed in collaboration with workers and community stakeholders.
3.5.3.1.	The operating company shall develop and implement due diligence procedures to prevent the hiring of company security personnel and private security providers who have been convicted of or credibly implicated in the infringement of human rights, breaches of international humanitarian law or the use of excessive force.	•	Interviews with mine management indicate that the company conducts criminal background checks on company security personnel and the private security provider. These background checks are done to ensure personnel have not been convicted or implicated in human rights breaches. The evidence does not include due diligence procedures to verify the security company meets the standard outside of the verification that is done during the recruitment and the company-contractor professional services agreement.
3.5.3.2.	The operating company shall make a good faith effort to determine if public security personnel providing security to the mine have been convicted of or credibly implicated in the infringement of human rights, breaches of international humanitarian law or the use of excessive force.	0	The company did not provide evidence indicating that it conducts background checks of public security personnel.
3.5.4.1.	Prior to deployment of company or private security personnel, the operating company shall provide training that incorporates, at minimum, information related to ethical conduct and affected communities, with particular reference to vulnerable groups, and the company's policy on the appropriate use of force and firearms. Initial training and refresher courses shall be mandatory for all operating company personnel involved in security, and for private security contractors that have not received equivalent training from their employers.	•	Per the contract between the company and the private security provider (June 2018), security personnel are to be trained on human rights issues two times a year. The training is to be guided by the UN Charter on Human Rights, the UN Global Compact, and the Guidelines for Human Rights Policy at Anglo American. The company provided evidence of their private security provider training its employees on human rights and appropriate use of force and firearms as indicated by training slides and attendance records (Training on Human Rights and Voluntary Principles, 2022).
3.5.4.2.	If public security forces are to be used, the operating company shall determine if public security personnel are provided with training on human rights and the appropriate use of force and firearms. If this training is not occurring, the company shall offer to facilitate	•	The company provided training documents from the local military police, which address human rights and proper use of force as indicated by training material such as Study Topics - Officer Training Course (2018) and The Role of Law Enforcement and Ethical and Legal Conduct (no date). The Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment (2019)



Chapte	er 3.5—Security Arrangements	Basis for rating
	training for public security personnel that provide mine-related security.	indicates that the company regularly invites the military police to attend their training and workshops on human rights.
3.5.5.1.	 The operating company shall: a. Develop and implement systems for documenting and investigating security incidents, including those involving impacts on human rights or the use of force; b. Take appropriate actions, including disciplinary measures, to prevent and deter abusive or unlawful acts by security personnel and acts that contravene the company's policies on rules of engagement, the use of force and firearms, human rights, and other relevant policies; c. Take appropriate actions to mitigate and provide remediation for human rights impacts (as per IRMA Chapter 1.3), injuries or fatalities caused by security providers; d. Report security incidents, including any credible allegations of human rights abuses by private or public security providers, to the competent authorities and national human rights institutions, and cooperate in any investigations or proceedings; e. Provide medical assistance to all injured persons, including offenders; and f. Ensure the safety of victims and those filing security-related allegations. 	The evidence, Rule for Investigation of Social Incidents (2019), and records from the grievance system Fale Conosco (2021), indicates the company has implemented a system to: a. Document, investigate and address all impacts including (presumed) incidents surrounding security and human rights or the use of force (Rule for Investigation of Social Incidents, 2019). Grievance records in the Fale Conosco (2021) system did not indicate the occurrence of security incidents. b. Take appropriate actions, including disciplinary measures, to prevent and deter abusive or unlawful acts by security personnel and acts that contravene the company's policies on rules of engagement, the use of force and firearms, human rights, and other relevant policies as indicated by the security provider's contract agreeing to the adherence to all company policies (Service Contract, 2018); c. Take appropriate actions to mitigate human rights impacts by training the public security forces as indicated by training sessions conducted by the company to teach public and private security on human rights as indicated by attendance records and training slides (2022 and 2023) and provide remediation for human rights impacts as indicated in chapter 1.3.4.1, where the company mitigated impacts of a pipeline burst; e. Provide medical assistance to all injured persons as indicated by the company's Emergency Preparedness and Response Procedure (2020); and f. Ensure the safety of victims and those filing security-related allegations by keeping names of aggrieved parties confidential as indicated in their Grievance
		Mechanism Policy (2020). The evidence does not indicate that the company has implemented a system to: d. Report security incidents, including any credible allegations of human rights abuses by private or public security providers, to the competent authorities and national human rights institutions, and cooperate in any investigations or proceedings.
		Interviews are needed (company) during the surveillance audit to confirm that relevant staff understands the procedures. Additional interviews will be



Chapte	r 3.5—Security Arrangements		Basis for rating
			conducted (company, community) to determine whether there have been any cases of inappropriate use of force, and that disciplinary actions were taken if applicable.
3.5.5.2.	In the event of security-related incidents that result in injuries, fatalities or alleged human rights impacts on community members or workers, the company shall provide communities and/or workers with information on the incidents and any investigations that are underway, and shall consult with communities and/or workers to develop strategies to prevent the recurrence of similar incidents.	_	Not relevant as the provided evidence does not indicate that any security incidents have occurred that led to injuries, fatalities, or human rights abuses. Interviews will be conducted (company, community) during the surveillance audit to confirm that no security incidents that led to injuries, fatalities, or human rights abuses occurred.
3.5.6.1.	If requested by a representative community structure, the operating company shall offer a briefing for community stakeholders on the company's procedures on the use of force and firearms.	•	The evidence indicates that the company has procedures and training material on the use of force and firearms and that it has adopted a Social Incidents System. The evidence indicates that no request has been made to receive briefing on these topics. The evidence did not indicate whether the company would offer a briefing upon request.
3.5.6.2.	The operating company shall consult regularly with stakeholders, including host governments and affected communities, about the impact of their security arrangements on those communities; and shall report to stakeholders annually on the company's security arrangements and its efforts to manage security in a manner that respects human rights.	•	The evidence indicates that the company has developed corporate policies on security arrangements (in general terms) and meets with stakeholders on a regular basis. The evidence does not indicate that stakeholders are regularly consulted or provided specific information on the company's security arrangements annually. Interviews are needed (company, community) during the surveillance audit to confirm the company consults regularly with stakeholders.
3.5.6.3.	Stakeholders shall have access to and be informed about a mechanism to raise and seek recourse for concerns or grievances related to mine security.	•	The evidence, a complaint from a community member involving mine site security (Contact Us, 2021), provides an example of stakeholders' awareness and ability to raise and seek recourse for concerns. The evidence also includes corporate policies regarding grievance handling. The evidence does not include specific procedures that confirm stakeholders' access to and if they are informed about mechanisms to raise and seek resource for concerns or grievances.



Chapter	3.5—Security Arrangements		Basis for rating
3.5.6.4.	If public security forces are providing security for any aspect of the mining project, the operating company shall encourage host governments to permit making security arrangements, such as the purpose and nature of public security, transparent and accessible to the public, subject to any overriding safety and security concerns.	0	The evidence does not include information to confirm that public security arrangements are made transparent and accessible. The Voluntary Principles on Security and Human Rights - Public Sector Security Risk Assessment (2019) indicates that the company is aware of this shortcoming and considers disclosing security arrangements with local communities. This will be verified during the surveillance audit.

Chapter 3.6—Artisanal and Small-Scale Mining		Basis for rating
Chapter Not Relevant	_	There are no artisanal and small-scale mines in close proximity to the project and the mine does not source any materials from artisanal and small-scale mines.

Chapte	r 3.7—Cultural Heritage		Basis for rating
3.7.1.1.	Screening, assessment and the development and implementation of mitigation measures and procedures related to the management of cultural heritage shall be carried out by competent professionals.	•	The evidence includes five (5) CVs of the personnel conducting screening, assessment, and the development of mitigation measures of cultural heritage projects and indicates that the work is completed by competent professionals. One of the CVs, an archaeologist/anthropologist, was not included in the evidence. The evidence does not include documentation of the mitigation measures implementation to confirm that it was carried out by competent personnel.
3.7.1.2.	Screening, assessment and the development of mitigation measures and procedures related to the management of cultural heritage shall include consultations with relevant stakeholders.	•	Records of meetings (Compliance with Condition 44 DA LP/LI No 01/2018, 2018) between the company and the Cultural Heritage Councils of the surrounding municipalities Alvorada de Minas, Mato Dentro, Serro, and Dom Joaquim indicate that the company has discussed the Preliminary Study of Impact on Cultural Heritage (EPIC) and the Report on Impact on Heritage (RPIC) with the councils. The councils agreed that the company fulfilled condition 44 of obtaining an operating license as per the Environmental Council of Minas Gerais (COPAM). The

Chapte	r 3.7—Cultural Heritage		Basis for rating
			impact assessments have been analyzed and approved by the State Institute of Historical and Artistic Heritage of Minas Gerais (IEPHA). Interviews are needed (company, community) during the surveillance audit to confirm that stakeholders have been consulted related to the screening, assessment and development of mitigation measures and procedures of cultural heritage.
3.7.1.3.	Cultural heritage assessments, management plans and procedures shall be made available upon request to community stakeholders and other stakeholders who have been engaged with the mine site on cultural heritage issues.	•	Records of meetings (Compliance with Condition 44 DA LP/LI No 01/2018, 2018) between the company and the Cultural Heritage Councils of the surrounding municipalities Alvorada de Minas, Mato Dentro, Serro, and Dom Joaquim indicate that the company has discussed the Preliminary Study of Impact on Cultural Heritage (EPIC) and the Report on Impact on Heritage (RPIC) with the councils. The company provided records of an e-mail communication where they shared lists of archaeological assets and mitigation plans with the Cultural Heritage Council of Mato Dentro upon request, indicating that they would also share physical copies of these documents. Interviews are needed during the surveillance audit to confirm that materials related to cultural heritage were provided upon request.
3.7.2.1.	Prior to the development of a new mine, or when there are significant changes to mining-related activities, the operating company shall undertake a screening process to identify risks and potential impacts to replicable, non-replicable and critical cultural heritage from the proposed mining-related activities.	•	The company distinguishes in its cultural heritage impact report Mina do Sapo Expansion Project (2018) between tangible assets (such as chapels and churches), intangible assets (such as festivals), and tangible/intangible assets (such as the farms producing artisanal cheese specific for the region). Although the report uses different vocabulary these categories correspond to IFC's definition of replicable, non-replicable, and critical cultural heritage.
3.7.2.2.	If the screening indicates the potential for replicable, non-replicable or critical cultural heritage to be encountered during mining-related activities, the operating company shall assess the nature and scale of the potential impacts and propose mitigation measures to avoid, minimize, restore or compensate for adverse impacts. Mitigation measures shall be consistent with the requirements below (see criteria	•	The cultural heritage impact report Mina do Sapo Expansion Project (2018, pages 77, and 78) indicates that the company undertakes screening and proposed mitigation measures for affected replicable, non-replicable, and critical cultural heritage. To compensate for cultural impacts created by the removal of some cultural heritage, the company agreed to develop an educational program on cultural heritage for the stakeholders, especially school children, for the



Chapte	er 3.7—Cultural Heritage		Basis for rating
	3.7.3, 3.7.4, 3.7.5 and 3.7.6), based on the type of cultural heritage likely to be affected.		surrounding communities as indicated in the report on preventative archaeological program carried out by the company (2019) as requested by the National Historic and Artistic Institute IPHAN.
			The evidence does not include information to confirm whether the company took all reasonable steps to avoid or mitigate impacts.
3.7.3.1.	 When tangible replicable cultural heritage that is not critical is encountered during mining-related activities the operating company shall apply mitigation measures that favor avoidance. Where avoidance is not feasible, the following mitigation hierarchy shall apply: a. Minimize adverse impacts and implement restoration measures, in situ, that ensure maintenance of the value and functionality of the cultural heritage, including maintaining or restoring any ecosystem processes needed to support it; b. Where restoration in situ is not possible, restore the functionality of the cultural heritage, in a different location, including the ecosystem processes needed to support it; c. Where restoring the functionality of the cultural heritage in a different location is not feasible, permanently remove historical and archeological artifacts and structures; and d. Where affected communities are using the tangible cultural heritage for long-standing cultural purposes compensate for loss of that tangible cultural heritage. 	•	The impact assessment in the cultural heritage impact report Mina do Sapo Expansion Project (2018, pages 73 and 74) indicates that no tangible replicable cultural heritage had to be removed or moved due to the mine expansion. The evidence indicates that the company used mitigation measures to avoid and/or reduce impacts to cultural heritage. The evidence does not include details to confirm that the company considered the mitigation strategy as outlined in sub-requirements (a) through (d) if avoidance was not feasible.
3.7.3.2.	All mitigation work involving tangible replicable cultural heritage shall be carried out and documented by competent professionals, using internationally recognized practices for the protection of cultural heritage.	0	The evidence includes a cultural heritage impact report Mina do Sapo Expansion Project (2018, pages 73 and 74), which was written by third-party Arcadis, and the CVs of the personnel undertaking the study indicating that they are competent professionals. The impact assessment in the report indicates that no tangible replicable cultural heritage had to be removed or moved due to the mine expansion. Impacts on tangible assets are predicted to be caused by an



Chapte	r 3.7—Cultural Heritage		Basis for rating
			increase of population in surrounding communities. To mitigate any potential impacts the company agreed to implement an educational preventative archaeological program as requested by the National Historic and Artistic Institute IPHAN. The implementation of the educational program is documented in the Report on Activities Carried Out from January to December 2019 (2020).
			An agreement with IPHAN from 2020 indicates that the company removed 99 archaeological sites during the Mina do Sapo expansion. The company agreed to compensate for the impact by funding the restoration of a local church. It is unclear whether these 99 sites were categorized as tangible replicable or tangible non-replicable cultural heritage. The evidence does not include documentation of mitigation work other than the educational program to confirm that any mitigation work involving tangible replicable cultural heritage was carried out by competent professionals, using internationally recognized practices.
			Community interviews are needed during the surveillance audit to determine their views on whether mitigation was carried out in a responsible and respectful manner.
3.7.4.1.	The operating company shall not remove any tangible nonreplicable cultural heritage, unless all the following conditions are met: a. The overall benefits of the mining project conclusively outweigh the anticipated cultural heritage loss from removal; and b. Any removal of cultural heritage is conducted using the best available technique.	_	The impact assessment in the cultural heritage impact report Mina do Sapo Expansion Project (2018, pages 73 and 74) indicates that no tangible non-replicable cultural heritage had to be removed due to the mine expansion. Interviews are needed during the surveillance audit to confirm that no tangible nonreplicable cultural heritage was removed unless the conditions in 3.7.4.1. were met.

Chapte	r 3.7—Cultural Heritage		Basis for rating
3.7.4.2.	All mitigation work involving tangible non-replicable cultural heritage shall be carried out and documented by competent professionals, using internationally recognized practices for the protection of cultural heritage.	0	An agreement with IPHAN from 2020 indicates that the company removed 99 archaeological sites during the Mina do Sapo expansion. It is unclear whether these 99 sites were categorized as tangible replicable or tangible non-replicable cultural heritage. The evidence does not include documentation of mitigation work to confirm that any mitigation work involving tangible non-replicable cultural heritage was carried out by competent professionals, using internationally recognized practices.
3.7.5.1.	Except under exceptional circumstances, the operating company shall not remove, significantly alter, or damage critical cultural heritage. In exceptional circumstances when impacts on critical cultural heritage are unavoidable, the operating company shall: a. Retain external experts to assist in the assessment and protection of critical cultural heritage, and use internationally recognized practices for the protection of cultural heritage; and b. Collaborate with affected communities to negotiate measures to protect critical cultural heritage and provide equitable outcomes for affected communities and document the mutually accepted negotiation process and outcomes. (Note: Where impacts may occur to indigenous peoples' critical cultural heritage, negotiation shall take place through the Free, Prior and Informed Consent process outlined in IRMA Chapter 2.2 unless otherwise specified by the indigenous peoples).		Not relevant. The evidence indicates that the company has not removed, significantly altered or damaged critical cultural heritage. The evidence indicates that the company categorizes the manufacturing of local cheese, which is specific for the region, as tangible/intangible assets corresponding to IFC's definition of cultural heritage. While the evidence indicates that the operation does not directly impact this cultural heritage, the company has made efforts to study the unique cheesemaking processes, support cheesemakers, and monitor and protect this cultural asset from mining-related impacts. (Cultural Heritage Impact Report - Mina do Sapo Expansion Project, 2018 and Protection and Monitoring of Cultural Heritage in Sao Sebastiao do Bom Sucesso, 2015). Interviews will be conducted (company, community) during the surveillance audit to confirm critical cultural heritage was not removed, significantly altered or damaged unless the company collaborated with affected communities on protective measures and equitable outcomes, and retained external experts to assist in the assessment and protection of critical cultural heritage.
3.7.5.2.	When a new mine is proposed within a legally protected cultural heritage area, including areas proposed by host governments for such designation, or a legally defined protected area buffer zone, the operating company shall: a. Comply with the requirement 3.7.5.1;	_	Not applicable as this is an existing mine.



Chapter	3.7—Cultural Heritage		Basis for rating
	 b. Comply with the protected area's management plan; c. Consult with agencies or bodies responsible for protected area governance and management, local communities, and other key stakeholders on the proposed mining project; and d. Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area. 		
3.7.5.3.	IRMA will not certify new mines that are developed in or that adversely affect the following protected areas if those areas were designated to protect cultural values (See also Chapter 4.6). · World Heritage Sites, and areas on a State Party's official Tentative List for World Heritage Site Inscription; · International Union for Conservation of Nature (IUCN) protected area management categories I-III; · Core areas of UNESCO biosphere reserves.	_	Not applicable. This is an existing mine, and the evidence does not indicate that there is a protected area as defined by UNESCO, IUCN, etc. within the mine concession.
3.7.5.4.	 An existing mine located entirely or partially in a protected area listed in 3.7.5.3 shall demonstrate that: a. The mine was developed prior to the area's official designation; b. Management plans have been developed and are being implemented to ensure that activities during the remaining mine lifecycle will not permanently and materially damage the integrity of the cultural values for which the area was designated or recognized; and c. The operating company collaborates with relevant management authorities to integrate the mine's management strategies into the protected area's management plan. 	_	Not applicable. This is an existing mine, and the evidence does not indicate that there is a protected area as defined by UNESCO, IUCN, etc. within the mine concession.
3.7.5.5.	To safeguard irreplaceable cultural heritage and respect indigenous peoples' right to selfdetermination, the operating company shall not carry out new exploration or develop new mines in areas where indigenous peoples are known to live in voluntary isolation.	•	The company has not undertaken any new exploration or developed new mines in areas where Indigenous peoples are known to live in voluntary isolation.



Chapte	r 3.7—Cultural Heritage		Basis for rating
3.7.6.1.	Where the operating company proposes to use the intangible cultural heritage, including knowledge, innovations or practices of local communities for commercial purposes, the company shall inform these communities of their rights under national and international law, of the scope and nature of the proposed commercial development, and of the potential consequences of such development.	_	Not relevant as the company does not use or proposes to use intangible cultural heritage of local communities for commercial purposes as indicated by evidence provided for this chapter.
3.7.6.2.	The operating company shall not proceed with such commercialization unless it: a. Collaborates with affected communities using a good faith negotiation process that results in a documented outcome; and b. Provides for fair and equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with local customs and traditions.	_	Not relevant as the company does not use or proposes to use intangible cultural heritage of local communities for commercial purposes as indicated by evidence provided for this chapter.
3.7.6.3.	Where the operating company proposes to use indigenous peoples' cultural heritage for commercial uses, negotiation shall take place through the Free, Prior and Informed Consent process outlined in IRMA Chapter 2.2 unless otherwise specified by the indigenous peoples.	_	Not relevant as the company does not use or proposes to use Indigenous peoples' cultural heritage for commercial purposes as indicated by evidence provided for this chapter.
3.7.7.1.	A cultural heritage management plan or its equivalent shall be developed that outlines the actions and mitigation measures to be implemented to protect cultural heritage.	•	The evidence, Archeological Preventive Program (2015), and Protection and Monitoring Program of Cultural Heritage (2015), describes the plan/measures to manage cultural heritage.
3.7.7.2.	If a new or existing mine is in an area where cultural heritage is expected to be found, the operating company shall develop procedures for: a. Managing chance finds, including, at minimum, a requirement that employees or contractors shall not further disturb any chance find until an evaluation by competent professionals is made and actions consistent with the requirements of this chapter are developed; b. Managing potential impacts to cultural heritage from contractors and visitors;	0	The evidence, Archaeological Monitoring Report Mina do Sapo Extension Project (2019), indicates that the company has implemented procedures for: a. Managing chance finds, including, at minimum, a requirement that employees or contractors shall not further disturb any chance find until an evaluation by competent professionals is made and actions consistent with the requirements of this chapter are developed;

Chapte	r 3.7—Cultural Heritage		Basis for rating
	 c. Allowing continued access to cultural sites, subject to consultations with affected communities and overriding health, safety, and security considerations; and d. If the mining project affects indigenous peoples' cultural heritage, the operating company shall collaborate with indigenous peoples to determine procedures related to the sharing of information related to cultural heritage. 		b. Managing potential impacts to cultural heritage from contractors; and c. Allowing continued access to cultural sites. As there are no Indigenous people in the area of direct or indirect influence of the mine sub-requirement d. is not relevant. Whilst the evidence indicates that procedures have been implemented, the company did not provide any actual procedures or policies on these topics. The evidence did not include a procedure for impacts caused by visitors.
3.7.7.3.	The operating company shall ensure that relevant employees receive training with respect to cultural awareness, cultural heritage site recognition and care, and company procedures for cultural heritage management.	•	The evidence, Final Report of Cultural Heritage Education by Arcadis (2019), describes the educational program, including internal collaborators of contracting companies. Key staff and contracting companies were trained and given information material on proper conduct and procedures when finding archeological remnants.

Principle 4: Environmental Responsibility

RATING LEGEND Description of performance



Chapte	r 4.1—Waste and Materials Management		Basis for rating
4.1.1.1.	The operating company shall develop a policy for managing waste materials and mine waste facilities in a manner that eliminates, if practicable, and otherwise minimizes risks to human health, safety, the environment, and communities.	•	The mine has seven (7) operating waste facilities, which are the Tailings Storage Facility (Barragem de Rejeitos), a waste rock storage facility (PDE Norte), and several sediment containment structures (Dikes 2, 3, 4, 5, and 6a). The evidence includes the company's group Processed Mineral Residue Facilities and Water Management Policy (December 2021) which describes the management of tailings dams, water dams, water diversion structures, waste storage facilities, and stockpiles. The policy includes a commitment to apply best available practices and technologies to eliminate, avoid, minimize, mitigate, remediate, rehabilitate, and offset potential impacts and risks on people, property, and the environment.
4.1.1.2.	The operating company shall demonstrate its commitment to the effective implementation of the policy by, at minimum: a. Having the policy approved by senior management and endorsed at the Director/Governance level of the company; b. Having a process in place to ensure that relevant employees understand the policy to a degree appropriate to their level of responsibility and	•	The company provided evidence indicating its commitment to the effective implementation of the policy as presented in the evidence: a. Having the group Processed Mineral Residue Facilities and Water Management Structures Policy (2021) approved by senior management and endorsed at the Director/Governance level of the company; and c. Having an environmental control plan (Group Mineral Residue Facilities and Water Management Standard and Technical Specifications (AA-TS-602-001, Version 5.2, September 2019) for the management of tailings dams, water

Chapte	er 4.1—Waste and Materials Management		Basis for rating
	function, and that they have the competencies necessary to fulfill their responsibilities; c. Having procedures and/or protocols in place to implement the policy; and d. Allocating a sufficient budget to enable the effective implementation of the policy.		dams, waste rock storage facilities, heap leach pads, and stockpiles including minimal requirements for siting, safe design, operation, and closure. The evidence does not include details to confirm that the company has a process to ensure employee training and competency as in (b), and that it allocates a sufficient budget to implement the policies as in (d).
4.1.2.1.	The operating company shall: a. Identify all materials, substances and wastes (other than mine wastes) associated with the mining project that have the potential to cause impacts on human health, safety, the environment or communities; and b. Document and implement procedures for the safe transport, handling, storage and disposal of those materials, substances and wastes.	•	The evidence, Solid Waste Management (2018) procedure, indicates that the company has: a. identified all materials, substances, and wastes (other than mine wastes) associated with the mining project that have the potential to cause impacts on human health, safety, the environment, or communities such as solid waste (plastic, glass, metal, hazardous waste, medical waste, radioactive waste etc.), sewage waste, and oily effluents; and b. a documented procedure for the safe transport, handling, storage, and disposal of those materials, substances, and wastes. The evidence does not include information to confirm the implementation of procedures for safe transport, handling, storage, and disposal of those materials, substances, and wastes.
4.1.3.1.	The operating company shall identify all existing and/or proposed mine waste facilities that have the potential to be associated with waste discharges or incidents, including catastrophic failures, that could lead to impacts on human health, safety, the environment or communities.	•	The evidence, Reserves Report (2020), presents existing mine waste facilities that have the potential to be associated with waste discharges or incidents, including catastrophic failures that could lead to impacts on human health, safety, the environment or communities. These include: one existing waste rock storage facility (North), one planned waste rock storage facility (South), and one tailings storage facility (TSF) located north of the pit that started its operation in 2014. The report indicates that the open pits' effluent is rainwater run-off and will be collected in a pond, treated, and released. The evidence, Mina do Sapo Extension Project - Adequacy of the Development Characterization, 2016, indicates the company has a system to identify proposed mine waste facilities.
4.1.3.2.	The operating company shall perform a detailed characterization for each mine waste facility that has associated chemical risks. Characterization shall include: a. A detailed description of the facility that includes geology, hydrogeology and hydrology, climate	•	Chemical characterizations of each mine waste facility with risks were presented as evidence by the company. Characterizations include: a. a detailed description of the mine premises that includes geology (EIA, 2007, Chapters 4.1.5 and 4.1.6), hydrography, hydrology, and hydrogeology (EIA, 2007, Chapters 4.1.8 and 4.1.9), all potential sources of MIW (Mina do Sapo Extension Project - Adequacy of the Development Characterization, 2016,



Chapter 4.1—Waste and Materials Management	Basis for rating
change projections, and all potential sources of mining impacted water (MIW); b. Source material characterization using industry best practice to determine potential for acid rock drainage (ARD) or metals leaching (ML). This shall include: i. Analysis of petrology, mineralogy, and mineralization; ii. Identification of geochemical test units; iii. Estimation of an appropriate number of samples for each geochemical test unit; and iv. Performance of comprehensive geochemical testing on all samples from each geochemical test unit. c. A conceptual model that describes what is known about release, transport and fate of contaminants and includes all sources, pathways and receptors for each facility; d. Water balance and chemistry mass balance models for each facility; and e. Identification of contaminants of concern for the facility/source materials, and the potential resources at risk from those contaminants.	pages 176 to 177, and Regional Water Balance, 2018, page 25 by consultancy ERM). The evidence includes a Climate Change Assessment (July 2023) prepared by third party WSP Ambiental, which includes projections for temperature, precipitation, and evapotranspiration up until the year 2100. b. source material characterization using industry best practice to determine the potential for acid rock drainage or metals leaching. Characterizations include baseline values for the chemical composition of geological units and analysis of stratigraphy, mineralogy, and the geochemistry of six (6) geological units (EIA, 2007, Chapter 4.1.5). Rock, soil, and water analysis background sampling indicates elevated concentrations (exceeding regulatory standards in some cases) of aluminum, manganese, and iron stemming from those naturally occurring in the geological formation. Geochemical samples of tailings are classified as Class IIA (Non-inert) according to standard NBR 10004:2004 Annex G (solubilization tests) and according to Standard NBR 10004:2004 Annex F (leaching tests) as indicated in the report Environmental Monitoring Around the Tailings Dam (July 2023, Chapter 4). The report further presents sample testing results for corrosivity and reactivity indicating that it is non-corrosive and non-reactive (Environmental Monitoring Around the Tailings Dam, July 2023, Chapter 4). The Ground Control Plan (August 2020) indicates that the waste rock storage facility's material is classified as Class IIB (inert and non-hazardous), indicating that the potential for acid rock drainage (ARD) is low (page 34). More recont composite sample analysis from three (3) different locations at the waste rock storage facility (Waste Pile Characterization PDE 2023 Composed Sample 1, 2 and 3, March 2023) indicate a waste classification of Class IIA (Non-inert), with pH values above 4.5 (low values of sulfate and hydrogen sulfide). Values for manganese, aluminum, and iron exceeded limits but are in line with background values obtained from rocks, soil



Chapter 4.1—Waste and Materials Management		Basis for rating
		monthly reports on water balances for each mine waste facility (Monthly Report - Water Balance, September 2019 to March 2023). e. Identification of contaminants of concern and the potential resources at risk from those contaminants as part of the conceptual site model and as explained in the Regional Water Balance report from 2018 (Part 2, page 30). This evidence is supplemented by ongoing monitoring (March 2021 and 2023) and related sampling of MIW and effluents characteristics in relationship to water flow and potential impacts to area surface and ground water. The evidence does not include a chemical mass balance model specific to its waste facilities
 4.1.3.3. The operating company shall identify the potent physical risks related to tailings storage facilities other mine waste facilities where the potential error catastrophic failure resulting in impacts on health, safety, the environment or communities. Evaluations shall be informed by the following: a. Detailed engineering reports, including site investigations, seepage and stability analyses b. Independent technical review (See criteria 4 c. Facility classification based on risk level or consequence of a failure, and size of the structure/impoundment; d. Descriptions of facility design criteria; e. Design report(s); f. Short-term and long-term placement plans schedule for tailings and waste rock or other facilities subject to stability concerns; g. Master tailings placement plan (based on life mine); h. Internal and external inspection reports and audits, including, if applicable, an annual datasafety inspection report; i. Facility water balances (See also 4.1.3.2.d); and j. Dam breach inundation (if applicable) and was rock dump runout analyses. 	and all kists uman s; s; and and all e of m d	The company has identified the potential physical risks related to its tailings storage facilities and its waste rock storage facility where the potential exists for catastrophic failure resulting in impacts on human health, safety, the environment, or communities. The company evaluation included: a. detailed engineering reports including site investigations, seepage, and stability analysis of the tailings dam such as the Design Basis Report (2023) by consultant WSP Consultoria e projetos do Brasil Ltda. for the TSF, and engineering design parameters and controls for maintaining stability and proper drainage of pit slopes including those of the waste rock storage facility as described in the Ground Control Plan from August 2020 (Chapters 6.2 and 7.1.2). b. independent technical reviews of the TSF performance and safety by different third-party consultants as indicated by the sample of Technical Dam Safety Audit Reports (RTSB) provided for the years 2014 to 2022. c. waste rock storage facility and stockpile stability rating and hazard classification (WSRHC) of the north waste rock storage facility as WHCII (moderate risk) as indicated by the operations' Ground Control Plan (2020, Chapter 6.2); and a TSF failure consequence classification as "major" according to the Consequence Classification Structure (CCS) and as "very high" per the Global Industry Standard for Tailings Management (CISTM) as indicated in the Memorandum on Consequence Classification of Failure of the Tailings Dam, which was provided to the company by consultant WSP Consultoria e projetos do Brasil Ltda. in May 2023. d. Design criteria for waste rock storage facilities as specified in the Ground Control Plan (2020, Chapter 6.2), and for the TSF as specified in the EIA (2016) for the Mina do Sapo Extension Project (Chapter 3.3.3.5.). e. design reports for both the TSF and waste rock storage facility (Design Basis Report, 2023 and Ground Control Plan, 2020, Chapters 6.2 and 7.1.2).



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			f. long-term plans for the TSF as indicated in the EIA from 2016 (Chapter 3.3.3.5), and long-term plans for the waste rock storage facility (Ground Control Plan, 2020, Chapter 6.2 and Reserves Report, 2020, Chapter 3.4.4.).
			g. tailings placement plans for the life of mine as described in the EIA for the Mina do Sapo Extension Project from 2016 (Chapter 3.3.3.5) and more recent evaluations of the TSF's placement plan considering the reduction of tailings and required storage volume if the company were to implement a new technology described in detail in the Technical Report on the Waste Disposal Plan for the second embankment raise of the TSF last reviewed in February 2023.
			h. internal, monthly inspection reports of the TSF, its dikes, filtration ponds and drainage system as indicated by Monthly Reports on the Safety of the TSF provided for all of 2022 and Q1 2023, and a sample of annual, third-party audits of the TSF's safety as evidenced by the Technical Dam Safety Audit Reports (RTSB) provided for the years 2014 to 2022.
			 facility water balances for the TSF as indicated by the TSF Prognosis (February 2023), which shows the expected TSF tailings levels for March 2023 to April 2025, Water Level and Volume Report (February 2021) and monthly reports on water balances for each mine waste facility (Monthly Report - Water Balance, September 2019 to March 2023).
			j. Dam breach inundation analysis and maps as indicated by the Technical Report on TSF Failure Modes and Effects (October 2022) by WSP Golder, as well as the Technical Report on Results of a Hypothetical Dam Breach (March 2023) by consultancy GWS Engenharia. The waste rock storage facility was classified as posing a moderate risk (Ground Control Plan, 2020, Chapter 6.2), and therefore a waste runout analysis is not required (refer to IRMA Notes on Requirement 4.3.1.1.).
			The evidence does not include short-term plans for the TSF and waste rock storage facility or any internal or external inspection reports or audits of the waste rock storage facility.
4.1.3.4.	Facility characterizations shall be updated periodically to inform waste management and reclamation decisions throughout the mine life cycle.	•	The evidence, the company's compliance tracker (Compliance Code Tailings Dam, 2020), indicates that data for the waste rock storage facility and TSF is updated and that relevant permits are obtained. Interviews with company personnel indicate operational procedures and an evaluation of the structure performance are regularly revised (once a year) or when significant process changes occur.
4.1.3.5.	Use of predictive tools and models for mine waste facility characterization shall be consistent with current industry best practice and shall be continually	•	The evidence, including a sample of Technical Reports of Safety Audits of the tailings dam (2021 and 2022), a sample of independent annual reviews of the TSF by a Technical Review Panel (2017 – 2020), and a conceptual site model to

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	revised and updated over the life of the mine as site characterization data and operational monitoring data are collected.		estimate the potential for mine-related contamination (ERM: Regional Water Balance Part 2, 2018, page 30), indicates that the company uses predictive tools and models to characterize its mine waste facilities. The engineering report (Design Basis Report, first created 2021, last updated 2023) indicates that the company uses site data to update models over time. Some of the TSF models were observed during the on-site audit. Interviews with workers and the management team indicate the mine waste management system considers site-specific and changing conditions and the inputs of various departments (i.e., geotechnical, water, environment). The evidence does not provide detail to confirm that the predictive tools and models are consistent with current industry best practice.
4.1.4.1.	 Critical A risk-based approach to mine waste assessment and management shall be implemented that includes: a. Identification of potential chemical risks (see 4.1.3.2.e) and physical risks (see 4.1.3.3) during the project conception and planning phase of the mine life cycle; b. A rigorous risk assessment to evaluate the potential impacts of mine waste facilities on health, safety, environment and communities early in the life cycle; c. Updating of risk assessments at a frequency commensurate with each facility's risk profile, over the course of the facility's life cycle; and d. Documented risk assessment reports, updated when risks assessments are revised (as per 4.1.4.1.c). 	•	 The risk-based approach to mine waste assessment and management that Minas-Rio has in place includes: a. identification of potential chemical risks during the project conception and mine life cycle (4.1.3.2.e), and identification of potential physical risks during the project conception and mine life cycle (4.1.3.3). b. the evidence, EIAs from 2007 and 2016, indicates that an evaluation of potential impacts on health, safety, environment, and communities based on a rigorous risk assessment was evaluated early in the life cycle. c. the evidence, a workplace risk assessment and control (WRAC) document for the mine site (Mine Site WRAC and Tailings Dam WRAC, first created July 2014 and last updated December 2019), indicates that the company updates its risk assessment regarding mine waste facilities over the course of the mine's life. Evidence for risk assessments of the tailings dam also include a list of Critical Controls (version 5, last updated November 2022) and Analyses of Failure Modes and Effects for the TSF and sediment containment ponds (October 2022). d. The evidence, including the WRACs for the site and TSF (December 2019) and several risk assessments are documented.
4.1.4.2.	The operating company shall carry out and document an alternatives assessment to inform mine waste facility siting and selection of waste management practices. The assessment shall: a. Identify minimum specifications and performance objectives for facility performance throughout the	•	The company carried out and documented an alternatives assessment in its EIA (2007) to inform mine waste facility siting and selection of waste management practices. The assessment: a. identifies minimum specifications and performance objectives for facility performance throughout the mine life cycle for waste rock storage facilities (Chapter 2.2.2.3.) and the tailings dam (Chapter 2.2.2.5), including mine closure objectives and post-closure land and water uses (Chapters 7.2 and 7.3); and



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	mine life cycle, including mine closure objectives and post-closure land and water uses; b. Identify possible alternatives for siting and managing mine wastes, avoiding a priori judgements about the alternatives; c. Carry out a screening or "fatal flaw" analysis to eliminate alternatives that fail to meet minimum specifications; d. Assess remaining alternatives using a rigorous, transparent decision-making tool such as Multiple Accounts Analysis (MAA) or its equivalent, which takes into account environmental, technical, socio-economic and project economics considerations, inclusive of risk levels and hazard evaluations, associated with each alternative; e. Include a sensitivity analysis to reduce potential that biases will influence the selection of final site locations and waste management practices; and f. Be repeated, as necessary, throughout the mine life cycle (e.g., if there is a mine expansion or a lease extension that will affect mine waste management).		 b. identifies and analyzes alternatives for the siting of waste rock storage facilities and the tailings dam (Chapter 2.4.2.1 and 2.4.2.3.) considering technical, environmental, socio-economic, and project economics aspects and impacts and managing mine wastes (pages 149 to 157); and c. Includes a fatal flaw analysis to eliminate alternatives that fail to meet minimum specifications (Chapter 2.4.2.1 and 2.4.2.3.). The evidence does not include details to confirm that the assessment considers risk levels and hazard evaluations associated with each alternative. The assessments did not include a sensitivity analysis to reduce the potential that biases will influence the selection of final site locations and waste management practices. The evidence did not indicate that the assessment is conducted repeatedly or as necessary, throughout the mine life cycle.
4.1.5.1.	Critical Mine waste facility design and mitigation of identified risks shall be consistent with best available technologies (BAT) and best available/applicable practices (BAP).	•	The mine waste facility design and mitigation of identified risks are consistent with best available technologies and available/applicable practices. The evidence, including the company's compliance tracker (Compliance Code Tailings Dam, 2020), indicates the company periodically performs various monitoring and safety controls, complying with federal, state, internal and international regulations. The TSF complies with: Federal regulations Portaria DNPM 70.389/2017 Lei 12.334/2010 Resolução ANM 13/2019 NR 22 - Segurança e Saúde Ocupacional na Mineração NBR ABNT 13.028/2017



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			 Lei 23.291/2019 Deliberações Normativas COPAM 62/2002; 87/2005; 124/2008 Licença de Operação nº 320 (included as a corporate control) Corporate Manual de Operação NR 22 - Segurança e Saúde Ocupacional na Mineração (Monitoramento ambiental, de instrumentação, geotécnico) Mineral Residue Facilities and Water Management Structures Standard (Technical Standard AA TS 602 001) International Global Tailings Standard - ICMM (including 68 of its 77 requirements).
4.1.5.2.	Mitigation of chemical risks related to mine waste facilities shall align with the mitigation hierarchy as follows: a. Priority shall be given to source control measures to prevent generation of contaminants; b. Where source control measures are not practicable or effective, migration control measures shall be implemented to prevent or minimize the movement of contaminants to where they can cause harm; and c. If necessary, MIW shall be captured and treated to remove contaminants before water is returned to the environment or used for other purposes.	•	The evidence, Processed Mineral Residue Facilities and Water Management Policy (December 2021), which describes the management of waste facilities, states that the company is committed to applying best available practices and technologies to eliminate, avoid, minimize, mitigate, remediate, rehabilitate, and offset potential impacts and risks on people, property, and the environment. The evidence indicates that the company has implemented following controls: a. chemical and physical tailings treatment as indicated by the Water Resource Management Program (2020, Chapters 2.3.), b. sedimentation traps and containment structures around the waste rock storage facility, and drainage systems to collect rainwater run-off from waste rock storage facilities and the open pit (Ground Control Plan, 2020, Chapter 7), c. rainwater and sediment collection, treatment, and release in dikes 3, 4, 5 and 6A (EIA, Chapter 3.2.5., 2015), clarification ponds for tailings pond overflow, water-oil-separation systems, and sewage water treatment to make water acceptable for re-use or discharge into the tailings pond as indicated by the Water Resource Management Program (2020, Chapters 2.3.), and a sample of Monthly Reports - Water Balance (September 2019 to March 2023).
4.1.5.3.	For high consequence rated mine waste facilities, a critical controls framework shall be developed that aligns with a generally accepted industry framework, such as, for example, the process outlined in Mining Association of Canada's Tailings Management Guide.	•	The company developed a critical controls framework (Critical Control index for a Tailings Dam Rupture, no date) for the high consequence rated mine waste facilities (TSF). The evidence, including the company's compliance tracker (Compliance Code Tailings Dam, 2020), indicates that the company periodically performs various monitoring and safety controls, complying with internal, state,

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			federal, and international regulations. In addition, the company is working towards alignment to the Global Industry Standard for Tailings Management (GISTM).
4.1.5.4.	Mine waste management strategies shall be developed in an interdisciplinary and interdepartmental manner and be informed by site-specific characteristics, modeling and other relevant information.	•	The mine has developed models of the TSF and has implemented a robust system for real-time monitoring, which was observed during the on-site audit, this includes 24/7 real time monitoring. Interviews with workers and the management team indicate the mine waste management system considers site-specific and changing conditions and the inputs of various departments (i.e., geotechnical, water, environment). Authorities also have access to this data. Additionally, an interdisciplinary panel of international experts reviews the TSF related information periodically.
4.1.5.5.	The operating company shall develop an Operation, Maintenance and Surveillance (OMS) manual (or its equivalent) aligned with the performance objectives, risk management strategies, critical controls and closure plan for the facility, that includes: a. An operations plan that documents practices that will be used to transport and contain wastes, and, if applicable, effluents, residues, and process waters, including recycling of process waters; b. A documented maintenance program that includes routine, predictive and event-driven maintenance to ensure that all relevant parameters (e.g., all civil, mechanical, electrical and instrumentation components of a mine waste facility) are maintained in accordance with performance criteria, company standards, host country law and sound operating practices; c. A surveillance program that addresses surveillance needs associated with the risk management plan and critical controls management, and includes inspection and monitoring of the operation, physical and chemical integrity and stability, and safety of mine waste facilities, and a qualitative and quantitative comparison of actual to expected behavior of each facility; d. Documentation of facility-specific performance measures as indicators of effectiveness of mine waste management actions; and		The company has several control plans and programs in place that include: a. an operations plan that documents practices that will be used to transport and contain wastes, and, if applicable, effluents, residues, and process waters, including recycling of process waters as indicated by the Solid Waste Management Program (2016), procedure on Sewage Treatment (no date) and plans on sediment containment (PCA, pages 119 to 200). b. the company's group Standard and Technical Specifications on Processed Mineral Residue Facilities and Water Management Structures (AA TS 602 001, version 6, September 2022), that outlines a detailed maintenance program for the TSF. The company's compliance tracker (Compliance Code Tailings Dam, 2020), which indicates that the tailings dam safety plan complies with federal, state, and international standards. During the site visit the staff mentioned that in 2022 Minas-Rio will begin the certification process against the ICMM tailings standard. c. a surveillance program for the tailings storage facility (Procedure for Geotechnical Inspection of TSF, 2019; Geotechnics and Hydrogeology Procedure - Regular Routine Safety Inspection of Dams, 2019; and Bathymetry 2020), Water balance Prognosis (Integrated Quality - Quantity Prognosis, no date) for the TSF's Water Level and Volume Reports (February 2021), which also investigates the facilities' stability. The Ground Control Plan (2022) indicates that there are operational procedures in place for the inspection of slopes across the mine operation, and the inspection and the evaluation of geotechnical integrity of waste rock storage facilities (Chapter 8) last reviewed in year 2020. d. documentation of facility-specific performance measures as indicators of the effectiveness of mine waste management actions as indicated by the Minas-



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	e. Documentation of risk controls and critical controls (see also 4.1.5.3), associated performance criteria and indicators, and descriptions of predefined actions to be taken if performance criteria are not met or control is lost.		Rio TSF performance review and risk findings in the GISTM Disclosure Report: Minas-Rio Tailings Storage Facility – Barragem de Rejeito (pages 6 to 7); and e. The presentation Critical Risk Management (2021) lists performance criteria and indicators as well as implemented and planned actions to improve risk control and meet performance criteria. The evidence does not include a maintenance or surveillance program or an operational procedure for the waste rock storage facility.
4.1.5.6.	 Critical On a regular basis, the operating company shall evaluate the performance of mine waste facilities to: a. Assess whether performance objectives are being met (see 4.1.4.2.a and 4.1.5.5); b. Assess the effectiveness of risk management measures, including critical controls (see 4.1.5.3); c. Inform updates to the risk management process (see 4.1.4.1.c) and the OMS (see 4.1.5.7); and d. Inform the management review to facilitate continual improvement (see 4.1.5.8). 	•	The company continuously evaluates the performance of the mine waste facilities as required by local legislation and complies with international best practices. A regular routine safety inspection of the tailings dam takes place every two weeks and is carried out by the Geotechnics and Hydrogeology Management team. The completion of the Inspection Form is mandatory for every geotechnical inspection, even if no anomalies are identified. If, during the Inspection, anomalies are identified, the inspectors follow the communication protocol and the chain of actions as presented in the Emergency Action Plan. All anomalies must be evaluated and classified according to the Emergency Levels (levels 1 to 4). The plan defines the procedures to be followed in an incident or accident with a risk of rupture of the dam. The bathymetric survey of the tailings dam is bimonthly. Also, the company has implemented a robust system for real-time monitoring of the geotechnical stability of the mine, which includes satellite and structural monitoring, cameras, and an alarm system to alert communities in case of an emergency.
4.1.5.7.	The OMS manual shall be updated and new or revised risk and critical control strategies implemented if information reveals that mine waste facilities are not being effectively operated or maintained in a manner that protects human health and safety, and prevents or otherwise minimizes harm to the environment and communities.	•	 Following evidence indicates that the company updates parts of its control plans and programs that make up the OMS manual: The evidence, Dam Audit (last updated November 2022), is an Excel sheet in which the company tracks implementation of recommendations obtained through independent reviews, and tracks progress including progress on updates to OMS related documentation of the TSF. The engineering report (Design Basis Report, first created 2021, last updated 2023) outlines basic criteria for the construction, operation, closure, and post-closure phases of the TSF and states that it shall be updated necessary (page 4). The compliance tracker (Compliance Code Tailings Dam, 2020) indicates that plans and programs are updated as necessary to comply with various internal and legal requirements of monitoring and inspection systems.



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			Interviews with company personnel indicate operational procedures and an evaluation of the structure performance are regularly revised (once a year) or when significant process changes occur.
4.1.5.8.	The operating company shall implement an annual management review to facilitate continual improvement of tailings storage facilities and all other mine waste facilities where the potential exists for contamination or catastrophic failure that could impact human health, safety, the environment or communities. The review shall: a. Align with the steps outlined in the Mining Association of Canada's Tailings Management Protocol or a similar framework; and b. Be documented, and the results reported to an accountable executive officer.	0	The evidence includes a sample of Declarations of the Stability Conditions (2019 – 2022) for the TSF, which are signed by civil engineers and by management level personnel, such as general managers or technical directors. These declarations indicate that management is involved in reviewing the stability report for the TSF. The information does not indicate the company has implemented and documented an annual management review of all mine waste facilities, including waste rock storage, fully aligned with the steps outlined in the Mining Association of Canada's Tailings Management Protocol or a similar framework with the results reported to an accountable executive officer.
4.1.6.1.	The siting and design or re-design of tailings storage facilities and other relevant mine waste facilities, and the selection and modification of strategies to manage chemical and physical risks associated with those facilities shall be informed by independent reviews throughout the mine life cycle.	•	The evidence includes a sample of independent annual reviews of the TSF by a Technical Review Panel (2017 – 2020), and a sample of semiannual TSF Safety Inspection Reports by third parties (2019-2022), which include recommendations on how to improve TSF management, indicating that there are regular independent reviews of the company's tailings management. The evidence, Dam Audit (last updated November 2022), is an Excel sheet in which the company enters recommendations obtained through independent reviews and tracks its implementation of these recommendations, as applicable, including recommendations made on placement of dam raises.
			The evidence does not include details to confirm whether the siting and design of all relevant mine waste facilities (including waste rock storage facilities) and the selection and modification of strategies to manage chemical and physical risks are informed by independent reviews.
4.1.6.2.	Reviews shall be carried out by independent review bodies, which may be composed of a single reviewer or several individuals. At high-risk mine waste facilities, a panel of three or more subject matter experts shall comprise the independent review body.	•	The evidence, a synopsis of the annual technical review of the TSF (Fourth Meeting Technical Review Panel - TRP Main Tailings Dam, 2020), included the last dam safety audit technical report as an example of the annual evaluation performed by the company. The panel includes some of the company's own engineers as well as eleven consultants listed as geotechnical, hydrology, hydraulic, and structural engineering.

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4.1.6.3.	Independent reviewers shall be objective, third-party, competent professionals.	0	The evidence, a report on the Fourth Meeting Technical Review Panel - TRP Main Tailings Dam (2020), does not indicate whether the consultants are sufficiently independent and were not supplemented with procedures or terms of reference governing the independent review process, documentation such as letters of engagement identifying independent review body members or documentation of independent reviewer qualifications.
4.1.6.4.	Independent review bodies shall report to the operation's general manager and an accountable executive officer of the operating company or its corporate owner.	0	The report on the Fourth Meeting Technical Review Panel - TRP Main Tailings Dam (2020) indicates that results were presented to the company's management. The report does not clarify whether the audience included accountable executive officers.
4.1.6.5.	The operating company shall develop and implement an action plan in response to commentary, advice or recommendations from an independent review, document a rationale for any advice or recommendations that will not be implemented, and track progress of the plan's implementation. All of this information shall be made available to IRMA auditors.	•	The evidence, Dam Audit (last updated November 2022), is an Excel sheet in which the company enters recommendations obtained through independent reviews and tracks its implementation of these recommendations, as applicable. The excel sheet also documents rationale for any recommendation that will not be implemented.
4.1.7.1.	Stakeholders shall be consulted during the screening and assessment of mine waste facility siting and management alternatives (see 4.1.4.2), and prior to the finalization of the design of the facilities.		The provided evidence, a Public Hearing held on July 20 th , 2017, on the Minas do Sapo Expansion Project, does not provide information to confirm whether mine waste facility siting and management alternatives were discussed with stakeholders and how the feedback was incorporated into the final design of the facilities.
		0	Interviews with stakeholders during the surveillance audit are needed to confirm communities were consulted on alternatives for siting of facilities that pose a risk to community health and safety and the environment; on the mitigation strategies to be employed to prevent or minimize impacts from these facilities; and that they were consulted prior to the company's sign off on the final design of the facilities.
4.1.7.2.	Emergency preparedness plans or emergency action plans related to catastrophic failure of mine waste facilities shall be discussed and prepared in consultation with potentially affected communities and workers and/or workers' representatives, and in collaboration with first responders and relevant government agencies. (See also IRMA Chapter 2.5).	•	Emergency preparedness plans related to catastrophic failure of mine waste facilities were developed. As observed at the site these include a network of alarms, and contacts in the communities located in the area around the mine and TSF. The evidence, an example of one of the annual simulations (example correspondent to the simulation conducted in 2019) with the fire department, employees, and communities, indicates the disclosure process of this EPRP with local communities.



Chapte	r 4.1—Waste and Materials Management		Basis for rating
			The evidence does not include information to confirm that the company collaborates with local communities, workers, first responders and government agencies in the creation of the plan.
4.1.7.3.	Emergency and evacuation drills (desktop and live) related to catastrophic failure of mine waste facilities shall be held on a regular basis. (See also IRMA Chapter 2.5).	•	The evidence included an example of one of the annual simulations (example correspondent to the simulation conducted in 2019): a hypothetical situation of failure of the tailings dam carried out by the Civil Defense teams of the municipalities of Conceição do Mato Dentro and Alvorada de Minas on November 26, 2019, involving communities and employees. The main objective of the exercise was to train the population located in the Self-Rescue Zone regarding the warning systems and evacuation procedures, as well as the organizations and people involved in emergency response regarding the command-and-control methodology that will be used in a crisis. Interviews with stakeholders and company personnel during the surveillance audit are needed to confirm that evacuation drills are held regularly aligned to Chapter 2.5 criteria.
4.1.7.4.	If requested by stakeholders, the operating company shall report to stakeholders on mine waste facility management actions, monitoring and surveillance results, independent reviews and the effectiveness of management strategies.	_	Not relevant. While the company has communicated the TSF design and EPRP, there is no evidence stakeholders have requested information on mine waste facility management actions, monitoring and surveillance results, independent reviews, and the effectiveness of management strategies. This will be reconfirmed at the time of the surveillance audit.
4.1.8.1.	Critical At the present time, mine sites using riverine, submarine and lake disposal of mine waste materials will not be certified by IRMA.	•	Observations during the site visit indicate that the mine does not dispose of any mine waste materials in rivers, lakes, or oceans. The mine waste disposal facilities are all situated near the mining site. The tailings are placed in a tailings storage facility and the waste rock storage facility is positioned away from rivers and lakes.

Note: Please note that the evaluation of the aforementioned IRMA requirements pertaining to the structural stability of mining facilities (such as TSF, open pit, dams, reservoirs, etc.) should not be misconstrued as a certification of these structures. The responsibility for certifying the stability of these structures lies with authorized technical and governmental organizations and is beyond the scope of the IRMA assessment. In conducting this assessment, the auditing team exercised professional judgment based on the information available to them, demonstrating the same level of care and skill typically employed under similar circumstances by reputable consultants providing comparable services in the same geographical area. It is important to acknowledge that reasonable individuals may hold differing views on matters involving professional judgment, which could consequently lead to varying opinions on a question of professional judgment.



Chapte	er 4.2—Water Management		Basis for rating
4.2.1.1.	The operating company shall identify water users, water rights holders and other stakeholders that may potentially affect or be affected by its mine water management practices.		The evidence is a document listing Grants for the Use of Water Resources (no date) in the area around the mine, indicating that the company has identified water users, water rights holders and other stakeholders that may potentially affect or be affected by the mine's water management practices.
		•	The list of water users does not indicate clearly whether all listed users may be potentially affected or are affected.
			Interviews are needed (community) during the surveillance audit to determine stakeholder's views on whether or not the company's efforts to identify water users are sufficient.
4.2.1.2.	The operating company shall conduct its own research and collaborate with relevant stakeholders to identify current and potential future uses of water at the local and regional level that may be affected by the mine's water management practices.	•	There are several reports (Follow-up Report on Dispersed Users, 2015 and Technical Report on Monitoring of Dispersed Users, 2020) that the company compiled to identify current uses of water resources. The company obtained a license (Authorization to Drill a Well, 2021) to drill a well in Mato Dentro intended to supply stakeholders with drinking water for human and livestock consumption and for irrigation purposes. The company foresees changes in water quantity in the local basin once it needs to lower the groundwater level to continue mining (Regional Water Balance, 2018, page 60) and has evaluated future demands of water for the region (Regional Water Balance, 2018, page 18). The evidence includes meeting minutes with the community from 2017 to 2021 that indicate the company has consulted with relevant stakeholders on current and potential future water uses that may be affected by the mine's water management. Interviews with water stakeholders are needed during the surveillance audit to confirm the company has used stakeholder input on current and future local and regional water uses.
4.2.1.3.	The operating company shall conduct its own research and collaborate with relevant stakeholders to identify and address shared water challenges and opportunities at the local and regional levels, and shall take steps to contribute positively to local and regional water stewardship outcomes.	•	The evidence (Follow-up Report on Dispersed Users, 2015, Technical Report on Monitoring of Dispersed Users, 2020, EIA, 2007) indicates the company has conducted research related to water challenges and opportunities at the local and regional levels and shared the results of project-related water quality monitoring with stakeholders. The company collaborated with relevant stakeholders on mitigation options for potential impacts on water quality and quantity as indicated by meeting minutes with the community from March 2020 and September 2021. The evidence indicates that the company supports local water projects and has taken steps to positively contribute to local and regional stewardship by drilling a well in the Mento Dentro community to supply

Chapte	r 4.2—Water Management		Basis for rating
			drinking water, improving water collection systems of remote families (Supply System Maintenance, 2020), and increasing water availability of the local basin for communities (Technical Proposal, 2020). Interviews are needed to confirm the company has worked cooperatively with relevant stakeholders to identify and address water challenges and improve
			water stewardship outcomes.
4.2.2.1.	The operating company shall gather baseline or background data to reliably determine: a. The seasonal and temporal variability in: i. The physical, chemical and biological conditions of surface waters, natural seeps/springs and groundwater that may be affected by the mining project;	•	The evidence indicates that the company has gathered information on background conditions since they took over the Minas-Rio project in 2007, including those listed in (a) (i.e., physical, chemical and biological conditions of surface waters, natural seeps/springs and groundwater, including seasonal variability, in water quality and quantity potentially affected by the mine), and (b) (sources of contamination and changes in water quantity or quality unrelated to the mine).
	 ii. Water quantity (i.e., flows and levels of surface waters, natural seeps/springs and groundwater) that may be affected by the mining project; and b. Sources of contamination and changes in water quantity or quality that are unrelated to the mining project. 		The evidence does not include an integrated map identifying the mine area of influence (i.e., water use, potential pollution sources) and physical characteristics such as the location of water resources, direction of groundwater and surface water flow, depth to groundwater, location and design of monitoring wells, water user location and data (i.e., municipal wells, livestock, recreation).
4.2.2.2.	The operating company shall carry out a scoping process that includes collaboration with relevant stakeholders, to identify potentially significant impacts that the mining project may have on water quantity and quality, and current and potential future water uses. The scoping process shall include evaluation of: a. The mining-related chemicals, wastes, facilities and activities that may pose a risk to water quality; and b. The mine's use of water, and any mining activities that may affect water quantity.	•	The evidence indicates the company has carried out scoping during their initial Environmental Impact Assessment (2007) to identify potentially significant mine-related impacts on water quantity and quality (current and future use) identified in (a) to (b) and is continuously monitoring water quality and water levels as indicated by several lab sample reports and water balance reports. The scoping of impacts has further been informed by two studies, including the Hydrological Model and Lowering Plan for the Water Level of Mina do Sapo for the years 2013 – 2019 (April 2013) and for the years 2020 – 2030 (May 2020), which investigate the possible impacts on regional water bodies caused by the company's lowering of the groundwater level. The studies identify potential impacts on the water supply of the communities of São Sebastião do Bom and Cabeceira do Turco and list possible mitigation measures (Chapter 7).
			The PCA for the Coexistence Program (April 2018) indicates that the company has held several meetings with the stakeholders from São Sebastião do Bom Sucesso, Turco, Cabeceira do Turco, and Beco between the beginning of 2017 and 2018, in which they have identified impacts on water and collaboratively



Chapte	r 4.2—Water Management		Basis for rating
			developed plans for a new water distribution network, and guidelines for the conscious use of water and water tank cleaning (Chapter 2.7). Meeting minutes from March 3rd, 2020, with 20 attendants, and from September 12th, 2020, with 17 attendants indicate that the company has collaborated with the community of Turco to develop strategies that aim to mitigate impacts caused by mine expansion work (construction of Dike 5).
4.2.2.3.	Where potential significant impacts on water quantity or quality, or current and future water uses have been identified, the operating company shall carry out the following additional analyses to further predict and quantify the potential impacts: a. Development of a conceptual site model (CSM) to estimate the potential for mine-related contamination to affect water resources; b. Development of a numeric mine site water balance model to predict impacts that might occur at different surface water flow/groundwater level conditions (e.g., low, average and high flows/levels); c. If relevant, development of other numerical models (e.g., hydrogeochemical/hydrogeological) to further predict or quantify potential mining-related impacts on water resources; and d. Prediction of whether water treatment will be required to mitigate impacts on water quality during operations and mine closure/post-closure.		The company has carried out the following additional analyses to predict and quantify the potential impacts: a. development of a conceptual site model (CSM) to estimate the potential for mine-related contamination to affect water resources (Regional Water Balance Part 2, 2018, page 30); and b. development of a stochastic model to simulate water balances as indicated by a presentation on Water Balance Simulations (2020); and c. a study for the hydrogeological impact of water level lowering for expansion of the pit (Hydrogeological Model and Simulation of Lowering the Water Level, 2013); and d. evaluated whether water treatment will be required as evidenced in the report on Regional Water Balance (2018) that describes the mine is treating sewage water before releasing it to waterways, as well as threats to water quality related to the TSF. Besides the mine, studies indicate local water quality is partially impacted by untreated sewage from surrounding communities, with impacts being higher during low rain seasons when the flow of the rivers decreases. The Regional Water Balance Part 2 (2018, page 61) indicates that water quality might improve over time due to ongoing sanitation efforts and a migration of community members to cities, which results in lower sewage waste generation and release. The company indicated that no water treatment will be necessary during mine closer and post-closure, as impacts on water quality are anticipated to be low (Preliminary Mine Closure Plan, 2019, page 52).
4.2.2.4.	Use of predictive tools and models shall be consistent with current industry best practices, and shall be continually revised and updated over the life of the mine as operational monitoring and other relevant data are collected.	•	The evidence (4.2.2.4) indicates the company has utilized predictive tools and models consistent with current best practices. The hydrological studies are well-prepared and updated to reflect changing conditions over time. The evidence indicates the company plans to prepare new predictive tools and models for the next phases of the operation.
4.2.3.1.	The operating company, in collaboration with relevant stakeholders, shall evaluate options to mitigate predicted significant adverse impacts on water quantity and quality, and current and potential future	•	The evidence, including meeting minutes with the community from 2017 – 2021 and an agreement with the state of Minas Gerais on water classification and discharge conditions (May 2008), indicates the company has consulted with relevant stakeholders, including authorities and water users to evaluate options



Chapter 4.2—Water Management			Basis for rating
	water uses that may be affected by the mine's water management practices. Options shall be evaluated in a manner that aligns with the mitigation hierarchy.		to mitigate predicted significant adverse impacts on water quantity and quality, and current and potential future water uses that may be affected by the mine's water management practices following the mitigation hierarchy. The PCA for the Coexistence Program (April 2018) indicates that the company has held several meetings with stakeholders from São Sebastião do Bom Sucesso, Turco, Cabeceira do Turco, and Beco between 2017 and 2018, in which they have collaboratively developed plans for a new water distribution network, and guidelines for the conscious use of water and water tank cleaning (Chapter 2.7). Meeting minutes from March 3rd, 2020, with 20 attendants, and from September 12th, 2020, with 17 attendants indicate that the company has collaborated with the community of Turco to develop the relocation of a water network so that communities would not be affected by expected damage to the existing network due to mining-related construction work. Community interviews are needed during the surveillance audit to confirm the company has collaborated with stakeholders in the development of mitigation options.
4.2.3.2.	If a surface water or groundwater mixing zone is proposed as a mitigation strategy: a. A risk assessment shall be carried out to identify, evaluate and document risks to human health, local economies and aquatic life from use of the proposed mixing zone, including, for surface water mixing zones, an evaluation of whether there are specific contaminants in point source discharges, such as certain metals, that could accumulate in sediment and affect aquatic life; and b. If any significant risks are identified, the operating company shall develop mitigation measures to protect human health, aquatic life and local economies including, at minimum: i. Surface water or groundwater mixing zones are as small as practicable; ii. Water in a surface water mixing zone is not lethal to aquatic life; iii. A surface water mixing zone does not interfere with the passage of migratory fish; iv. Surface water or groundwater mixing zones do not interfere with a pre-mine use of water	_	Not applicable. According to the company it does not propose a mixing zone as a mitigation measure.



Chapter 4.2—Water Management			Basis for rating
	for irrigation, livestock or drinking water, unless that use can be adequately provided for by the operating company through another source of similar or better quality and volume, and that this substitution is agreed to by all potentially affected water users; and v. Point source discharges into a surface water mixing zone match the local hydrograph for surface water flows to the extent practicable.		
4.2.3.3.	Waters affected by the mining project shall be maintained at a quality that enables safe use for current purposes and for the potential future uses identified in collaboration with relevant stakeholders (see 4.2.1.2). In particular, the operating company shall demonstrate that contaminants measured at points of compliance are: a. Being maintained at baseline or background levels; or b. Being maintained at levels that are protective of the identified uses of those waters (See IRMA Water Quality Criteria by End Use Tables 4.2.a to 4.2.h, which correspond to particular end uses).	•	The evidence, a report of the company's Water Resource Management Program (2020), which includes monitoring results for all surface water and groundwater monitoring stations for 2020, indicates that the company's contaminants measured at points of compliance are: a. Being maintained at baseline levels which include elevated background concentrations of dissolved iron and manganese exceeding federal limits at some monitoring points and do not meet drinking water quality as defined in the IRMA Water Quality Criteria by End Use (but meet requirements for animal consumption and irrigation). The high content of dissolved iron and manganese can be attributed to the geological characteristics of the region, as waterbodies outside of the mine's direct and indirect area of influence, and elevated levels of thermotolerant coliforms were traced back to animal husbandry and disposal of sanitary sewage along the watercourses as indicated by the report on the Water Resource Management Program (2020, page 92). The report concludes in Chapter 5 that the mining operation did not have an effect on the water quality and thus the water quality remains at the baseline levels.
4.2.3.4.	Unless agreed by potentially affected stakeholders, water resources affected by mining activities shall be maintained at quantities that enable continued use of those resources for current purposes and for the potential future uses identified in collaboration with relevant stakeholders (see 4.2.1.2).	•	The grievance log (Fale Conosco, 2021) indicates that stakeholders have made complaints about silting and a reduction of quantity of natural water resources. The company responded that since their water quality and quantity monitoring submitted annually to the environmental agency do not indicate any significant impact by the mining operation in both cases other factors are at play (silting was determined to be at normal levels and the quantity reduction was due to the unusual low rainfall received since 2014 and more drastically in 2018-2019). While the evidence indicates that changes in water quantity or quality are not due to the company's operation, it is not clear whether the company has



Chapter 4.2—Water Management			Basis for rating
			consulted with stakeholders on water quality and quantity expectations for future uses.
4.2.4.1.	Critical (a through e) The operating company shall develop and document a program to monitor changes in water quantity and quality. As part of the program the operating company shall: a. Establish a sufficient number of monitoring locations at appropriate sites to provide reliable data on changes to water quantity and the physical, chemical and biological conditions of surface waters, natural springs/seeps and groundwater (hereafter referred to as water characteristics); b. Sample on a frequent enough basis to account for seasonal fluctuations, storm events and extreme events that may cause changes in water characteristics; c. Establish trigger levels and/or other indicators to provide early warning of negative changes in water characteristics; d. Sample the quality and record the quantity of mine-affected waters destined for re-use by nonmining entities; e. Use credible methods and appropriate equipment to reliably detect changes in water characteristics; and f. Use accredited laboratories capable of detecting contaminants at levels below the values in the IRMA Water Quality Criteria by End-Use Tables.	•	The evidence (Water Resources Management Program, 2021, and Environmental Control Plan Expansion of the Sapo Mine – Water Resources Management Plan, 2018) indicates the company has a very robust and well-established monitoring program. Surface water and groundwater samples are collected, and conditions monitored (i.e., elevation, withdrawal, flow) from about 135 stations at locations on and off the mine site every day/three days per week/monthly/quarterly/ and/or biannually. The evidence indicates that results are evaluated on an ongoing basis. Based upon a review of a sample of the evidence, the company has: (a) established a sufficient number of monitoring points, (b) samples frequently to characterize seasonal variation in water elevation/flow as well as potential influences from mining on water resource quality and quantity, (c) reviews results of each monitoring event to assess change, (d) no evidence was provided to verify re-use of water by non-mining entities occurs (i.e., livestock), (e) the company utilizes industry best practices and methods to credibly detect changes in water characteristics as confirmed through interviews during the site visit, and (f) no evidence if analysis is conducted at lab capable of low method detection limits. The evidence does not include a map under 4.2.4.1 (a) detailing the area of influence and adequacy of monitoring points, or specific trigger levels. Interviews are needed during the surveillance audit to determine the stakeholders' view on the adequacy of the number of monitors and monitoring locations.
4.2.4.2.	Samples shall be analyzed for all parameters that have a reasonable potential to adversely affect identified current and future water uses. Where baseline or background monitoring, source characterization, modeling, and other site-specific information indicate no reasonable potential for a parameter to exceed the baseline/background values or numeric criteria in the IRMA Water Quality Criteria by End-Use Tables (depending on the approach used in 4.2.3.3), those parameters need not be measured on a regular basis.	•	The evidence (Water Resources Management Program, 2021) indicates that the company monitors water quality for 18 groundwater/21 surface water parameters on a regular basis (refer to 4.2.4.1). The monitoring schedule and parameters are based on background sampling and source characterization criteria. The evidence does not include a comparison to parameters in IRMA Water Quality Criteria by End-Use.



Chapte	r 4.2—Water Management		Basis for rating
4.2.4.3.	The operating company shall actively solicit stakeholders from affected communities to participate in water monitoring and to review and provide feedback on the water monitoring program: a. Participation may involve the use of independent experts selected by the community; and b. If requested by community stakeholders, costs related to participation in monitoring and review of the monitoring program shall be covered in full or in part by the company, and a mutually acceptable agreement for covering costs shall be developed.	•	The evidence (76 th Meeting of the Coexistence Committee, 2018) indicates the company has solicited some communities to participate in water sampling. Monitoring results are shared publicly through an online link. The evidence does not include a written agreement with communities and does not indicate whether all communities are included to participate in water monitoring, review and give feedback of results. Interviews with communities are needed during the surveillance audit to confirm the company has actively engaged and encouraged stakeholder participation in water monitoring, provided feedback on the monitoring program and offered the necessary means for community stakeholders to participate, if deemed necessary.
4.2.4.4.	Critical The operating company shall develop and implement an adaptive management plan for water that: a. Outlines planned actions to mitigate predicted impacts on current and future uses of water and natural resources from changes in surface water and groundwater quality and quantity related to the mining project; and b. Specifies adaptive management actions that will occur if certain outcomes (e.g., specific impacts), indicators, thresholds or trigger levels are reached, and timelines for their completion.	•	The evidence, Environmental Control Plan (PCA) Expansion of the Sapo Mine, and interviews with the company officials and community members, indicate the company has monitoring plans and mitigation management actions based upon triggers for surface water flow at the mine site. The evidence indicates the company has developed adaptive management practices for water-related impacts, discussing with communities the plans for relocating water sources. The outlined practices have been shared with affected communities. The evidence does not include a procedure that outlines trigger thresholds, indicators, and timelines, including how potential impacts are to be managed or mitigated.
4.2.4.5.	Annually or more frequently, if necessary (e.g., due to changes in operational or environmental factors), the operating company shall review and evaluate the effectiveness of adaptive management actions, and, as necessary, revise the plan to improve water management outcomes.	•	The company provided a third-party proposal (Technical note on the Adjustments to the Water Resources Management Program (PGRH) of the Environmental Control Plan (PCA, 2021)) on changes of the water monitoring program and Water Resources Management Programs from the year 2018, 2020 and 2021 indicating that water management plans are updated annually and as necessary.
4.2.4.6.	Community stakeholders shall be provided with the opportunity to review adaptive management plans and participate in revising the plans.	•	The company provided evidence (Control of Trade - Condition 39, 2021, and Technical Report on Compliance with the Conditions of the Preliminary License and Installation License, 2021) indicating that they are paying for independent technical assistance to the community as elected by the community. The evidence indicates that a technical report (Technical note on the adjustments to the Water Resources Management Program (PGRH) of the Environmental Control Plan (PCA), 2021) on proposed water management changes was written



Chapte	r 4.2—Water Management		Basis for rating
			and submitted to the company by the communities' elected independent technical team.
			The evidence does not include details to confirm that the company considered the proposed changes by the community in their adaptive water management plans.
4.2.5.1.	The operating company shall publish baseline or background data on water quantity and quality, and the following water data shall be published annually, or at a frequency agreed by stakeholders from affected communities: a. Monitoring data for surface water and groundwater points of compliance; and		The evidence is a website link (https://brasil.angloamerican.com/pt-pt/sustentabilidade/meio-ambiente) that allows stakeholders to access the company's environmental monitoring reports. These include monthly monitoring reports on surface water and groundwater quality for 2010 - 2023 and quantity for 2007 - 2023. These reports are published as they become available.
	 b. Monitoring data for water quantity (i.e., flows and levels of surface waters, springs/seeps and groundwater), and the volume of water discharged and extracted/pumped for mining operations. 	•	The evidence does not provide details or explanations necessary to make the data comprehensible and useful or include details, such as a list of physical locations, to confirm that surface and groundwater monitoring points are at points of compliance. In addition, the evidence does not provide reports on water use/water quantity pumped by the mine.
			Interviews are needed during the surveillance audit to confirm that stakeholders have been consulted on the appropriate formats and delivery methods for data sharing.
4.2.5.2.	The operating company shall develop and implement effective procedures for rapidly communicating with relevant stakeholders in the event that there are changes in water quantity or quality that pose an imminent threat to human health or safety, or commercial or natural resources.	0	The evidence (Social Communication Program, Conducted Activities Report, 2021, and Emergency Action Plan for Tailings Dams – Elevation 700 m, 2019) indicates that the company has a procedure to communicate emergent issues with relevant stakeholders, and meets with stakeholders on a regular basis on various topics. The plan applies to emergencies such as a failure of the TSF.
			The evidence does not include a procedure to rapidly communicate threats due to changes in water quantity or quality.
4.2.5.3.	The operating company shall discuss water management strategies, performance and adaptive management issues with relevant stakeholders on an annual basis or more frequently if requested by stakeholders.	•	The company consulted with relevant stakeholders to evaluate options to mitigate predicted significant adverse impacts on water quantity and quality, and current and potential future water uses that may be affected by the mine's water management practices as indicated by meeting minutes with the community from March 2020 and September 2021. One of the projects included the relocation of a water network so that communities would not be affected by



Chapter 4.2—Water Management		Basis for rating
		expected damage to the existing network due to mining-related construction work. Interviews with stakeholders during the surveillance audit are needed to confirm the company has met with interested stakeholders and discussed water quality and quantity monitoring results, the effectiveness of mitigation strategies, and adaptive management issues on an annual basis or more frequently if requested by stakeholders.

Chapte	r 4.3—Air Quality		Basis for rating
4.3.1.1.	The operating company shall carry out air quality screening to determine if there may be significant air quality impacts associated with its operations.		The evidence (MMX, EIA 2007) shows that an air quality (AQ) study was conducted at the site. Baseline data was collected at two (2) sites (Vila do Sapo and Itapanhoacanga) for around 20 days and analyzed for particulate matter (PM) and PM10. The results were compared to local regulation (Deliberação Normativa COPAM n°01 de 1981).
			A subsequent AQ study was performed by Ecosoft, in 2015. The goal of this study was to define an automatic AQ monitoring network around the mine site. The study included:
			- Climatologic conditions
			- AQ standard applicable
			- Emissions inventory (mine and other sources)
			- Background AQ data (2011-2014)
			- AQ predictions and results
			- Design of the AQ monitoring network
		•	The study covered the municipality of Conceição do Mato Dentro, including Alvorada de Minas (located approximately 1.5 km north of the operation, and Dom Joaquim, located approximately 1.5 km east of the operation).
			AQ data was collected using (24-hour filtered samples) for PM and PM10, using USEPA -approved methodology. The PM data was collected at three (3) locations from 2011 to 2014, in average every six (6) days (189, 167, 180 data points), and at other three (3) locations from 2013 to 2014, totaling 34, 56, and 36 data points. The PM10 data was collected in 2013 and 2014 at the same six (6) locations, with an average of 35 data points for each location.
			The AQ modeling and prediction considered also PM2.5, SO2, NOx, NO2, CO, O3, and COV and WRF and CMAQ models were used. The predictions were calculated at 27 community receptors. The AQ standard to compare the predicted values are in the local regulation (Conama, O3/1990). The result of this AQ study was the design of a AQ monitoring network.
			The AQ study was updated in 2017 (Ecosoft, 2017) and used the daily data collected by the new AQ monitoring network from march to December 2017. The study predicted the AQ impacts for the 2018 operation, for the expected

Chapte	r 4.3—Air Quality		Basis for rating
			operation by 2027/28 and for the final year of operations. The model used for the predictions of the PM, PM10 and PM2.5 was AERMOD.
4.3.1.2.	During screening, or as part of a separate data gathering effort, the operating company shall establish the baseline air quality in the mining project area.		The evidence indicates the company has gathered air quality data for particulate matter (PM) and PM10 at six (6) different locations around the mine site, see more detail in 4.3.1.1
4.3.1.3.	If screening or other credible information indicates that air emissions from mining-related activities may adversely impact human health, quality of life or the environment, the operating company shall undertake an assessment to predict and evaluate the significance of the potential impacts.	•	The EIA (2007) and mine expansion EIA (2015) indicate that the company has studied possible impacts of mine-related air pollution on the surrounding communities during all stages of the mining project. Per the EIA (2015) the impact will be of moderate magnitude, whereas the significance is considered to be high. Both the EIA (2007) and an Air Quality Study (2015) conducted by a consultant, predicted that the potential impacts of the mine on air quality will be below the legal limits of air pollution. However, the company indicated that dust may cause impacts to surrounding communities, especially during the dry season mostly due to traffic. Eleven (11) grievance records indicate that stakeholders have complained about excessive dust. The mentioned cause of dust was mostly traffic as predicted by the company. Interviews are needed (company, community) during the surveillance audit to confirm whether air emissions from mining-related activities are perceived as significant by community stakeholders, and if so, confirm that the company has undertaken an assessment to evaluate the significance of the potential impacts
4.3.1.4.	The assessment shall include the use of air quality modeling and monitoring consistent with widely accepted and documented methodologies to estimate the concentrations, transport and dispersion of mining-related air contaminants.	•	The AQ study by Ecosoft (2015) indicates that the emissions inventory used the protocol of USEPA to approximate emissions and the simulation models WRF and CMAQ for predictions. The 2017 AQ study used the AERMOD model.
4.3.2.1.	Critical If significant potential impacts on air quality are identified, the operating company shall develop, maintain and implement an air quality management plan that documents measure to avoid, and where that is not possible, minimize adverse impacts on air quality.	•	The evidence (AA, 2014 & 2016: AQ Management Plant) shows the company has developed an Air Quality Management Program that identifies potential adverse impacts on air quality and documents measures to avoid or minimize them and includes mitigation strategies. The AQ management plan includes: - Emissions control program - AQ monitoring program - Equipment maintenance program Each program includes goals, targets, and methodologies.



Chapte	r 4.3—Air Quality		Basis for rating
4.3.2.2.	Air quality management strategies and plans shall be implemented and updated, as necessary, over the mine life.	•	The company has developed the AQ management plan in 2014 and it was updated in 2016 (see 4.3.2.1). There is evidence indicating the implementation of the subprograms and the AQ data is available online at the link https://brasil.angloamerican.com/pt-pt/sustentabilidade/meio-ambiente.
4.3.3.1.	The operating company shall monitor and document ambient air quality and dust associated with the mining project by using personnel trained in air quality monitoring.	•	The evidence indicates the company maintains a handbook with operating procedures for air quality sampling, training and certification personnel and equipment. The evidence includes: - Equipment operating manual - Sampling procedures - Training certificates - List of staff trained
4.3.3.2.	Ambient air quality and dust monitoring locations shall be situated around the mine site, related operations and transportation routes and the surrounding environment such that they provide a representative sampling of air quality sufficient to demonstrate compliance or non-compliance with the air quality and dust criteria in 4.3.4.3, and detect air quality and dust impacts on affected communities and the environment. Where modeling is required (see 4.3.1.4) air monitoring locations shall be informed by the air quality modeling results.	•	The evidence (4.3.3.1) indicates that monitoring follows local regulation, that it is audited and well assessed. Monitoring locations and description of how sites where selected were provided in Environmental Control Plan (2016). The monitoring network includes three (3) automatic monitoring stations and six (6) manual monitoring stations. The location of the stations covers the whole mine site area as required. The AQ monitoring network was designed based on the methodology called Figures of Merit and Spheres of Influence, which advocates the use of an adequate number of monitors (measuring stations and sensors) that are minimally necessary to provide adequate spatial coverage of priority areas for monitoring, or areas of greatest merit. According to the technique used in this project, the monitoring network is classified as optimized for employing the minimum resources necessary for the adequate monitoring of the study area, rationalizing the costs involved and maximizing the spatial coverage of monitoring.
4.3.4.1.	New mines and existing mines shall comply with the European Union's Air Quality Standards (EU Standards) as amended to its latest form (See Table 4.3, below) at the boundaries of the mine site and transportation routes, and/or mitigate exceedances as follows: a. If a mine is in an air shed where baseline air quality conditions meet EU Standards, but emissions	_	Not scored. The company measures its air pollution against the national air quality standard defined in the CONAMA Resolution No. 003/90 and has a risk-based approach to managing air quality as evidenced by its air quality monitoring and management programs.



Chapter	4.3—Air Quality		Basis for rating		
	from mining-related activities cause an exceedance of one or more parameters, the operating company shall demonstrate that it is making incremental reductions in those emissions, and within five years demonstrate compliance with the EU Standards; or				
	b. If a mine is located in an air shed where baseline air quality is already degraded below EU Standards, the operating company shall demonstrate that emissions from mining-related activities do not exceed EU Standards, and make incremental improvements to the air quality in the air shed that are at least equivalent to the mining project's emissions.				
4.3.4.2.	As an alternative to 4.3.4.1, the operating company may undertake a risk-based approach to protecting air quality as follows:	_	Not scored. The company measures its air pollution against the national air quality standard defined in the CONAMA Resolution No. 003/90 and has a risk-based approach to managing air quality as evidenced by its air quality		
	 a. New and existing mines shall comply with host country air quality standards at a minimum, and where no host country standard exists mines shall demonstrate compliance with a credible international best practice standard; 		monitoring and management programs.		
	 Where compliance is met for host country standards but the mine experiences a residual risk related to its air emissions, then more stringent international best practice standards shall apply; 		_	_	_
	c. Where compliance is met for international best practice standards and a mine still experiences a residual risk from its air emissions, then the mine shall set more stringent self-designed limits, and implement additional mitigation measures to meet those limits; and				
	d. For all air-emissions-related risks, the mine shall demonstrate that it is making incremental reductions in emissions, through a multi-year phased plan with defined timelines.				
4.3.4.3.	Dust deposition from mining-related activities shall not exceed 350 mg/m2/day, measured as an annual average. An exception to 4.3.4.3 may be made if demonstrating compliance is not reasonably possible through ordinary monitoring methods. In such cases	_	Not scored. The company measures its air pollution against the national air quality standard defined in the CONAMA Resolution No. 003/90 and has a risk-based approach to managing air quality as evidenced by its air quality monitoring and management programs.		

Chapter	4.3—Air Quality		Basis for rating
	the operating company shall utilize best available practices to minimize dust contamination.		
4.3.5.1.	The operating company shall ensure that its air quality management plan and compliance information is upto-date and publicly available or made available to stakeholders upon request.	•	The evidence (see 4.3.2.2) indicates that the company's air quality management plan and compliance information is up to date (as of 2017) and publicly available. https://brasil.angloamerican.com/pt-pt/sustentabilidade/meio-ambiente.

Chapte	r 4.4—Noise and Vibration		Basis for rating
4.4.1.1.	The operating company shall carry out screening to determine if there may be significant impacts on offsite human noise receptors from the mining project's noise and/or vibration. Screening is required at all new mines, and at existing mines if there is a proposed change to the mine plan that is likely to result in a new source of noise or vibration or an increase in existing noise or vibration levels.	•	The evidence indicates noise and vibration studies were conducted as part of the Mina Do Sapo expansion in 2015/16 (EIA Volume V, 2015) and for the original mine EIS in 2007, a noise study was considered. Since 2011 and almost every other year independent consultants have conducted measurements for noise and vibrations and noise predictions around the mine site. Some of the documents reviewed included: Oppus Acustica: 2011, 2015, 2017, 2020; Noise measurements and predictions OldB, 2017: Noise study Aven, Thermo Acustica, 2019, with monthly monitoring data. dB Laboratorio Acustica, 2020 Sequencia Engeneria; 2018: Vibration measurements Sismografia Carste, 2019 & 2020: Vibration study
4.4.1.2.	If screening identifies potential human receptors of noise from mining-related activities, then the operating company shall document baseline ambient noise levels at both the nearest and relevant offsite noise receptors.	•	The evidence indicates that human receptors of noise were identified, and noise baseline data was collected. Baseline studies were carried out for 12 sites during two (2) monitoring campaigns in 2006 and 2007, two (2) sites were community receptors. Data obtained included noise measurements (diurnal and nocturnal). Additional baseline data was collected in the Noise Study in 2011 (Oppus acustica, 2011) and included four (4) measurements stations at community receptors, including the nearest residences.
4.4.2.1.	If screening or other credible information indicates that there are residential, institutional or educational noise receptors that could be affected by noise from mining-related activities, then the operating company shall demonstrate that mining-related noise does not exceed a maximum one-hour LAeq (dBA) of 55 dBA during the hours of 07:00 to 22:00 (i.e., day) and 45 dBA at other times (i.e., night) at the nearest offsite noise receptor. These hours may be adjusted if the operating company can justify those alternative hours are necessary and/or appropriate because of local, cultural or social norms.	•	The evidence (Aven, 2020: noise measurements, year 2019) indicates for the year 2019 that the noise levels measured at the receptors does not exceed the guidelines established by Conama 01, 1990 (55 dBA for day hours and 50 dBA for night hours) most of the time (95.3%). For the year 2019, 256 measurements were conducted, every month, for two (2) days, at 13 locations. The evidence indicates that the company's noise level occasionally exceeds the limits (55 dBA during the day, 45 dBA at night) stated in the IRMA guideline.
4.4.2.2.	The following exceptions to 4.4.2.1 apply: a. If baseline ambient noise levels exceed 55 dBA (day) and/or 45 dBA (night), then noise levels shall	_	Not relevant. The Acoustic Test Report (2020) indicates that the baseline ambient noise never exceeds 55 dBA (day) or 45 dBA (night).



Chapte	r 4.4—Noise and Vibration		Basis for rating
	not exceed 3 dB above baseline as measured at relevant offsite noise receptors; and/or b. During periods of blasting, the dBA levels may be exceeded, as long as the other requirements in 4.4.2.4 are met.		
4.4.2.3.	If screening or other credible information indicates that there are only industrial or commercial receptors that may be affected by noise from mining-related activities, then noise measured at the mine boundary or nearest industrial or commercial receptor shall not exceed 70 dBA.	_	The noise monitoring stations (12 in total) are in residential areas (2) and the rest are on farmland. No evidence indicated that there are industrial or commercial receptors that could be affected by noise from mining.
4.4.2.4.	If screening or other credible information indicates that noise or vibration from blasting activities may impact human noise receptors, then blasting operations at mines shall be undertaken as follows: a. A maximum level for air blast overpressure of 115 dB (Lin Peak) shall be exceeded on no more than 5% of blasts over a 12-month period; b. Blasting shall only occur during the hours of 09:00 to 17:00, on traditionally normal working days; and c. Ground vibration (peak particle velocity) shall neither exceed 5 mm/second on 9 out of 10 consecutive blasts, nor exceed 10 mm/second at any time.	•	The company provided the evidence Residential Seismographic Monitoring Report for Minas Do Sapo (2020), which investigated several blast parameters for all blasts conducted during the year 2020 at five (5) different monitoring location in communities closest to the blast location. This monitoring campaign resulted in 1,230 blast measurements indicating that: a. 95% of measured air blast overpressure were below 115 dB (Lin Peak); and c. the ground vibration (peak particle velocity) never exceeded 5 mm/second. Around 10 % of the blasts occurred between the hours of 17:00 - 18:00 (5PM – 6PM). Although the company is compliant with the local regulation ABNT/NBR n° 9653/2005, the timing of blasts does not meet the IRMA standard.
4.4.2.5.	Mines may undertake blasting outside of the time restraints in 4.4.2.4.b when the operating company can demonstrate one or more of the following: a. There are no nearby human noise receptors that will be impacted by blasting noise or vibration; b. Alternative hours are necessary and/or appropriate because of local, cultural or social norms; and/or c. Potentially affected human receptors have given voluntary approval for the expanded blasting hours.	•	Although there are human noise receptors close to the mine as identified in the Residential Seismographic Monitoring Report for Minas Do Sapo (2020), the grievance records Fale Conosco (2020) indicate that no hardship is caused by the alternative blasting times. Stakeholders are made aware of each blast ahead of time.
4.4.2.6.	If a credible, supported complaint is made to the operating company that noise or vibration is adversely impacting human noise receptors, then the operating company shall consult with affected stakeholders to	•	The grievance log Fale Conosco (2020) indicates that eight (8) complaints were reported by stakeholders during the year 2020. The company has responded to each grievance with explanations of the variations, and consulting with the



Chapter	4.4—Noise and Vibration		Basis for rating
	develop mitigation strategies or other proposed actions to resolve the complaint. Where complaints are not resolved then other options, including noise monitoring and the implementation of additional mitigation measures, shall be considered.		stakeholders on how to resolve the issue, such as installing monitoring devices closer to the aggrieved parties' homes to measure blast vibration.
4.4.2.7.	All noise- and vibration-related complaints and their outcomes shall be documented.	•	All noise- and vibration-related complaints and their outcomes are documented as indicated by the grievance log Fale Conosco (2020).
4.4.3.1.	When stakeholders make a noise-related complaint, the operating company shall provide relevant noise data and information to them. Otherwise, noise data and information shall be made available to stakeholders upon request.	•	When stakeholders make a noise-related complaint, the company provides noise data by stating whether noise thresholds exceeded or met legal limits and, in some cases, giving more specific information on the monitoring campaign and mitigation measures as indicated by the grievance log Fale Conosco (2020).
			Interviews are needed (company, community) during the surveillance audit to confirm that complainants have received noise data and information.

Chapte	r 4.5—Greenhouse Gas Emissions		Basis for rating
4.5.1.1.	Critical The operating company or its corporate owner shall develop and maintain a greenhouse gas or equivalent policy that commits the company to: a. Identifying and measuring greenhouse gas emissions from the mining project; b. Identifying energy efficiency and greenhouse gas reduction opportunities across the mining project; c. Setting meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and d. Reviewing the policy at least every five years and revising as needed, such as if there are significant changes to mining-related activities, new technologies become available, or there are newly identified opportunities for reductions.	•	The company has a group climate change policy (2018) to be reviewed every three (3) years that complies with the requirements (a) to (d).
4.5.2.1.	The operating company shall comply with emissions quantification methods described in a widely accepted reporting standard, such as the Greenhouse Gas Protocol Corporate Standard or the Global Reporting Initiative's GRI 305 emissions reporting standard.	•	The evidence, Sustainability Report (2020), indicates that the company uses an emissions quantification method that is aligned with the GHG Protocol Corporate Standard.
4.5.3.1.	The greenhouse gas policy shall be underpinned by a plan that details the actions that will be taken to achieve the targets set out in the policy.	•	The evidence, the site's Sustainable Mining Plan (November 2020), indicates that the company has developed planned actions to achieve the targets.
4.5.3.2.	The operating company shall demonstrate progress toward its greenhouse gas reduction targets.	•	The evidence, Sustainability Report (2020, Section "Tackling climate change"), indicates that the company is making progress towards its reduction targets.
4.5.3.3.	The operating company shall demonstrate that it has investigated greenhouse gas reduction strategies and shall document the results of its investigations.	•	The evidence, the site's Sustainable Mining Plan (November 2020), indicates that the company has requested ECS to review its energy and GHG reduction opportunities at its operations and the third-party produced a report in 2020, identifying top 7 opportunities.
4.5.4.1.	The greenhouse gas policy shall be publicly available.	•	The company's climate change policy is available at its web page.
4.5.4.2.	On an annual basis, the operating company or its corporate owner shall: c. Disclosure to IRMA auditors an accounting of its greenhouse gas emissions from the mining project; achievement of and/or progress towards mine-site-level greenhouse gas reduction targets;	•	The company produces a public sustainability report annually where the performance of the corporation is presented, as a whole and not at every mine site. IRMA auditors had access to data related to the Minas-Rio mine, as required by IRMA in the document Sustainable Mining Plan (November 2020) and in the 2020 report Energy and GHG reduction opportunity review.



Chapter 4.5—Greenhouse Gas Emissions		Basis for rating
and efforts taken to reduce emissions from the mining project and mining-related activities; and d. Publicly report on mine-site-level or corporate-level greenhouse gas emissions, progress towards greenhouse gas reduction targets and efforts taken to reduce emissions.		

	Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas		Basis for rating
4.6.1.1.	Biodiversity, ecosystem services and protected areas screening, assessment, management planning, implementation of mitigation measures, and monitoring shall be carried out and documented by competent professionals using appropriate methodologies.	•	The evidence includes the EIA from 2015 and several professional licenses of personnel of personnel involved in the screening, assessment, management planning, implementation of mitigation measures, and monitoring, indicating that biodiversity-related assessments were developed and carried out by competent professionals using industry-accepted practices.
4.6.1.2.	Biodiversity, ecosystem services and protected areas screening, assessment, management planning, and the development of mitigation and monitoring plans shall include consultations with stakeholders, including, where relevant, affected communities and external experts.	•	The evidence, Anglo American and Fauna & Flora International MoU (2021), indicates that the company collaborates with several stakeholders including the NGO Flora & Fauna International, consultancy Bicho do Mato to create the Monitoring and Rescue Program - Fauna (2015), consultancy Sete to create the Riparian Forest and Water Recharge Areas Recovery Programs (2018), consultancy Agroflor partnering with the Federal University of Vicosa for the Flora Rescue and Native Seedling Production program (2020) and the University of Sao Paulo to support research on ecosystem service impact mitigation (2021). The company consulted with relevant stakeholders to evaluate options to mitigate predicted significant adverse impacts on water quantity and quality, and current and potential future water uses that may be affected by the mine's water management practices as indicated by a sample of meeting minutes with the community from March 2020 and September 2021. The evidence does not include detail to confirm that affected communities were included in the screening, assessment, management planning and development of mitigation and monitoring plans of ecosystem services (other than water), and biodiversity. Interviews are needed (company, community, regulatory, competent professionals) during the surveillance audit to confirm that community stakeholders have been consulted during biodiversity, ecosystem services and protected areas screening, assessment and development of mitigation measures and monitoring plans, and that regulatory authorities and external experts were consulted where relevant.
4.6.1.3.	Biodiversity, ecosystem services and protected areas impact assessments, management plans and monitoring data shall be publicly available, or made available to stakeholders upon request.	0	The evidence, Technical Report on the Public Hearing 20/07/2017 (July 2017), indicates that the company made information on its Report on Environmental Impacts (December 2016), available to stakeholders for a limited time. The evidence does not include details to confirm that biodiversity, ecosystem services, and protected areas impact assessments, management plans and monitoring data are publicly available.



Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas			Basis for rating
			Interviews are needed (community) during the surveillance audit to determine whether stakeholders have access to these materials through other means.
4.6.2.1.	Critical New and existing mines shall carry out screening or an equivalent process to establish a preliminary understanding of the impacts on or risks to biodiversity, ecosystem services and protected areas from past and proposed mining-related activities.		The evidence, Report on Environmental Impacts (December 2016), indicates that the company developed environmental diagnosis, evaluating all factors in the physical, biotic, and socioeconomic environment for the mine expansion. The impacts identification in planning, implementation, operation, and closure stages of the mine was also developed.
		•	In the Anglo American Biodiversity Guideline and Standard (no date), the company developed an assessment and management risks workflow. The workflow indicates that for any new/potential exploration sites/projects, new development or change to site footprint, the company will conduct a screening process to identify potential impacts, risks, and features. Also, the company described that in operating projects they have conducted the screening as part of the EIA process.
4.6.2.2.	Screening shall include identification and documentation of: a. Boundaries of legally protected areas in the mine's actual or proposed area of influence, and the conservation values being protected in those areas; b. Boundaries of Key Biodiversity Areas (KBA) in the mine's actual or proposed area of influence, the important biodiversity values within those areas and the ecological processes and habitats supporting those values; c. Areas of modified habitat, natural habitat and critical habitat within the mine's proposed or actual area of influence, and the important biodiversity values (e.g., threatened and endangered species) present in the critical habitat areas; and d. Natural ecosystems or processes within the mine's proposed or actual area of influence that may or do provide provisioning, regulating, cultural and supporting ecosystem services.	•	The evidence is an excel sheet containing information on Biodiversity Value Assessment results (2020), listing protected areas nearby the site, fauna and flora and their status (endangered, threatened etc.) and ecosystem services. The Biodiversity Value Assessment (2020) and supporting evidence (Report on Environmental Impacts, December 2016) indicate that the screening exercise included: a. Boundaries of legally protected areas in the mine's actual or proposed area of influence, such as UNESCO World Heritage sites and buffer zones; b. Boundaries of Key Biodiversity Area, including Alliance for Zero Extinction, and Ramsar, among others; c. Areas of modified habitat, natural habitat, during which the company has identified threatened and endangered plants and animal species and their distribution (Report on Environmental Impacts, Chapter 3.2. December 2016); and d. Natural ecosystems or processes within the mine's proposed or actual area of influence that may or do provide provisioning, regulating, cultural and supporting ecosystem services (Report on Environmental Impacts, Chapters 4.1.2 and 4.1.3, December 2016).



	Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas		Basis for rating	
			The screening exercise indicates that the mine is in the buffer zone of a UNESCO Biosphere Reserve, which is also classified as category VI according to IUCN and closely locates to the boundaries of the National Monument Serra da Ferrugem, a conservation area.	
4.6.3.1.	When screening identifies protected areas or areas of potentially important global, national or local biodiversity or ecosystem services that have been or may be affected by mining-related activities (e.g., KBAs, critical habitat, threatened or endangered species), the operating company shall carry out an impact assessment that includes: a. Establishment of baseline conditions of biodiversity, ecosystem services and, if relevant, conservation values (i.e., in protected areas) within the mine's proposed or actual area of influence; b. Identification of potentially significant direct, indirect and cumulative impacts of past and proposed mining-related activities on biodiversity, ecosystem services and, if relevant, on the conservation values of protected areas throughout the mine's lifecycle; c. Evaluation of options to avoid potentially significant adverse impacts on biodiversity, ecosystem services and conservation values of protected areas, prioritizing avoidance of impacts on important biodiversity values and priority ecosystem services; evaluation of options to minimize potential impacts; evaluation of options to provide restoration for potential and actual impacts; and evaluation of options to offset significant residual impacts (see 4.6.4.1 and 4.6.4.2); and d. Identification and evaluation of opportunities for partnerships and additional conservation actions that could enhance the long-term sustainable management of protected areas and/or biodiversity and ecosystem services.	•	The evidence, Report on Environmental Impacts (December 2016), presents a summary of key biodiversity values including protected species, and impact assessment of these. The evidence did not include a detailed impact assessment or rationale, including other potential key elements such as ecosystem services, for subrequirements (a) to (d).	
4.6.4.1.	Critical Mitigation measures for new mines shall: a. Follow the mitigation hierarchy of:	•	Currently the mine is not developing new mining facilities that require an ESIA. For existing facilities, the evidence, the site-level Sustainable Mining Plan (September 2020), a group-level management plan (Our Sustainable Mining	

Chapter Protecte	4.6—Biodiversity, Ecosystem Services and d Areas		Basis for rating	
	i. Prioritizing the avoidance of impacts on important biodiversity values and priority ecosystem services and the ecological processes and habitats necessary to support them;		Plan, no date), and an internal report (July 2021), indicate the implementation of a Net Positive Impact methodology for biodiversity and provides specific goals to be met until 2030. The evidence indicates that the company follows the mitigation hierarchy as outlined in sub-requirements (a) to (c).	
	ii. Where impacts are not avoidable, minimizing impacts to the extent possible;			
	iii. Restoring biodiversity, ecosystem services and the ecological processes and habitats that support them; and			
	iv. As a last resort, offsetting the residual impacts.			
	b. Prioritize avoidance of impacts on important biodiversity values and priority ecosystem services early in the project development process;			
	c. Be designed and implemented to deliver at least no net loss, and preferably a net gain in important biodiversity values, and the ecological processes that support those values, on an appropriate geographic scale and in a manner that will be self-sustaining after mine closure.			
4.6.4.2.	At existing mines:		The company has:	
	 a. Where past adverse impacts on important biodiversity values and priority ecosystem services have been identified, the operating company shall design and implement onsite restoration strategies, and also, through consultation with stakeholders, design and implement additional conservation actions to support the enhancement of important biodiversity values and/or priority ecosystem services on an appropriate geographic scale; and b. If there is the potential for new impacts on important biodiversity values or priority ecosystem 		a. implemented onsite restoration strategies, as indicated by the agreement with the State Institute of Forests from 2017 to compensate for 743 ha of forest, of which around 10% lie in a permanent preservation area by establishing 764 ha of designated Private Natural Heritage Reserves in the future. The provided Sustainable Mining Plan (2020) indicates that the company has invested in the conservation of 12.1 thousand ha of forest in the mine's larger region. The company also collaborates with an NGO to ensure positive outcomes for biodiversity and ecosystem services (Anglo American and Fauna & Flora International MoU, 2021), and consultancies to develop fauna and flora rescue programs and a native seedling nursery (Monitoring and Rescue Program - Fauna, 2015; and Flora Rescue and Native Seedling	
	services (e.g., as a result of mine expansions, etc.), the operating company shall follow the mitigation hierarchy, prioritizing the avoidance of impacts on important biodiversity values or priority ecosystem services, but where residual impacts remain, shall		Production program, 2020). b. The company provided an internal document signed by executive management (2021) on its approach to positively contribute to nature by implementing the mitigation hierarchy and collaborating with communities on measures to mitigate residual impacts.	



	Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas		Basis for rating	
	apply offsets commensurate to the scale of the additional (new) impacts.		Except for the mitigation of predicted significant adverse impacts on water quantity and quality, and current and potential future water uses that may be affected by the mine's water management practices as indicated by meeting minutes with the community from March 2020 and September 2021, the company did not provide further evidence of collaboration with community stakeholders on additional conservation efforts.	
			Interviews are needed (company, community, regulatory, competent professionals) during the surveillance audit to confirm that stakeholders have been consulted in the development of additional conservation actions.	
4.6.4.3.	Offsetting, if required, shall be done in a manner that aligns with international best practice.	•	The evidence listed in 4.6.4.2. indicates that the company has carried out offset activities based on local legislation and internationally recognized best practices.	
4.6.4.4.	The operating company shall develop and implement a biodiversity management plan or equivalent that: a. Outlines specific objectives (e.g., no net loss/net gain, no additional loss) with measurable conservation outcomes, timelines, locations and activities that will be implemented to avoid, minimize, restore, enhance and, if necessary, offset adverse impacts on biodiversity and ecosystem services; b. Identifies key indicators, and ensures that there is an adequate baseline for the indicators to enable measurement of the effectiveness of mitigation activities over time; c. Provides a budget and financing plan to ensure that funding is available for effective mitigation.	•	 The company developed and implemented a sustainable mining plan that is equivalent to a biodiversity management plan that: a. Outlines specific objectives in its Sustainable Mining Plan (2020) such as mitigation, rehabilitation and restoration, and offsets of impacts. The company provided a spreadsheet of the budget allocation (Sustainable Mining Plan Budget, 2021) which lists measurable conservation outcomes, timelines, locations, and activities that will be implemented to avoid, minimize, restore, enhance and, if necessary, offset adverse impacts on biodiversity and ecosystem services; and b. Identifies key indicators such as the percentage of reduction in freshwater use (Sustainable Mining Plan Budget, 2021); and c. Provides a budget and financing plan to ensure that funding is available for effective mitigation as indicated by the company's Sustainable Mining Plan Budget (2021). The evidence did not include an indicator baseline to measure the effectiveness of mitigation activities over time. 	
4.6.4.5.	Biodiversity management shall include a process for updating or adapting the management plan if new information relating to biodiversity or ecosystem services becomes available during the mine lifecycle.	•	The evidence, Biodiversity Standard (no date) and Biodiversity Guideline (no date), states that the biodiversity management program shall be periodically reviewed and updated as necessary, indicating that there is a process in place for updating or adapting management plans. The evidence does not include documentation of updates to the biodiversity management plan to confirm the implementation of this process.	



Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas	Basis for rating
An operating company shall not carry out new exploration or develop new mines in any legally protected area unless the applicable criteria in the remainder of this chapter are met, and additionally the company: a. Demonstrates that the proposed development in such areas is legally permitted; b. Consults with protected area sponsors, managers and relevant stakeholders on the proposed project; c. Conducts mining-related activities in a manner consistent with protected area management plans for such areas; and d. Implements additional conservation actions or programs to promote and enhance the conservation aims and/or effective management of the area.	Reserva da Biosfera Serra do Espinhaço. This reserve was registered in 2005, and the mine operates in its buffer zone (not the core zone).



Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas			Basis for rating
			Heritage Reserves in the future to promote and enhance the conservation aims and effective management of the area.
4.6.5.2.	An operating company shall not carry out new mining-related activities in the following protected areas unless they meet 4.6.5.1.a through d, and an assessment, carried out or peer-reviewed by a reputable conservation organization and/or academic institution, demonstrates that mining-related activities will not damage the integrity of the special values for which the area was designated or recognized. International Union for Conservation of Nature (IUCN) protected area management category IV protected areas; Ramsar sites that are not IUCN protected area management categories I-III; and Buffer zones of UNESCO biosphere reserves.	_	 Not relevant. During interviews, the site management indicated that no new exploration or mining activities would be carried out in protected areas. It should be noted that: The mine's concession is within the UNESCO Biosphere Reserve named Reserva da Biosfera Serra do Espinhaço. This reserve was registered in 2005, and the mine operates in its buffer zone (not the core zone). Anglo America acquired the mine after 2005 from the former operating company MMX Mineração e Metálicos S.A., which had developed the mine in the buffer zone of a protected area. The Biodiversity Value Assessment from 2020 also indicates that the area is classified as category VI according to IUCN. The documental evidence includes legal authorizations, certifications, and agreements, management plans for protected areas, and on-site interviews with management. They indicate that Anglo America has put in effort to be a good steward of it's operating environment including protected areas by obtaining legal permits before interfering with protected areas, consulting with various relevant stakeholders on proposed projects, conducting mining-related activities consistent with management plans for protected areas and implementing additional conservation efforts.
4.6.5.3.	Critical IRMA will not certify new mines that are developed in or that adversely affect the following protected areas: · World Heritage Sites, and areas on a State Party's official Tentative List for World Heritage Site Inscription; · IUCN protected area management categories I-III; · Core areas of UNESCO biosphere reserves.	•	The evidence indicates that the company is not developing or expanding into World Heritage, IUCN, or core areas of the UNESCO biosphere reserves. The company is currently operating within the buffer area of the UNESCO Reserva da Biosfera Serra do Espinhaço and has implemented management plans and actions to prevent impacts in this area.
4.6.5.4.	Critical An existing mine located entirely or partially in a protected area listed in 4.6.5.3 shall demonstrate that: a. The mine was developed prior to the area's official designation; b. Management plans have been developed and are being implemented to ensure that activities during the remaining mine lifecycle will not	_	Not relevant. The evidence (Integrated Plan of Management of protected areas, April 2020) provides a description of the area with regards to the protected area, as well as conservation initiatives, Management plans and biodiversity area stakeholder engagement guidelines. This evidence shows that: a. Although the mine started operations after the area's official designation (which was in 2005), mining related activities were present in the area before the official designation.



	4.6—Biodiversity, Ecosystem Services and ed Areas		Basis for rating
	permanently and materially damage the integrity of the special values for which the area was designated or recognized; and c. The operating company collaborates with relevant management authorities to integrate the mine's management strategies into the protected area's management plan.		 b. Management plans have been developed and are being implemented to ensure that activities during the remaining mine lifecycle will not permanently damage the integrity of the key biodiversity values, and c. The company collaborates with relevant management authorities, neighbors, and the scientific community to integrate the mine's management strategies into the protected area's management plan.
4.6.6.1.	6.6.1. The operating company shall develop and implement a program to monitor the implementation of its protected areas and/or biodiversity and ecosystem services management plan(s) throughout the mine lifecycle.		The evidence, including an Integrated Management Plan for Protected Areas (April 2020), a Sustainable Mining Plan (September 2020), a Report on Environmental Impacts (December 2016), and a screenshot of software in which the company tracks biodiversity (April 2020), indicates the company monitors implementation of its protected areas and biodiversity management plans. The evidence, Biodiversity Standard (no date) and Biodiversity Guideline (no date), provides a group-level framework for biodiversity monitoring.
4.6.6.2.	Monitoring of key biodiversity or other indicators shall occur with sufficient detail and frequency to enable evaluation of the effectiveness of mitigation strategies and progress toward the objectives of at least no net loss or net gain in biodiversity and ecosystem services over time.	•	The evidence, Sustainable Mining Plan, September (2020), indicates that the company has implemented monitoring programs to evaluate the effectiveness of its mitigation strategies.
4.6.6.3.	4.6.6.3. If monitoring reveals that the operating company's protected areas and/or biodiversity and ecosystem services objectives are not being achieved as expected, the operating company shall define and implement timely and effective corrective action in consultation with relevant stakeholders.		Not relevant. The evidence, Sustainable Mining Plan (September 2020), indicates that biodiversity and ecosystem services objectives are on track to being achieved as expected.
4.6.6.4. The findings of monitoring programs shall be subject to independent review.		0	The evidence does not include independent reviews of findings from the monitoring programs.



Chapter 4.7—Cyanide Management		Basis for rating
Chapter Not Relevant	_	This chapter is not relevant for Minas-Rio as the site does not use or produce cyanide.

Chapter 4.8—Mercury Management		Basis for rating
Chapter Not Relevant	_	This chapter is not relevant for Minas-Rio as the site does not use or produce mercury.

APPENDIX B – Corrective Action Plan

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Kedilirement lext		Action Plan
1.2	Community and Stakeholder Engagement	1.2.2.	Engagement Processes	1.2.2.2	The operating company shall foster two-way dialogue and meaningful engagement with stakeholders by: a. Providing relevant information to stakeholders in a timely manner; b. Including participation by site management and subject-matter experts when addressing concerns of significance to stakeholders; c. Engaging in a manner that is respectful, and free from manipulation, interference, coercion or intimidation; d. Soliciting feedback from stakeholders on issues relevant to them; and e. Providing stakeholders with feedback on how the company has taken their input into account.	Substantially Meets	Auditors should interview stakeholders during the surveillance audit.
1.4	Complaints and Grievance Mechanism and Access to Remedy	1.4.1.	Access to Operational- Level Complaints and Grievance Mechanism	1.4.1.1.	The operating company shall ensure that stakeholders, including affected community members and rights holders (hereafter referred to collectively as "stakeholders") have access to an operational-level mechanism that allows them to raise and seek resolution or remedy for the range of complaints and grievances that may occur in relation to the	Substantially Meets	Present the dissemination mechanisms for the company's grievance channel, including minutes of coexistence committee meetings, radio advertisements, the Dialogue magazine, among others. Reinforce the Fale Conosco operational procedure and its updates, in addition to presenting

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
					company and its mining-related activities.		the results of the mechanism's satisfaction survey.
2.5	Emergency Preparedness and Response	2.5.1.	Emergency Response Plan	2.5.1.1.	All operations related to the mining project shall have an emergency response plan conforming to the guidelines set forth in United Nations Environment Programme, Awareness and Preparedness for Emergencies at the Local Level (APELL) for Mining.	Substantially Meets	Share the emergency response procedure and emergency response plan for all Minas-rio operations.
2.5	Emergency Preparedness and Response	2.5.2.	Community and Worker Consultation	2.5.2.1.	The emergency response plan shall be developed in consultation with potentially affected communities and workers and/or workers' representatives, and the operating company shall incorporate their input into the emergency response plan, and include their participation in emergency response planning exercises.	Substantially Meets	The functionality test is being carried out, as scheduled. The report must present the adherence of the signs to the project and any improvements identified to be incorporated into the process. The promotion of stakeholder participation continues, as progress is made in 2022, where we had important participation from external stakeholders and members of civil defense.

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
2.6	Planning and Financing Reclamation and Closure	2.6.2.	Reclamation and Closure Planning	2.6.2.6.	The most recent version of the reclamation and mine closure plan, including the results of all reclamation and closure plan updates, shall be publicly available or available to stakeholders upon request.	Substantially Meets	The Mine Closure Plan is available on the website (Barro Alto Mine Closure Plan) https://brasil.angloamerican.com/pt-pt/sustainability/documentos-tecnicos-sobre-nossos-projetos To request the document, it is possible to request it through Anglo American communication channels. The telephone is free and operates from Monday to Friday, from 8 am to 7 pm.
3.1	Fair Labor and Terms of Work Requirements	3.1.2.	Workers' Organizations and Agreements	3.1.2.1.	The operating company shall respect the rights of workers to freedom of association and collective bargaining.	Substantially Meets	Demonstrate mechanisms for implementing human resources policies. Strengthen the guarantee of freedom of negotiation for association workers, in addition to maintaining invitations to participate in audit processes. Show the emails with the status of the negotiations that are sent to all employees.

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
3.3	Community Health and Safety	3.3.1.	Health and Safety Risk and Impact Scoping	3.3.1.1.	The operating company shall carry out a scoping exercise to identify significant potential risks and impacts to community health and safety from mining-related activities. At minimum, the following sources of potential risks and impacts to community health and/or safety shall be considered: a. General mining operations; b. Operation of mine-related equipment or vehicles on public roads; c. Operational accidents; d. Failure of structural elements such as tailings dams, impoundments, waste rock dumps (see also IRMA Chapter 4.1); e. Mining-related impacts on priority ecosystem services (see also IRMA Chapter 4.6); f. Mining-related effects on community demographics, including in-migration of mine workers and others; g. Mining-related impacts on availability of services; h. Hazardous materials and substances that may be released as a result of mining-related activities (see also IRMA Chapter 4.1); and	Substantially Meets	Present a study related to communicable diseases, shared annually with SUPRAM in accordance with licensing conditions. Present a study prepared for the AASW 4C in 2022 (Health Impact Assessment Scope Definition Report). Check whether it will be deepened in 2025.

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
Number		Number	Name	Number	i. Increased prevalence of water-borne, water-based, water-related, and vector-borne diseases, and communicable and sexually transmitted diseases (e.g., HIV/AIDs, tuberculosis, malaria, Ebola virus disease) that could occur as a result of the mining project.		

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
4.2	Water Management	4.2.4.	Monitoring and Adaptive Management	4.2.4.1.	The operating company shall develop and document a program to monitor changes in water quantity and quality. As part of the program the operating company shall: a. Establish a sufficient number of monitoring locations at appropriate sites to provide reliable data on changes to water quantity and the physical, chemical and biological conditions of surface waters, natural springs/seeps and groundwater (hereafter referred to as water characteristics); b. Sample on a frequent enough basis to account for seasonal fluctuations, storm events and extreme events that may cause changes in water characteristics; c. Establish trigger levels and/or other indicators to provide early warning of negative changes in water characteristics; d. Sample the quality and record the quantity of mine-affected waters destined for re-use by non-mining entities; e. Use credible methods and appropriate equipment to reliably detect changes in water characteristics; and	Substantially Meets	To highlight the occurrence of water reuse by non-mining entities, in addition to presenting the analysis of laboratories capable of detecting contaminants at levels below the values. Include a map, detailing the area of influence and suitability of monitoring points, or specific trigger levels.

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
Number		Number	Name	Number	f. Use accredited laboratories capable of detecting contaminants at levels below the values in the IRMA Water Quality Criteria by End-Use Tables.		

Chapter Number	Topic	Criteria Number	Criteria Name	Requirement Number	Requirement Text	Rating	Action Plan
4.2	Water Management	4.2.4.	Monitoring and Adaptive Management	4.2.4.4.	The operating company shall develop and implement an adaptive management plan for water that: a. Outlines planned actions to mitigate predicted impacts on current and future uses of water and natural resources from changes in surface water and groundwater quality and quantity related to the mining project; and b. Specifies adaptive management actions that will occur if certain outcomes (e.g., specific impacts), indicators, thresholds or trigger levels are reached, and timelines for their completion.	Substantially Meets	Review the Water Resources Management Program, including a chapter for the adaptive management plan (4.2.4.2).