

Várzea do Lopes Iron Ore Mine Audit Packet

9 October 2025



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Contents

(click to jump)

[Press Release](#)

[Questions & Answers](#)

[Audit Report](#)



Gerdau's Várzea do Lopes Iron Ore Mine Completes IRMA Audit

***Brazilian Mine achieves IRMA Transparency when audited
against the world's only equally governed mining standard***

On **9 October 2025** the Initiative for Responsible Mining (IRMA) released the audit report of Gerdau's Várzea do Lopes iron ore mine against the IRMA Standard for Responsible Mining. The Várzea do Lopes Mine is located in Brazil's Minas Gerais state in the municipality of Itabirito. Independent audit firm SCS Global Services assessed the Várzea do Lopes Mine at IRMA Transparency when measuring its performance against the Standard's best practice social and environmental criteria.

IRMA Transparency means that the operation has been independently audited against all relevant requirements in IRMA's Standard and has publicly shared its audit scores and the basis for auditors' findings. By sharing such extensive information, a mine provides diverse stakeholders with the information needed to understand the mine's operations and encourage improvement as needed. The full audit report is available on the [Várzea do Lopes Mine audit page](#) on the IRMA website.

As the IRMA Standard is [recognized](#) and adopted around the globe, these audits are important steps in a deepening dialogue between mining companies and those affected by their operations. Because the IRMA process is always improving from the experience of the most recent audit, audit results should be reviewed and interpreted accordingly.

On July 17, 2025, Gerdau [announced](#) the signing of an agreement for the full transfer of mining rights related to the operation of the Várzea do Lopes Mine, located in Itabirito (MG). The new holder of these rights is Várzea do Lopes Mineração S.A., a company controlled by the same partners of Avante Participações e Negócios Ltda.



With this transaction, the new holder of the mining rights assumes full responsibility for the operation and production of iron ore at the Várzea do Lopes Mine.

This initiative is part of Gerdau's process of reorganizing its mining assets, aiming to concentrate its own mining operations in the Miguel Burnier asset, located in Ouro Preto (MG).

Including the Várzea do Lopes Mine, [26 industrial-scale mines worldwide are within the IRMA independent assessment system](#). After an initial self-assessment, a participating mine engages a third-party audit firm — trained and approved by IRMA — to conduct a detailed independent evaluation, including on-site visits to the mine and nearby communities. Following the release of the initial audit, a surveillance audit checks on the mine's performance. Three years after the initial audit, the operation is fully audited again.

The independent IRMA system is the only global mining standard that provides equal power to the public sector (communities and Indigenous rights holders, mine workers, and environmental and human rights advocates) alongside the private sector (mining companies, mined materials purchasers and investors).

For More Information:

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contact@responsiblemining.net +1.360.217.9080 (WhatsApp)
- Várzea do Lopes Mine audit packet: <https://responsiblemining.net/varzea-do-lopes-packet>
- Várzea do Lopes Mine IRMA audit page:
<https://responsiblemining.net/varzea-do-lopes>
- Announcement of Várzea do Lopes Mine ownership change:
<https://www2.gerdau.com.br/noticias/comunicado-reorganizacao-dos-ativos-minerais/>

October 2025

Questions & Answers

IRMA audit of Gerdau's Várzea do Lopes operation

Do IRMA audits certify these mining operations as “responsible”?

IRMA audits do not yield “certification”, nor do they declare at what point a mine operation becomes a “responsible mine”. The IRMA system is built to facilitate transparent conversation about mine impacts, at a table where civil society and labor have voice equal to the private sector, and to create greater value for all stakeholders.

In doing this audit, Gerdau volunteered their Várzea do Lopes operation to be measured against a standard more rigorous, requiring more public engagement, and more transparent sharing of results than any other global standard. It is an act of leadership and commitment to increase dialogue across diverse stakeholder sectors and community members.

IRMA doesn't use the word “sustainable” but rather brings attention to best practices for more responsible mining practices. The IRMA process also creates incentives for reducing waste, supporting a circular economy, addressing inequity in the use and benefits of mined materials, and supporting innovation that reduces the need for new extraction.

What do IRMA achievement levels mean?

IRMA recognizes four levels of achievement for an independent audit.

- **IRMA Transparency** means a mine has been independently audited against all relevant requirements in IRMA's Standard and has publicly shared its audit scores and the basis for auditors' findings. By sharing such extensive information, a mine provides diverse stakeholders with the information needed to understand the mine's operations and encourage improvement as needed.
- **IRMA 50 and IRMA 75** indicate a mine has been independently audited and met at least 50% or 75% of the possible score within each of the four principle areas of the IRMA Standard—business integrity, positive legacies, and social and environmental responsibility.

- [A mine receiving IRMA 50, IRMA 75 or IRMA 100 must at least substantially meet all IRMA's critical requirements.](#)
- **IRMA 100** indicates an independently audited mine meets all requirements applicable to the mine operation. To date, no mine has achieved the level of IRMA 100.

What does IRMA Transparency mean for the Várzea do Lopes Mine?

The Várzea do Lopes operation achieved IRMA Transparency which means it has been independently audited and agreed to share this public report. The operation's performance by chapter and against each critical requirement is presented in Section 3 of the report. Chapter 2.2 related to Indigenous people's rights was not evaluated during this audit due to initial scoping, but interviews conducted during the operation visit revealed that both members of these Quilombola communities located near the mine believe that their legal, customary rights or interests may be affected by the company's operations. Consequently, the applicability has been classified as not assessed. This chapter must be evaluated during the surveillance audit. Since the operation's performance against this chapter and associated critical requirement were not assessed and scored, the operation was unable to demonstrate performance that meets the minimum requirements of at least IRMA 50.

The audit began in June 2023, with the announcement of the independent, third-party audit and included onsite audit activities in August and September 2023. Gerdau decided to use IRMA's Corrective Action Period after which corrective actions were verified by auditors in July 2025. The operation must undergo a surveillance audit in 12 to 18 months from the date this initial report has been released, as part of [IRMA's independent assessment cycle](#).

What confidence can I have that the audit report is accurate?

The information in this audit report represents the work of an independent audit firm to measure a mining company's performance against IRMA's Standard for Responsible Mining. The Standard includes more than 400 requirements – it's more rigorous and detailed than any other mining standard in the world.

Auditors review thousands of pages of documents shared by the company, spend a week or more at the mining operation, and speak with workers and community members without the company present. This audit team included a total of 9 auditors with qualifications in social performance, worker health and safety, and environmental management. Auditors consider the feedback from workers and stakeholders alongside evidence provided by the operation to enable a balanced perspective of the mine's performance. Auditors consider this collective information to help determine a rating for each requirement. Their rationale is documented, including a reference to the evidence that was considered. Approximately half of IRMA's requirements include an expectation of the auditors to seek additional perspectives from workers, community members and others on an operation's performance.

If you have questions or concerns that information in the report isn't accurate, or if you have information and opinions different than what you read here, we encourage you to contact IRMA to make it more accurate:

<https://responsiblemining.net/feedback>

Companies participating in IRMA audits are sharing a broad range of information with more transparency than has ever been done. Their effort is a work in progress and will further improve as communication increases with the people who are potentially most impacted by their operations.

Gerdau has sold this operation to another company. How does this affect the IRMA recognized achievement?

On July 17, 2025, [Gerdau announced the signing of an agreement](#) for the full transfer of mining rights related to the operation of the Várzea do Lopes Mine, located in Itabirito (MG). The new holder of these rights is Várzea do Lopes Mineração S.A., a company controlled by the same partners of Avante Participações e Negócios Ltda.

According to Gerdau, with this transaction, the new holder of the mining rights assumes full responsibility for the operation and production of iron ore at the Várzea do Lopes Mine. This initiative is part of Gerdau's process of reorganizing its mining assets, aiming to concentrate its own mining operations in the Miguel Burnier asset, located in Ouro Preto (MG).

Part of IRMA's protocol when ownership is transferred is for audit firms to assess whether performance confirmed during the most recent IRMA audit is being maintained with the new owner. This continuity is assessed at the discretion of the audit firm that has issued the existing achievement level. In addition, auditors will assess the operation's commitment to continual improvement at the surveillance audit.

IRMA reports usually include a corrective action plan, prepared by the mining company, that describes how they intend to correct deficiencies. These plans are required for operations that achieve IRMA 50 or higher and must, at a minimum, address any critical requirements that are not fully met. Because this operation achieved IRMA transparency, a corrective action plan was not required. Due to the transfer of ownership, it will remain up to the current owner to decide if they wish to continue participating in the IRMA program and if they wish to present a corrective action plan based on the outcome of this audit. Stakeholders are encouraged to communicate with the new mine operation owner regarding requests for information, participation, or for continued participation in the IRMA process.

Does an IRMA audit mean a mine is “safe”?

An IRMA audit does not declare a mine “safe” or “unsafe”. An IRMA audit measures how an operation's performance compares to best practices at a moment in time and

transparently reports the results to the public. The audit reports provide unprecedented transparency so that stakeholders can make informed decisions as they engage with the mining company on areas for improvement that are most important to them.

How does IRMA compare to other standards and how does achievement in IRMA differ?

IRMA's audit reports offer more independently verified information and insights into a mine's performance than any other system. The IRMA Standard requirements are detailed, specific and comprehensive, providing clear visibility into a mine's operations. This level of transparency is new for the industry and provides immense value for civil society, labor unions, investors, and purchasers alike.

Audits which lack specificity and clear reporting create opacity and potential risks, as it becomes difficult to objectively assess which mining operations truly align with best practice. Transparency is the first critical step toward the IRMA's ultimate goal: to drive value for improved practices in mining.

I'm a mining company contemplating doing an independent audit – if I do one, will civil society appreciate my effort, or just further criticize our work? Is this level of transparency going to be appreciated or just create greater risk for us?

Trust is deeply broken between many mining companies and the stakeholders, community members and Indigenous rights holders impacted by their operations. Key to building trust is sharing information, being responsive to concerns about impacts, and demonstrating timely responsiveness to community and worker concerns.

Changing the current context won't happen overnight. We appreciate the effort of companies voluntarily stepping forward during this time of change and uncertainty to increase sharing of information, making commitments to improve practices, and showing positive progress.

Many stakeholders, community members and Indigenous rights holders don't trust auditors or audit processes, broadly speaking. Could there have been "cheating" or inappropriate influence of auditors involved in this process?

IRMA and approved firms are aware of some stakeholders' deep distrust of audit processes. This can happen when "independent audits" are actually consulting work done by experts hired to serve a particular company. IRMA audits are different from these type of consulting contracts in several ways.

To date, IRMA has approved, trained, and works closely with three firms (applications for new firms to join are always being accepted). While the mining company must pay for the costs of the audit, the right to do an IRMA audit is conferred by IRMA. IRMA can remove that right to audit if a firm has not met expectations in terms of

competency, has not demonstrated freedom from conflict of interest, and is not working in service to the IRMA system and its commitment to all stakeholders, community members and Indigenous rights holders.

IRMA-approved audit firms must be accredited to ISO 17021 or a similar standard for third-party auditing and are required to meet strict requirements associated with maintaining impartiality and managing conflict of interest. Audit firms cannot provide consulting or internal auditing services to a mine operation being audited, they must have systems to assess and mitigate risks to impartiality and must conduct an internal review of the audit methodology and report by someone not involved in the audit to verify compliance. Accredited audit firms are trained by IRMA, assessed annually by an external accreditation body, and also by an independent oversight body that specifically considers expectations for the IRMA assurance process. Audit firms that fail to properly manage and preserve impartiality could lose their accreditation and therefore their license to operate.

Why would a mining company agree to do a rigorous audit like IRMA?

It's best to ask this question to each mining company engaged to hear their perspective. To date, the first mining companies engaging in IRMA audits have done so because their local community members have asked them, or a customer or investor has asked. Mining companies are evaluating which standards systems bring the greatest value for the time and effort to engage. While the IRMA process is more rigorous, which requires more time and financial investment to participate—and while the high-bar requirements don't yield an easy pass, mining companies are finding that this type of robust assessment is better informing specific improvements and supporting better relationships with communities, customers and investors.

How can community members and other stakeholders use this report?

Community members, NGOs, workers and other stakeholders can use the audit findings to engage directly with Gerdau.

An IRMA audit report is a tool that helps increase access to information about the impacts of a mining operation. It assists rights-holders by putting them on a more equal information footing when engaging with an operator directly, or in public.

The findings of an IRMA audit report can internationally amplify the voices of rights-holders that participated in the audit. The findings of an audit report provide data on a company's practices that can be cross-referenced with other sources of information by interested stakeholders including metals purchasers.

IRMA is the only voluntary mining standard in the world actively reaching out to potentially impacted communities to encourage them to use the IRMA system as a tool to drive more responsible business practices, and to train and support them on how to do this.

How can governments/regulators use this report?

A voluntary initiative like IRMA will never replace, nor be as valuable, as the role that governments serve, and the laws they set which apply to all operators. Where mining companies have agreed to do an independent IRMA audit, they are often sharing information on performance beyond legal compliance. We encourage mining companies and their regulatory government agencies to communicate together about the information shared in the IRMA audit report.

IRMA staff offer our time in direct support to government staff who want to learn more about the IRMA Standard and cross-stakeholder definitions for best practices to drive more responsible mining practices. We support governments doing gap analysis work to measure where IRMA goes beyond regulatory structure and considering the opportunity and value to strengthen laws using the IRMA Standard as a template.

How can purchasers of mined materials, like a car maker, or investors in mining companies use, these audit reports? What can companies buying materials from this operation say about their sourcing?

Purchasers of mined material, and investors in mining companies, can use IRMA audit reports to better understand environmental and social impacts at operations that supply minerals for their products or in which they invest. We encourage purchasers and investors to look beyond an IRMA achievement level and take an in-depth look at audit reports to understand the scores and performance for each chapter. IRMA reports can provide significant insights into a broader effort of due diligence to understand risks in the supply chain and support mining's customers and investors to be active participants in reducing potential impacts.

In being audited, Gerdau and other companies doing IRMA audits are sharing with purchasers, investors, workers, and civil society metrics on their performance for more than 20 different areas of impact. This means that interested readers can understand more, and ask for further insights, so that performance isn't just about single issues like greenhouse gas emissions, or worker health and safety, or protecting water resources—but can be evaluated against a comprehensive range of issues relevant for large-scale mining.

As purchasers and investors learn more about mining companies' operations, they can encourage operations to further share information on impacts, seek context and ask for improvement in areas of challenge, and value areas of strong performance. They can appreciate the effort Gerdau has made to be audited and can encourage in further dialogue between the company and its stakeholders, community members and Indigenous rights holders.

In terms of specific sourcing claims, IRMA has a new Chain of Custody Standard (responsiblemining.net/coc) which provides a way to independently audit a purchaser's supply chain and ensure claims of responsible sourcing can be verified.

If I have questions or feedback about this report, who do I contact?

IRMA's intention is to increase direct dialogue and information sharing between mining companies and diverse stakeholders, community members and Indigenous rights holders affected by the operations.

If you have questions about the mining operations' practices in this audit report, we encourage you to directly contact Gerdau at:

prosasdevizinhos@gerdau.com.br / daiane.soares@gerdau.com.br

If you have questions about the process that auditors followed or the evidence they reviewed, contact the audit firm SCS Global Services at:

feedback@scsglobalservices.com.

If you have questions about the IRMA Standard and the metrics there for measuring mining company performance, or IRMA rules for auditing, or IRMA's governance, accountability or other aspects of how the IRMA system works, please contact IRMA using the information below.

IRMA staff are dedicated to helping all stakeholders and community members get answers to questions related to this audit report. Please contact us if you need help getting answers to questions.

For more information

IRMA Várzea do Lopes mine audit page:

<https://responsiblemining.net/VarzeadoLopes>

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MINE SITE ASSESSMENT PUBLIC SUMMARY REPORT

MINE SITE

Várzea do Lopes

OPERATING COMPANY

Gerdau S.A.

COUNTRY OF OPERATION

Brazil

9 OCTOBER 2025

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.

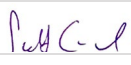
Outside stakeholders are not remunerated for their participation, and willingly give their time to provide perspectives and information on mine site performance. IRMA would like to recognize Gerdau workers, governmental representatives, and members of affected communities for their participation in this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

Table of Contents

Acknowledgements.....	2
Table of Contents.....	3
Audit Details	5
1. Mine Site Overview	6
1.1. Overview of Location.....	6
1.2. Overview of Operation	11
1.2.1. Scope of activities and facilities included in audit	12
2. Mine Site Assessment Process.....	13
2.1. Overview of IRMA Process.....	13
2.1.1. Scope and Limitation of Audits.....	14
2.1.2. IRMA Complaints Process.....	15
2.2. Audit Process and Timeline	15
2.3. Stakeholder Engagement.....	16
2.3.1. Written comments/inquiries	16
2.3.2. Mine Staff.....	16
2.3.3. Workers/Contractors.....	17
2.3.4. Government Agencies	17
2.3.5. Participating Communities and NGOs.....	18
2.4. Summary of Mine Facilities Visited.....	19
3. Summary of Findings	20
3.1. Audit outcome	20
3.2. Scores by IRMA Standard principle and chapter	20
3.3. Performance on critical requirements.....	22
3.3.1. Snapshot of performance on 40 critical requirements	22
3.3.2. Performance on 40 critical requirements	23
4. Next Steps.....	26
4.1 Corrective Action Plans.....	26
4.2 Disclosure of Summary Audit Report.....	27
4.3 Timing of Future Audits.....	27
APPENDIX A—Results by Requirement.....	28
Principle 1: Business Integrity	28
Chapter 1.1—Legal Compliance.....	28
Chapter 1.2—Community and Stakeholder Engagement	33
Chapter 1.3—Community and Stakeholder Engagement	43

Chapter 1.4—Complaints and Grievance Mechanism and Access to Remedy	57
Chapter 1.5—Revenue and Payments Transparency	64
Principle 2: Planning for Positive Legacies.....	72
Chapter 2.1—Environmental and Social Impact Assessment and Management.....	72
Chapter 2.2—Free, Prior and Informed Consent (FPIC)	85
Chapter 2.3—Obtaining Community Support and Delivering Benefits.....	87
Chapter 2.4—Resettlement.....	92
Chapter 2.5—Emergency Preparedness and Response.....	93
Chapter 2.6—Planning and Financing Reclamation and Closure	97
Principle 3: Social Responsibility	111
Chapter 3.1—Fair Labor and Terms of Work.....	111
Chapter 3.2—Occupational Health and Safety	127
Chapter 3.3—Community Health and Safety.....	144
Chapter 3.4—Mining and Conflict-Affected or High-Risk Areas.....	151
Chapter 3.5—Security Arrangements	157
Chapter 3.6—Artisanal and Small-Scale Mining	166
Chapter 3.7—Cultural Heritage.....	166
Principle 4: Environmental Responsibility.....	177
Chapter 4.1—Waste and Materials Management.....	177
Chapter 4.2—Water Management	198
Chapter 4.3—Air Quality.....	216
Chapter 4.4—Noise and Vibration.....	224
Chapter 4.5—Greenhouse Gas Emissions	229
Chapter 4.6—Biodiversity, Ecosystem Services and Protected Areas.....	231
Chapter 4.7—Cyanide Management.....	245
Chapter 4.8—Mercury Management	245
.....	246

Audit Details

Name of Mine:	Várzea do Lopes
Operating Company:	Gerdau S.A.
Mine Owner:	Gerdau
Country of Operation:	Brazil
Mined Material(s):	Iron Ore
# Employees / contractors:	149 employees / 1,319 contractors at the time of audit
IRMA Audit Webpage:	https://responsiblemining.net/vareza-do-lopes
Audit Type:	Initial Verification Audit
Audit Dates:	Stage 1: June - July 2023 Stage 2: August 28, 2023 - September 05, 2023 Corrective Action Verification: July 2025
Audit Team:	Lead Auditor (1), Social Auditor (2), Health and Safety Auditor (2), Environmental Auditors (4), Support team members (2)
Auditor Firm Declaration:	<ul style="list-style-type: none"> ✓ 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. ✓ The information in this report is accurate according to the best knowledge of the auditors who contributed to the report.
Audit Firm:	SCS Global Services
Authorized Representative:	Scott Coye-Huhn, Vice-President, EBC Division
Representative Signature:	
Scope of Audit	The scope includes drilling, blasting, iron ore extraction, transportation (conveyor, road), crushing, raw material and waste storage, maintenance, and ancillary services at Várzea do Lopes, Brazil.
IRMA Standard Version:	IRMA Standard for Responsible Mining, v.1.0 (June 2018)
IRMA Achievement Level:	IRMA Transparency
Achievement Decision date:	9 October 2025 (report publication date)
Achievement Valid Until:	8 October 2028 (contingent upon outcome of surveillance audit and continuous compliance with the IRMA independent audit processes)
IRMA Reference Number:	IRMA-STD-SCS-002-V-00007

1. Mine Site Overview

1.1. Overview of Location

Gerdau S.A. (Gerdau) operates mines in Minas Gerais, a state in southeastern Brazil. Minas Gerais, translated into English, means "General Mines", which signals the importance of mining in this part of Brazil. Gerdau's mining operations are situated between Belo Horizonte and Ouro Branco in the Iron Quadrangle (Quadrilátero Ferrífero), a region rich in iron ore deposits (Figure 1).



Figure 1: Locality of the Várzea do Lopes Mine, Brazil

Mining in this region began with Indigenous populations prior to Portuguese colonization. It expanded and accelerated at the end of the seventeenth century when gold was discovered. The gold rush brought hundreds of thousands of settlers, primarily Portuguese and enslaved Africans, to the region (Annual Report Securities Exchange Act of 1934, 2015), reshaping the region's ethnic composition (European, African and Indigenous ancestry) and leaving a legacy in placenames and historical monuments. The city of Ouro Preto (a UNESCO World Heritage Site), meaning 'black gold', as well as other historical monuments such as the "Serra da Moeda" (translation 'coin rock'), a conservation area whose name is said to originate from a slave who found many gold coins in one of its caves or crevices.

Gold mining gradually gave way to manganese and iron ore extraction in the 1940s, spurring the growth of the steel industry. Today, Minas Gerais remains a leader in iron ore and steel production with companies like Gerdau playing a significant role (Brazil Steel Institute, 2021).

The municipality of Itabirito, home to Gerdau's Várzea do Lopes mine, is in the Serra do Espinhaço mountain range, also known as the "Brazilian Highlands," with elevations between 1,100 and 1,700 meters above sea level (masl). This region's complex geography of eroded peaks and stream valleys creates a diverse microclimate, with unique temperature and precipitation patterns

and occasional freezing conditions at higher altitudes. The climate here is mild, with the warmest months from January to March, averaging 26°C (79°F), and the coolest months from June to August, averaging 21°C (70°F). The region experiences a distinct rainy season from October to March (Weather Spark, 1980 - 2016), replenishing aquifers and local water resources (i.e., springs, rivers, and streams).

The Serra do Espinhaço range lies within a unique transition zone between Brazil's Atlantic Forest and Cerrado Grassland biomes, both recognized globally as high-priority areas for conservation due to their high biodiversity (Trinational Alliance for the Atlantic Forest Restoration, 2009). This highland area supports an array of plant and animal species, many of which are found only in this region, including diverse bird, reptile, amphibian, insects, fish, and mammal populations. Besides being rich in minerals and biodiversity, the region provides critical ecosystem services, like fresh water for communities, timber for charcoal and fuelwood, land for food production (crops and livestock), recreational areas, and other natural resources. Balancing industrial activities, including mining and timber production, with conservation is a key priority for Brazil, supported by the country's National System of Nature Conservation Units (Law No. 9.985 of 2000). This priority has gained importance following the tailings dam failures of mine sites owned by other companies in the Minas Gerais mining municipalities of Mariana in 2015 and Brumadinho in 2019.

The mine occupies an area along both sides of Highway BR-040 in Itabirito municipality between two ecologically important and protected areas: the Arêdes Ecological Station to the east, and the Moeda State Natural Monument to the west (Figure 2). Both areas are part of the Espinhaço Range UNESCO Biosphere

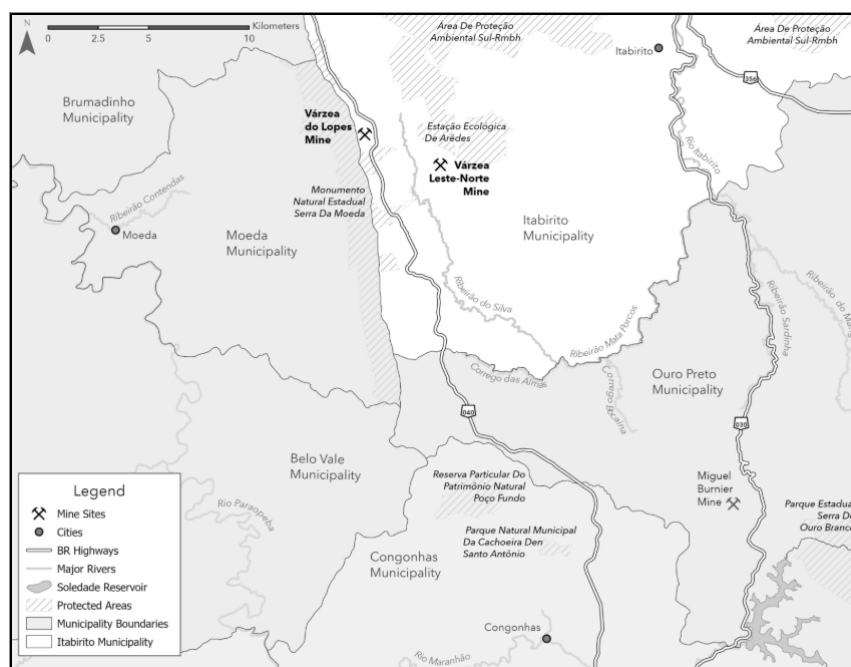


Figure 2: Location of Várzea do Lopes mine and surrounding municipalities

Reserve, and are recognized for high biodiversity and unique ecosystems, including various endangered species. The Arêdes station serves as a crucial research site for studying and conserving the Atlantic Forest's flora and fauna. The Moeda State Natural Monument was made possible by Gerdau through a commitment to protect the area in 2009, early in Várzea do Lopes' licensing process. Nowadays, more than 54% of the 2,372 hectares of the conservation unit are Gerdau's property. According to Gerdau's agreement with the State of Minas Gerais, the land after mine closure protects shall be integrated into the Monument. Both areas are home to birds, reptiles and amphibians, insects, fish, and mammals, many endemic to the region.

The Várzea do Lopes mine is bounded to the west by the Serra da Moeda Mountain range. Besides conservation, land use closest to the mine site consists of other industrial-scale iron ore mining operations (predominantly to the east, northeast) including SAFM Mineração (Ponto Verde Mine), Herculano Mineração, and Vale S.A. (Pico Mine); small-scale family agriculture, including livestock raising; several condominium complexes; business services along highways and roads (general store, agricultural, restaurant); and a few, widely-spaced rural residential homes (Figure 3).

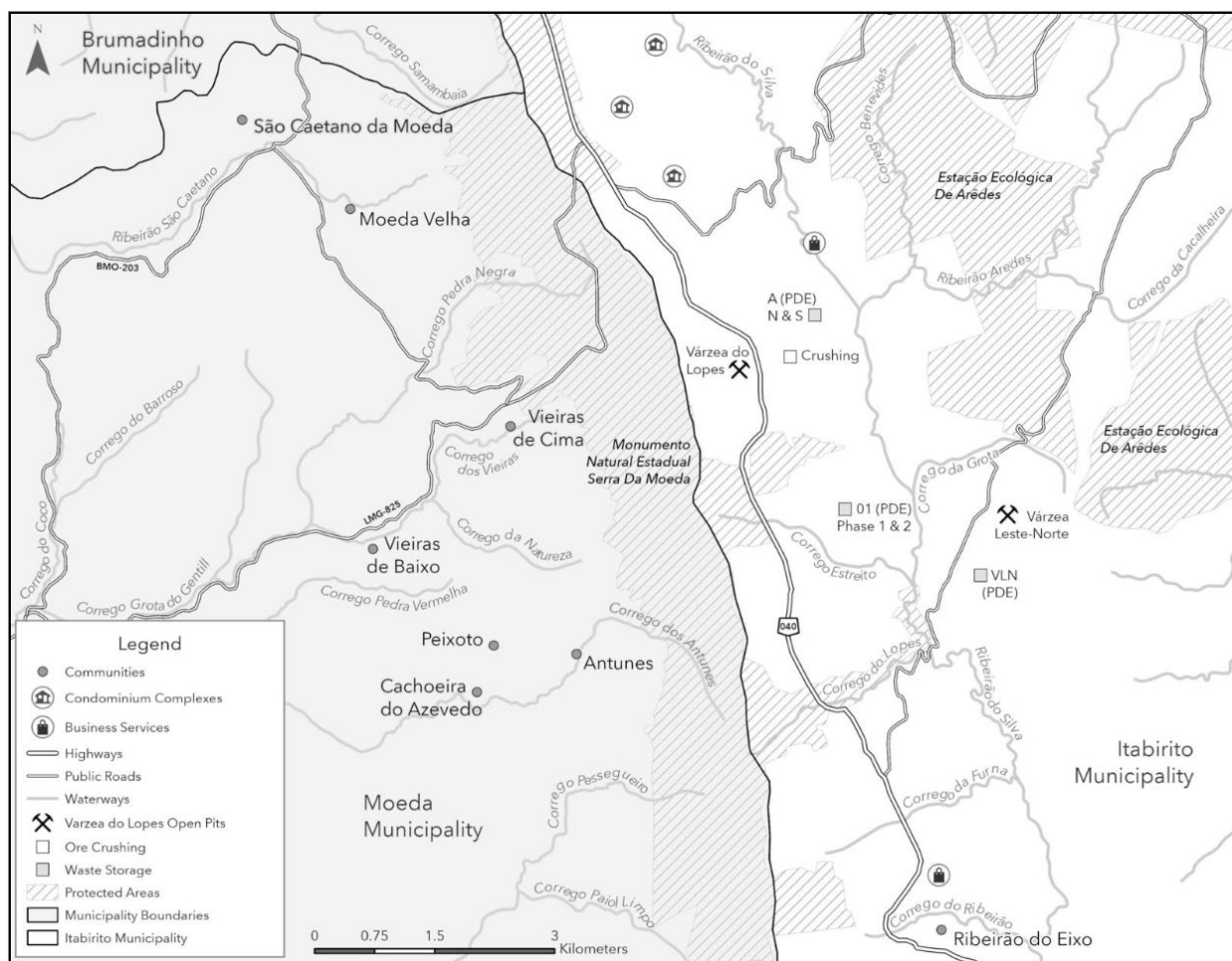


Figure 3: Mine Infrastructure, Surrounding Communities, and Waterways

Serra da Moeda is a topographical boundary and drainage divide, with Itabirito municipality to the east and Moeda municipality to the west. On the eastern side of the Moeda range (Itabirito municipality), surface water flows south towards the Do Silva Stream, which is a tributary within the Das Velhas River watershed. On the western side of the Moeda range (Moeda municipality), surface water flows west through a network of streams and rivers that are within the Paraopeba River watershed. Both the Paraopeba and Velhas River watersheds (sub-basins) are located within the São Francisco River basin.

There are several aquifers that supply water to the region; the Cauê aquifer is reported to be the most significant. However, the principal water source (i.e., for human consumption, irrigation, and animal watering) is extraction from surface water (streams and rivers).

Population density in the rural areas of Itabirito municipality, including the area around the mine, is sparse (less than 5% of the total for the municipality).

West of Serra da Moeda, rural population densities in the municipalities of Belo Vale and Moeda are much higher, with more than 50% of the population living in rural areas, based on 2010 statistics (Table 1 – Population Density).

The population also includes two small quilombola communities near Moeda. Quilombolas are descendants of African slaves who escaped and formed settlements to resist recapture during Brazil's colonial period. These communities originally served as refuges where they could practice a self-sufficient lifestyle reminiscent of their African heritage. 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 ethnographic landscape.

Table 1 Population Density and Distribution in the Area of the Várzea do Lopes Mine

Municipality	2010 Population	2022 Population	% of Population in Rural Areas (2010)
Itabirito	45,449	53,365	4.1%
Moeda	4,689	5,125	61.8%
Ouro Preto	70,281	74,824	13%
Congonhas	48,519	52,890	2.6%
Brumadinho	33,973	38,915	15.7%
Belo Vale	7,536	8,627	56.3%

Source: Brazilian Institute of Geography and Statistics, 2024.

Industries such as mining, steel manufacturing, and related activities, including mine equipment and railroad maintenance, fueling, etc., offer jobs for skilled workers that with wages that exceed what is offered for other types of work in the area around the mine. The availability of employment opportunities, affordable housing, food, recreation, and access to basic services (i.e., healthcare, education, religion, government assistance) and amenities in nearby cities (i.e., Moeda, Belo Vale, Itabirito, Ouro Branco, Ouro Preto, Congonhas, Belo Horizonte) contribute to the economic well-being of the region.

Unskilled workers, including those residing in small communities, find employment opportunities in restaurants, as drivers, as teachers, in healthcare, or in the provision of other community services and goods. Others may live a subsistence lifestyle, maintaining small farms and livestock for personal consumption.

All cities, villages, 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 as is common in planned urban environments and new developments.

1.2. Overview of Operation

The Várzea do Lopes iron ore mining extraction operation consists of two open pits: Várzea do Lopes, which began to operate in 2007, and Várzea Leste-Norte, which contains additional iron ore reserves (primarily hematite) and was permitted for extraction in November 2019. Várzea do Lopes is licensed to extract 14.5 million tons of ROM (Run of Mine) per year, while Várzea Leste-Norte is licensed to extract 3.0 million tons of iron ore per year.

Mining at these locations begins with vegetation clearing, top-soil 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. This 'shot rock' is transported via dump trucks to the primary crusher, from where it is transported to additional sieving and screening process to achieve size reduction and classification. The crushed and classified ore is then transported by trucks to Miguel Burnier or another third party for final processing.

The Várzea do Lopes operation includes dewatering to keep the mine pit floors dry and rock walls stable. Pumping of accumulated surface water and groundwater from the pit is permitted in the 2014 environmental license. A portion of the water extracted from the pit (approximately 15%) is used for roadway dust control. The remaining 85% of water extracted from the pit, not lost to evaporation, is discharged to the Sítios, Lagartixa, Grota and Sabão streams, all tributaries of the Do Silva River.

Water for mine operations (Várzea do Lopes and Várzea Leste-Norte) including crushing/processing dust control, maintenance, washing, and for potable use (i.e., administrative offices, lockers, etc.) is supplied through one or more of the eleven permitted water wells at the mine. The wells provide drinking water which is treated at the facility's Water Treatment Plant (ETA) prior to use.

Várzea do Lopes employs a total of 149 workers (7.4% are women), and 1,319 workers are contractors. The total number of workers fluctuates according to the production and not all of them work on-site. The workforce is well

educated and generally young, with an average age of 35. Approximately 40% of Gerdau employees live in Conselheiro Lafaiete, 21% in Ouro Branco and 15% in Congonhas; most of the remaining employees (est. 20%) live in the smaller cities and communities such as Moeda, Brumadinho, and Itabirito, with a few living in more distant areas such as Ouro Preto and Belo Horizonte. This breakdown in residency does not include contractors.

1.2.1. Scope of activities and facilities included in audit

The scope of this IRMA Assessment is for Gerdau's Várzea do Lopes Mine and its expansion, the Várzea do Lopes Leste-Norte open pit. The principal components of the mine are: iron ore mining, iron ore crushing and screening facilities (TSVL), five waste rock storage facilities (PDE-A north and south, PDE-01 phases 1 and 2, and PDE-VLN), sediment containment ponds, ore stockpiles, fuel storage and fueling system, electrical substation, water treatment plants, security guard house, changing rooms, dining room, administrative buildings, clinic, maintenance facilities, operations building, and laboratory.

As part of the audit, a sample of relevant stakeholders was contacted and interviewed. This sample included neighbors from the nearby condominiums and family homes; the communities of Antunes, Vieiras, Peixoto, Moeda Velha, and São Caetano da Moeda; NGO's and government officials; and workers (employees and contractors) living in all areas mentioned or illustrated in the overview above, and workers representatives.

Regarding forest management, it is essential to highlight that Gerdau's operations encompass eucalyptus forest plantations (non-native trees) throughout the state of Minas Gerais. Currently, Gerdau owns approximately 150,000 hectares of planted forests, primarily used for charcoal production. Charcoal serves as a renewable energy source and bio reductor for the manufacturing of pig iron and steel at the mills. It is utilized in blast furnaces at the Barão de Cocais, Divinópolis and Sete Lagoas plants in other parts of Minas Gerais state. The Gerdau Açominas' steel plant and the mining units of Miguel Burnier and Várzea do Lopes do not use charcoal derived from forest plantations; thus, eucalyptus plantations are out of the scope of the audit.

2. Mine Site Assessment Process

2.1. Overview of IRMA Process

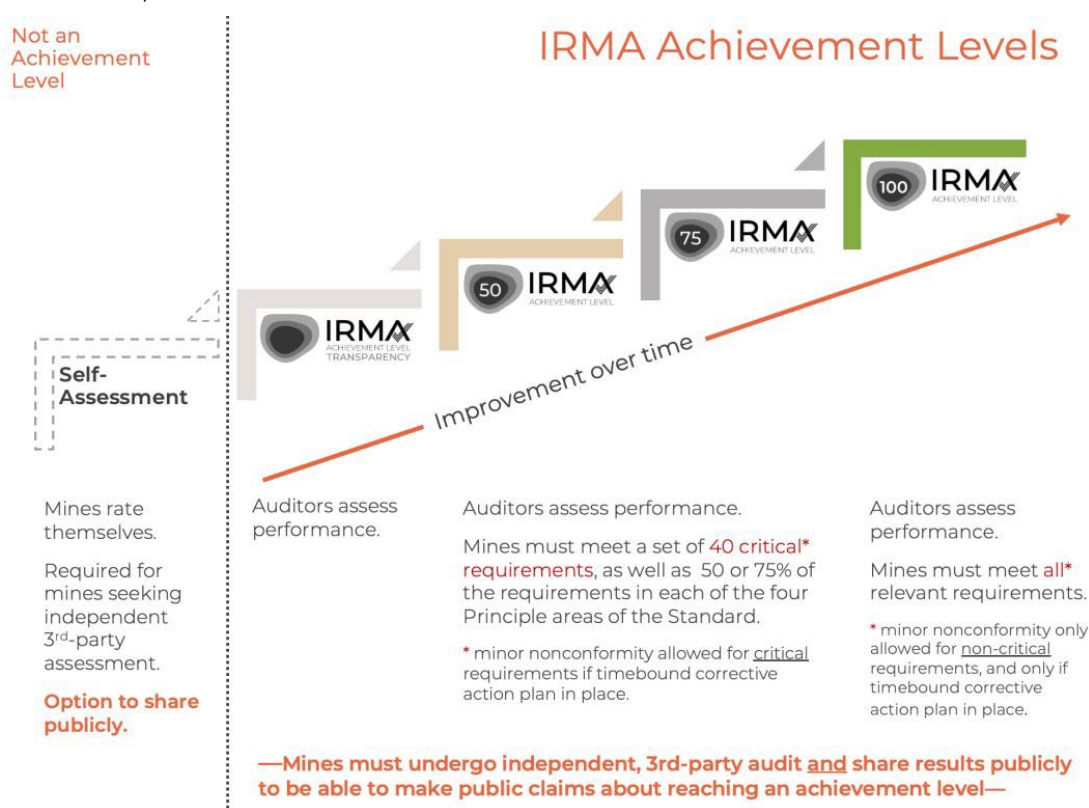
The mine site assessment process begins with mines completing a self-assessment and uploading evidence into an online tool (Mine Measure). When the self-assessment has been completed, the independent, third-party assessment may begin.

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 website.



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 practices for independent audits (i.e., ISO 19011, ISO 17021). In addition to document review and interviews with company personnel, audits include independent research, including government inquiries, on-site visits of relevant facilities, observations of operating practices, and interviews with a sample of stakeholders and workers, among them contractors, wishing to participate in the assessment.

Auditor evaluations are based on samples of audit evidence assessed against the requirements of the IRMA Standard VI (2018). Professional judgments expressed in auditor reports are based on the facts available at the time of the audit within the limits of existing data, scope of work, budget, and schedule. As such, audit reports represent the reasonable conclusions of auditors based on the IRMA standard and associated guidance, and the facts and evidence available to them, within the framework of the audit process.

The information provided in this audit report is designed to identify opportunities for expanding responsible mining in accordance with the IRMA standard and is not intended for any other purposes.

2.1.2. IRMA Complaints Process

IRMA stakeholders wishing to provide feedback or file a complaint related to the mine site assessment process may do so by visiting IRMA Website. Details on the complaints process can be found in IRMA's Issues Resolution Procedure.

2.2. Audit Process and Timeline

- Gerdau completed the initial self-assessment for Várzea do Lopes in 2022.
- SCS Global Services carried out an initial Stage 1 desktop audit in August 2023
- SCS Global Services conducted a Stage 2 on-site audit in September 2023
- SCS Global Services conducted a Corrective Action Plan Verification assessment in July 2025

The on-site audit included a series of interviews with mine staff (workers and management team), relevant community representatives, and governmental agencies; documentation review; and visit to operational areas including open pit mines, maintenance facilities, processing plants, stockpiles, waste dumps, dry tailings dumps, tailings dam, sediment control dams, clinic, management areas, and environmental monitoring sites. Communities and nearby towns were also visited.

The Corrective Action Plan Verification consisted of additional document review and remote interviews with the mine staff.

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 in July 2023, more than (30) days prior to the audit date; inquiries were received via the SCS website feedback page. Stakeholder outreach was also conducted via posters placed in community centers within the nearby towns and public audio announcements.

2.3.2. Mine Staff

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

Position/Role
Director of Mining and Raw Materials
Social Responsibility Manager
Mine Operations Manager
Geotechnical and Hydrogeology Manager
Health, Safety and Environment Manager
Human Resources Manager
Environmental Licensing Manager
Mine Planning and Quality Manager
Iron Ore Industrial General Manager
Engineering Manager
Occupational Health Coordinator
Work Safety Coordinator
Process Maintenance Coordinator
Process Plant Coordinator
Mine Operations Coordinator
Finance Specialist
Sustainability Specialist
Social Responsibility Specialist

Mine Planning and Quality Specialist
Engineering Specialist
Geotechnical Specialist
Hydrogeology Specialist
Social Responsibility Trainee

2.3.3. Workers/Contractors

Onsite interviews were conducted from August 28 to September 05, 2023, with both permanent and contract employees. The interviews involved a total of 57 workers and contractors through one-on-one and small groups interviews. The participants represented a diverse cross-section of workers, varying in roles, gender, age, years of service, and type of work responsibilities across the key operational areas of the mining operation. Worker union representatives were also included.

The interviewees represented multiple departments and were selected to ensure diversity in age, gender, experience, work groups, shifts, and responsibilities, including operational, administrative, worker health and safety, and union roles, including union leadership. Topics discussed included working conditions, with a focus on women and vulnerable groups, freedom of association, health and safety, grievance mechanisms, and more.

Interviews were held at various onsite locations, such as conference rooms, offices, lunchrooms, maintenance areas, and outdoors, ensuring both safety and worker privacy. Importantly, worker interviews were conducted without company management present. Supervisory staff were interviewed individually but did not participate in group sessions to avoid influencing employee responses.

Mine	Employees: 12 individuals (3 female, 9 male) Contractors: 45 individuals (17 female, 28 male)
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2.3.4. Government Agencies

Onsite interviews were conducted with the following public sector institutions in August and September 2023.

Government Institutions

National Mining Agency (ANM)

State Secretariat for the Environmental and Sustainable Development (Semad)

Mineral Resources Research Company (CPRM)

Public Prosecutor's Office of the State of Minas Gerais

State Council of Environmental Policy (COPAM)

State Council of Water Resources (ERH/MG)

Regional Environmental Superintendency (SUPRAM)

State Institute of Forests (IEF)

State Foundation for the Environment (FEAM/MG)

Mineral Resources Research Company (CPRM)

State Council of Environmental Policy (COPAM)

The Palmares Foundation

National Historical and Artistic Heritage Institute (IPHAN/MG)

Itabirito City Hall

Itabirito Secretariat for Environment and Sustainable Development

Itabirito Civil Defense

Ecological Station Arêdes

Congonhas City Hall

Congonhas Civil Defense

Congonhas Environmental Council

Moeda City Hall

Moeda Secretariat for Environment and Sustainable Development

2.3.5. Participating Communities and NGOs

Interviews were conducted with 18 external community stakeholders between: August and September 2023. including some online meetings. The community interviews included a cross-section of members including men, women, youth, and vulnerable groups where practically possible.

Community/NGO Name	Location	Number of Attendees
Condomínio Aconchego da Serra	online	1 male
Residencial Alto Bela Vista	Moeda	1 female
Comunidade Ribeirão do Eixo	Itabirito	1 male
NGO AMA Moeda	Moeda	3 male
NGO Abrace a Serra	Moeda	2 (1 female and 1 male)
Quilombo Taquaraçu Community Leader	Moeda	1 male

Vieiras de Cima	Moeda	1 male
Azevedo	Moeda	4 (1 male and 3 female)
Labor Union – Sindicato Metabase dos Inconfidentes	online	1 male
Union of community associations of Congonhas	online	1 male
Historical and Geographical Institute of Congonhas	online	1 male
Federation of Quilombola Communities of the State of Minas Gerais (Ngolo)	online	1 male

2.4. Summary of Mine Facilities Visited

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

Operational areas	Open pit, Open Pit Expansion (Várzea Leste-Norte), Ore Crushing and Screening Facilities (TSVL), Waste Rock Storage Facilities (PDE-01, PDE-A, PDE-VLN), Sediment Containment Ponds, Ore Stockpiles, Fuel Storage and System, Electrical Substation, Water Treatment Plants, Security Guard House, Changing Rooms, Dining Rooms, Administrative Buildings, Clinic, Maintenance Facilities and Operations Building.
Other areas visited (e.g., downstream watercourses, off-site facilities)	Germinar Biodiversity Center, Serra da Moeda Protected Area
Surrounding Communities	Rural residential development, commercial development, communities, including Ribeirão do Eixo, Moeda Velha, Azevedo, Peixoto, Vieiras de Baixo, Vieiras de Cima, Antunes, and nearby towns Moeda and Itabirito.

3. Summary of Findings

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

3.1. Audit outcome

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

3.2. Scores by IRMA Standard principle and chapter

	Chapter Relevant*	Actual Score	Possible Score	Percent Score
Principle 1: Business Integrity		64.5	108	60%
Chapter 1.1—Legal Compliance	Yes	11.5	14	82%
Chapter 1.2—Community and Stakeholder Engagement	Yes	14.5	28	52%
Chapter 1.3—Human Rights Due Diligence	Yes	11	22	50%
Chapter 1.4—Complaints Mechanism/Access to Remedy	Yes	14.5	22	66%
Chapter 1.5—Revenue and Payments Transparency	Yes	13	22	59%
Principle 2: Planning for Positive Legacies		52	132	39%
Chapter 2.1—Env/Soc Impact Assessment and Management	Yes	15	32	47%
Chapter 2.2—Free, Prior and Informed Consent	Yes	-	34	**Not Assessed
Chapter 2.3—Community Support and Benefits	Yes	9.5	16	59%
Chapter 2.4—Resettlement	No	Not Relevant	Not Relevant	Not Relevant
Chapter 2.5—Emergency Preparedness and Response	Yes	8.5	12	71%
Chapter 2.6—Planning/Financing Reclamation & Closure	Yes	19	38	50%

Principle 3: Social Responsibility		141.5	184	77%
Chapter 3.1—Fair Labor and Terms of Work	Yes	57.5	62	93%
Chapter 3.2—Occupational Health and Safety	Yes	39	46	85%
Chapter 3.3—Community Health and Safety	Yes	8	18	44%
Chapter 3.4—Conflict-Affected and High-Risk Areas	Yes	2	2	100%
Chapter 3.5—Security Arrangements	Yes	16	28	57%
Chapter 3.6—Artisanal and Small-Scale Mining	No	Not Relevant	Not Relevant	Not Relevant
Chapter 3.7—Cultural Heritage	Yes	19	28	68%
Principle 4: Environmental Responsibility		106.5	164	65%
Chapter 4.1—Waste and Materials Management	Yes	31.5	54	58%
Chapter 4.2—Water Management	Yes	22	38	58%
Chapter 4.3—Air Quality	Yes	11	18	61%
Chapter 4.4—Noise and Vibration	Yes	8	8	100%
Chapter 4.5—Greenhouse Gas Emissions	Yes	13	14	93%
Chapter 4.6—Biodiversity, Eco. Serv. and Protected Areas	Yes	21	32	66%
Chapter 4.7—Cyanide Management	No	Not Relevant	Not Relevant	Not Relevant
Chapter 4.8—Mercury Management	No	Not Relevant	Not Relevant	Not Relevant

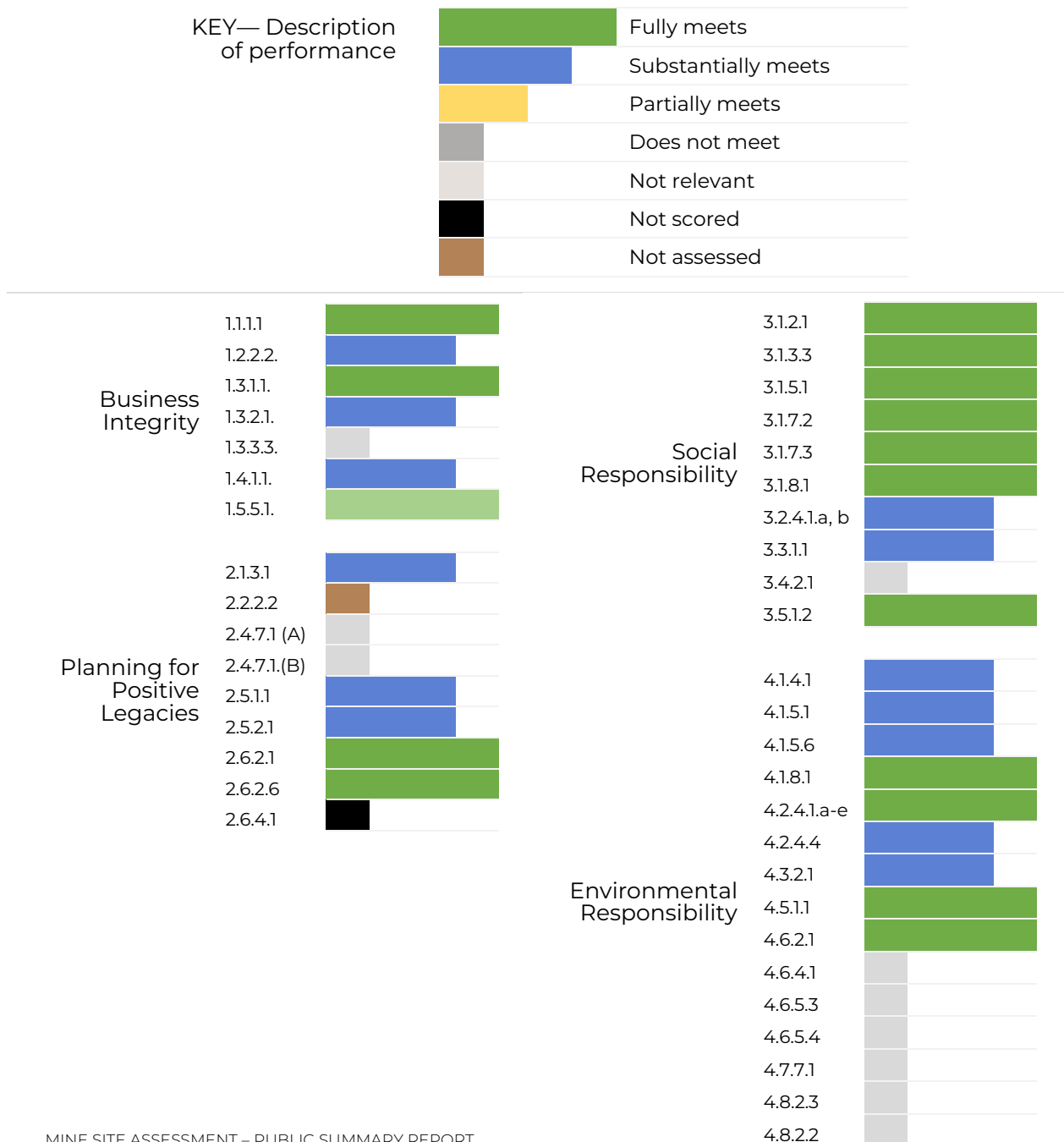
* Chapters are marked as not relevant if auditors have verified that the issues addressed in the chapter are not applicable at the mine site.

** Not assessing Chapter 2.2 means this aspect was not evaluated during the initial and CAP audit processes. This chapter must be evaluated during the surveillance audit.

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 IRMA 100 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

KEY — Description of performance

	Fully meets
	Substantially meets
	Partially meets
	Does not meet
	Not relevant
	Not scored
	Not assessed

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

4.1 Corrective Action Plans

In the IRMA system, a mine may postpone release of its initial audit results for up to 12 months while it implements corrective actions to address non-conformities with critical or other requirements to reach a higher achievement level or gain recognition for improved performance. Any improvements or changes under the early corrective action period must be verified by auditors within the 12-month period. This enables sites to implement changes and have them verified by auditors before the next assessment (refer to 4.3 for future audits).

During the 12-month period Gerdau's Várzea do Lopes Mine implemented a series of corrective actions to address major non-conformities with critical requirements. The audit team verified the implementation of these corrective actions during a remote follow-up assessment conducted in July 2025.

A key area of improvement was the strengthening of the site's human rights due diligence system through the implementation of a more robust human rights risk and impact assessment process. The process is now more closely aligned with international standards, with improvements in the identification and management of risks to community members potentially affected by the operations. In addition, the mine expanded and improved its engagement process with potentially affected communities. Improvements included expanding the list of stakeholders who received relevant information about the mine, using multiple communication channels to ensure accessibility, and incorporating subject-matter experts into community meetings to help address technical concerns. The mine also began actively soliciting feedback from stakeholders and providing clear responses on how input was considered in decision-making.

The company has implemented a more robust framework for the performance review of mine waste facilities, supported by new and updated operations manuals, expanding performance indicators, the implementation of a centralized process to gather and review performance data, corrective action trackers, as well as regular management involvement in the performance reviews.

Another significant improvement during the corrective action period was the development of a comprehensive Adaptive Water Management Plan (Water Services and Technologies, July 2024) to address preventative and corrective actions of potential impacts to water, as well as policies, guidelines, procedures, and specific trigger values to support its implementation. In addition, the company began using specialized software that enables more efficient monitoring, identification of process improvements, and prevention of water quality and quantity impacts.

Per IRMA protocols, sites that achieve IRMA Transparency are not held to specific requirements for corrective action plans; however, all sites that are independently audited against IRMA are expected to demonstrate a commitment to continual improvement. According to Gerdau, the Várzea do Lopes site is in the process of transferring ownership to a new entity. Part of IRMA's protocol when ownership is transferred is for audit firms to assess whether performance confirmed during the most recent IRMA audit has been maintained with the new owner. This continuity is assessed at the discretion of the audit firm that has issued the existing achievement level. In addition, auditors will assess the site's commitment to continual improvement at the surveillance audit.

4.2 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. Várzea do Lopes Mine's public summary report will be posted on the IRMA website.








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. In addition, auditors retain the right to re-assess the operation following any transfer of ownership to confirm that the site has maintained the systems and performance that were verified during this audit.


APPENDIX A—Results by Requirement

Note: The following section includes the results for each requirement of the Standard. In total, the evidence included more than 1,180 files (MS Word, MS Excel, pdf, shapefiles, kmz, maps, photographs and mp3); only the most relevant ones are included in this section.

KEY
Description of
performance

	Fully meets
	Substantially meets
	Partially meets
	Does not meet
	Not relevant
	Not scored
	Not assessed

Principle 1: Business Integrity

Chapter 1.1—Legal Compliance		Basis for rating
1.1.1.1.	Critical. The operating company shall have a system in place to identify all host country laws that are applicable to the mineral processing operation and associated facilities and shall track the	 <p>The company has implemented two systems to identify regulatory requirements, store documents, and monitor compliance status that are updated over time. The first system, Onegreen, is a specialized software for managing environmental licenses, permits, and tasks. The second, SOGI, is a modular software that acts as a management</p>

<p>status of the operation's compliance with those obligations.</p>		<p>and monitoring tool to maintain compliance with legal requirements.</p> <p>The programs provide the means to track compliance with applicable host country laws in relation to the mining project. A review of system reports (May 2023) indicates that the mining project monitors compliance, aiming to comply with host country laws. The evidence indicates that where renewals or updates are needed to comply with Brazilian legislation, the company has a plan in place and corrective actions in process to resolve the non-compliance.</p>
<p>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 intent of the IRMA requirement to the extent feasible without violating the law.</p>	<p>—</p>	<p>Not relevant. IRMA requirements are not in conflict with host country laws.</p>
<p>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.</p>	<p>●</p>	<p>The company presented two Environmental Control Programs (both from February 2023) referring to current operating licenses No. 01776/2004/029/2018 valid until October 29, 2026 - Várzea do Lopes Mine and No. 1776/2004/026/2017 valid until 11/27/2029 - Várzea Leste-Norte Project, as well as an evaluation report, developed by a third party, indicating the level of compliance with legal requirements (SOGI General Indicators - Mina Várzea do Lopes, February 2023).</p> <p>This evidence, as well as interviews with key staff, indicate that plans are put in place and corrective actions are implemented in a timely manner to remedy every non-compliance issue; and that for past non-compliance, not addressed in a timely and effective manner, the company has carried out an evaluation to determine why corrective actions were slow or ineffective. The evaluations led to further actions including the implementation of procedures to improve the</p>

		<p>company's response time and effectiveness and to prevent repeat noncompliance. Currently, one corrective action plan is in progress. The expected time frame to address this issue, as established by the Regional Environmental Superintendency, is December 30, 2024.</p>
1.1.4.1	<p>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.</p>	<p>The company's supplier manual (Gerdau Suppliers Manual, Annex 3, no date) includes a blank contract form (Terms of Responsibility and Commitment), that indicates that contractors are required to read, accept, and adhere to all principles outlined in the company's Code of Conduct (May 2020), which generally aligns with the intent of IRMA requirements. The evidence also includes a sample of a third-party contract (April 2022) indicating that the contractor is required to adhere to all company policies and guidelines. The evidence, Code of Ethics and Conduct for third-parties (October 2020), is a policy that indicates that all suppliers, service providers and customers shall adhere to Gerdau's commitments to respect human rights, minimizing impact on the environment, anti-corruption and anti-bribery practices and compliance with regulations. Three samples of training attendance registers for Human Relations and Quality of Life at Work (May 2023) and a sample of training attendance registers on Broadening Environmental Perception and Protagonism (November 2022), indicate that contractors have been informed on the company's social and environmental expectations, which generally align with the intent of IRMA requirements.</p> <p>The evidence includes the company's Procedure on Third-Party Management (October 2021) which indicates that the company has established procedures for hiring, managing, reviewing compliance with guidelines, and legal and regulatory requirements, and access of third parties at Gerdau. It also indicates that third-parties must use Gerdau's compliance program available on their website to track their compliance with contractual requirements and that compliance is monitored by the company.</p> <p>Interviews with key staff indicate that the company uses several means to track the compliance status of contractors, such as</p>

		<p>monthly evaluation of environmental and safety good practices implemented by the contractors, besides monthly environmental inspections to third-parties, conducted by Gerdau's staff.</p> <p>The evidence does not include details to confirm that contractors are generally adhering to the standards set out by Gerdau.</p>
1.1.5.1.	<p>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.</p>	<p>The evidence, Onegreen and SOGI system reports (OneGreen_VLVLN, May 2023 and General Indicators - Mina Várzea do Lopes, May 2022), include documentation indicating compliance with host country laws from December 2018 to September 2023. The evidence, annual Environmental Control Program Reports (January and February 2023) for the mine operations (Várzea do Lopes and Várzea Leste-Norte), indicates that plans are put in place and corrective actions are implemented in a timely manner to remedy every non-compliance issue. Interviews with managers indicated the company's commitment to ensure compliance with the applicable legislation and IRMA Standard, and to implementing corrective actions if necessary.</p> <p>The evidence does not include documentation to authenticate and demonstrate compliance with the IRMA Standard (note, this is an initial verification audit).</p>
1.1.5.2.	<p>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.</p>	<p>The company demonstrated the use of two software programs for tracking compliance with host country legislation, including permits, licenses, and other legal requirements, which are already in place.</p> <p>The programs provide the means to track compliance with applicable host country laws in relation to the mining project. A review of system reports (May 2023) indicates that the mining project complies with host country laws, and where it is in breach, there is a plan in place, and corrective actions are well underway to resolve identified gaps, which is supported by two Environmental Control Programs (both from February 2023) referring to current operating licenses No. 01776/2004/029/2018 valid until October 29, 2026 - Várzea</p>

		<p>do Lopes Mine and license No. 1776/2004/026/2017 valid until November 27, 2029 - Várzea Leste-Norte Project, in which plans are put in place and corrective actions are implemented in a timely manner to remedy every non-compliance issue.</p> <p>Some legal requirements, which have had previous breaches of host country laws in the system reports reviewed, do not have enough detail to assess if final investigations, allegations, discussions, and final remedies were in place.</p>
1.1.5.3	<p>Upon request, operating companies shall provide stakeholders with a summary of the mining project's regulatory non-compliance issues that are publicly available.</p>	<p>The evidence, interviews with stakeholders, indicates that no request has been made regarding non-compliance issues. The company has several means for fulfilling stakeholders' requests: (1) directly, such as telephone, e-mail, and WhatsApp, (2) through "Neighbors Chat" and "Neighborhood Prose" programs, and (3) the online platform AUDIRE. The evidence, Communication Procedure in the environmental management system (version 7, September 2019), outlines the process for fulfilling stakeholder requests, besides establishing the conditions for receiving, recording, and handling communications, ensuring transparency with internal and external stakeholders, and indicates that the company would share information on non-compliance with stakeholders upon request.</p>
1.1.5.4.	<p>Where the operating company claims that records or documentation contains confidential business information, it shall:</p> <p>a. Provide to auditors a general description of the confidential material and an explanation of the reasons for classifying the information as confidential; and</p> <p>b. If a part of a document is confidential, only that confidential part shall be</p>	<p>The evidence, Corporate Guideline for Information Security (version 4, December 15, 2022), establishes the company's Information security standards and guidelines to ensure the protection of data in relation to confidentiality, integrity, and availability necessary to carry out business activities. The evidence covers (a) and (b) where a part of a document is confidential, only that confidential part shall be redacted, allowing for the release of non-confidential information. During the IRMA assessment, there were no instances in which the company did not provide the auditors with information due to its confidential nature.</p>

redacted, allowing for the release of non-confidential information.



Chapter 1.2—Community and Stakeholder 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, including a stakeholder list (i.e., a table of government, community members, and guild members, among others) and a description of the social context of potentially affected communities (August 2023), indicates the company has taken partial steps to identify potentially affected stakeholders. Stakeholder interviews reveal a spectrum of impact perceptions, ranging from those who feel unaffected to those who believe themselves to be significantly impacted by the company’s mining activities, including those not previously identified by the company. The evidence does not include information to confirm that identification and analysis covers all who may be affected by or interested in the mining project including water users, workers, those residing near or along transportation routes associated with the mining project, or other populations whose livelihoods, health and safety or rights may be affected by the company’s activities, including vulnerable groups (or their representatives) such as women, children, ethnic minorities and the elderly.

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, including a stakeholder list (i.e., a table of government, community members, and guild members, among others, no date) and an action plan summarizing planned activities and goals (July 2023), indicates the company has initiated the development of an updated stakeholder engagement plan (SEP) scaled to the expanding project’s risks and impacts. Records of emails exchanged with representatives of two condominiums located near the mine (September 2021 and April 2023) provide evidence of SEP implementation.

		<p>Interviews with a sample of stakeholders indicated that some communities members considered themselves as affected by the company's mining-related activities but were not considered by the company.</p> <p>The evidence does not include a fully developed and implemented stakeholder engagement plan, that defines all stakeholder groups (refer to finding for 1.2.1.1), consultation priorities, implementation timetables, the means for incorporating stakeholder feedback, and updates over time scaled to the stage of the mining project. Refer to IRMA Notes for 1.2.1.2 (IFC 2007).</p>
1.2.1.3.	<p>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).</p>	<p>The evidence, a summary of social actions, a strategic plan to inform the community of operational changes, and visits for one of the potentially affected communities (Moeda) conducted by a third party during 2021 and 2022, indicate the company considered the design of engagement as a continuous process.</p> <p>Interviews with a sample of stakeholders indicate that some believe the company does not engage in a readily accessible way.</p> <p>The evidence does not provide the details to confirm the company consulted affected stakeholders to design engagement processes that are mutually accessible and inclusive to all groups, including women, youth, marginalized and vulnerable individuals, and that remove barriers to engagement.</p>
1.2.1.4.	<p>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.</p>	<p>The evidence, a description of the social context in the potentially affected communities, including a general social baseline study analysis of communities (revised in August 2023) and summaries of monthly visits to some communities (Chat, Prose, February 2 and 6, 2023), indicates an effort by the company to design an engagement structure that takes community context into account. The evidence also indicates the methodology to understand community dynamics and prevent or mitigate community conflicts that might otherwise occur because of company engagement processes. Key staff from</p>

		<p>the community relations department interviewed indicated awareness of factors influencing local dynamics.</p> <p>The evidence does not include an assessment of local dynamics, or the details to confirm that:</p> <ul style="list-style-type: none"> - Recommendations for the establishment of additional committees and strengthening of existing committees were considered, - Stakeholders from all potentially affected communities have functional and appropriately tailored engagement processes, such as specific committees, and - Local power dynamics, or factors are thoroughly documented, understood, and used to develop appropriate and tailored engagement processes, for example through discussions with existing committees.
1.2.2.1.	<p>Stakeholder engagement shall begin prior to or during mine planning, and be ongoing, throughout the life of mine. (Note: existing mines do not need to demonstrate that engagement began prior to mine planning)</p>	<p>Várzea do Lopes is an existing mine with an expansion in progress. The evidence, a table listing their stakeholders (i.e., Government, community members, and guild members, among others) and an action plan listing the main activities and goals to be developed (July 2023) indicates that a stakeholder engagement planning is under development. The evidence, record of emails exchanged with representatives of two condominiums located near the mine (September 2021 and April 2023) and communication tracked in the company's Stakeholder Engagement Database (April 17, 2023), as well as interviews with key personnel, indicate the company interacts with some stakeholders in a dynamic, interactive, and continuous manner through periodic visits/communication to some community members.</p> <p>The evidence does not indicate that the company engages with a broad range of stakeholders from all potentially affected communities on an ongoing basis.</p>
1.2.2.2.	<p>Critical. The operating company shall foster two-way dialogue and meaningful engagement with stakeholders by:</p>	<p>This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment.</p>

- 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 rating reflects the new CAP assessment.

Initial Audit Findings:

There are ten communities in the mine site's area of influence, with the closest being two nearby condominium complexes and the community of Ribeirão do Eixo. The company uses several means to foster two-way dialogue and meaningful engagement with community members in these areas, including directly through telephone, e-mail, and WhatsApp; in-person by a third party through Chat and Prose, programs designed to provide support and economic assistance to communities through the provision of goods and rural services; and online through the platform AUDIRE. Summaries of WhatsApp messages sent to local stakeholders with actions supported by the company and communication tracked in the company's Stakeholder Engagement Database from Itabirito and Moeda municipalities (July, 2023) indicate that the company strives to:

- a. provide relevant information to stakeholders, including
- b. participation by management and subject matter experts for technical issues such as reviewed in the evidence (reports on actions in condominiums, April 2022). Interviews with stakeholders indicate engagement with the company is c. respectful and free from intimidation.

According to some interviewees, including a sample of those potentially affected (i.e., living closest to the mine or in potentially affected areas) communication through in-person visits conducted by the company's employees and third party may not always fulfill expectations related to a. timely delivery of relevant information, and b. the sharing of technical information of personal significance (i.e., dust, noise, water quality and quantity, traffic safety, or potential watershed impact, etc.) by subject matter experts, giving rise to c. perception that information is being withheld or disrespectful treatment in some instances when expressed concerns are not addressed. In addition, the evidence does not include how the company has (d) solicited feedback from stakeholders, including

issues they find relevant, or (e) have taken their input into account. A review of a sample of the information provided by the company to stakeholders indicates company communication emphasizes capacity building for projects with limited information that contributes to stakeholder understanding of technical aspects of the mine operation.

CAP Findings:

Following the IRMA Initial Audit, the company developed an action plan to improve engagement with potentially affected communities (Executive Schedule – Stakeholder Engagement VL 2024, no date). The plan, based upon a survey carried out in late 2023 and early 2024 (Territorial Surveys, February 2024), outlines activities to understand each community's interests and needs. Auditors reviewed the action plan and documental evidence of its implementation, including:

- Várzea do Lopes Community Relations Plan (February 2024),
- Reports on Community Visits (Visit Report, July 2024) conducted by the company's employees and third party at the potentially affected communities,
- Expanded WhatsApp distribution list (no date) and use of the AUDIRE platform, the company's online tool aimed at two-way communication with stakeholders,
- AUDIRE platform comments (from July 2023 until August 2024),
- In-person meeting minutes (Activities Reports, May to August 2024),
- Monthly reports (February to December 2024),
- Reports on the delivery of technical information to stakeholders (Condominium Aconchego da Serra, and the communities of Ribeirão do Eixo and Moeda, July to September 2024),
- Company sensitivity training (Reinforcement Training of 0800, February 2024; Gerdau Facilitator Training, December 2023 and February 2024), and
- Stakeholder workshops (July 2024).

This evidence indicates that the company has made efforts to enhance stakeholder accessibility to company personnel and broaden the capacity for stakeholder engagement and meaningful

two-way dialogue. Evidence from interviews with company key staff and documents show progress in:

- a. Providing relevant information through various channels to an expanded list of stakeholders, such as through WhatsApp (i.e., notifying people of upcoming meetings, for example), the door-to-door program (Visit Report, July 2024), and in a timely manner (Door-to-door Activities Reports, May to August 2024).
- b. Incorporating subject-matter experts to address technical concerns in meetings, as indicated in several monthly engagement reports (February to December 2024) and community meetings (Condominium Aconchego da Serra, and the communities of Ribeirão do Eixo and Moeda, July to September 2024), including requests by community members for follow-up meetings to clarify technical questions.
- c. Promoting respectful dialog through the company's commitment to sensitivity training for key company personnel (Reinforcement Training of 0800, February 2024; Gerdau Facilitator Training, December 2023 and February 2024), in which key personnel were trained in procedures for addressing stakeholder concerns, including how to record the type of complaint, establishing response procedures (i.e., a response within 7 business days), and adhering to defined response timelines.
- d. Actively soliciting stakeholder feedback, as indicated by the door-to-door program summary (Door-to-door Activities Reports, May to August 2024) and in the Monthly Engagement Reports (from February to December 2024) where stakeholders were invited to provide feedback on the effectiveness of their interactions with the company and the issues discussed.
- e. Providing feedback to stakeholders on how their input has been considered, as shown by follow-up meetings and a participatory workshop (July 2024), including organizing a second round of meetings to update stakeholders on topics discussed in prior interactions.

Interviews with stakeholders are needed during the surveillance audit to assess whether the company's improvements of its

		stakeholder engagement protocols have been implemented and meet the intent of sub-requirements a. to e.
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.	<p>The evidence, including interviews with key personnel, government agencies and community members, indicates that the company has implemented several means to establish stakeholder engagement mechanisms in order to provide oversight of issues of interest to stakeholders, such as telephone, e-mail, and WhatsApp; in-person by a third party through Chat and Prose, programs designed to provide support and economic assistance to communities through the provision of goods and rural services; and online through the Audire platform.</p> <p>The evidence does not indicate that the company has considered the requests of the communities in the design, form, and execution of these mechanisms.</p>
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.	<p>The evidence, including different reports summarizing the projects developed by the Chat and Prose programs in 2022 and 2023 (designed and implemented by a third party), highlights the involvement and participation of both men and women from local communities. According to some interviewees, their age and mobility restrictions were not taken into account by the company, which resulted in them being unable to participate in events held by the company (i.e. meetings related to a possible mine expansion). The evidence does not indicate that specific information such as gender, age, or disability, were taken into account to verify inclusivity or cultural appropriateness.</p>
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	<p>Not relevant.</p> <p>The evidence, including different reports summarizing the projects developed by the Chat and Prose programs, designed and implemented by a third party, indicates that stakeholder engagement processes do not depend substantially on community representatives. Interviewees confirm representatives chosen by each community participate in dialogue spaces promoted by Gerdau and</p>

<p>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.</p>		<p>the third party company responsible for stakeholder engagement, and that these community representatives disseminate information to their broader communities.</p>
<p>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.</p>	<p>⊕</p>	<p>The evidence, an excel file with the log of grievances filed during the years 2022 and 2023 through the Audire platform (Manifestations Gerdau 2022-2023), and different reports summarizing the projects developed by the Chat and Prose programs during 2022 and 2023, indicates the company documents engagement processes.</p> <p>The evidence does not include certain inputs received from stakeholders or the feedback provided by the company for some engagement processes (e.g., those conducted directly with company personnel, which are not being formally documented).</p>
<p>1.2.2.7. The operating company shall report back to affected communities and stakeholders on issues raised during engagement processes.</p>	<p>⊗</p>	<p>The evidence, different reports summarizing the projects developed by the Chat and Prose programs during 2022 and 2023, and an excel file with the log of grievances filed during the years 2022 and 2023 through the Audire platform (Manifestations Gerdau 2022-2023), indicates that the company is communicating with communities in a way that allows stakeholders to fill in registered surveys to "rate their experience with the company" if communication is established through the Audire platform, which is inadequate to meet this component of the requirement. Interviewees, including a sample of those potentially affected, indicate that although much of the information requested by stakeholders is shared with communities, there are still many unanswered questions, particularly in relation to the impacts of mine operation (i.e., dust, noise, water quality, and quantity, traffic safety, or potential watershed impact, etc.).</p> <p>The evidence does not provide details to confirm that the company</p>

		has developed processes for ongoing consultation with stakeholders on their satisfaction as to how their inputs have or have not been integrated into the operation planning or not, and that the company reports back to affected communities and stakeholders on issues raised during engagement processes.
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.	<p>According to interviews with the company's biologist at the Germinar Center and the Environmental Education Program report (February 2021), the company collaborates with stakeholders from affected communities to engage them in studies, assessments, and the development of environmental mitigation, monitoring and development strategies.</p> <p>The evidence does not confirm that the company collaborates with stakeholders from affected communities to assess their capacity for effective engagement such as their capacity to effectively engage in consultations, studies, assessments, and the development of mitigation, monitoring and community development strategies unrelated to the environment. Additionally, there is no indication that the company has taken steps to address any identified gaps to enhance and facilitate more effective stakeholder engagement.</p>
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 non-confidential information.	The company has not received stakeholder requests for information specifically related to the mine's performance against information related to chapters of the IRMA Standard. The company reports that no formal results are currently available but indicates that IRMA-related information will be made available upon request once finalized, provided the information is not considered confidential business information. Any future disclosures will follow the principle of redacting only confidential sections of documents, where applicable. The company states that performance results will be published on the IRMA website upon audit completion and approval. Mechanisms through which information can be shared include the company website, e-mail, and WhatsApp.

<p>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.</p>	<p>—</p>	<p>There is no indication of requests for information that were deemed unreasonable.</p>
<p>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.</p>	<p>⊕</p>	<p>The evidence, Manifestations Gerdau 2022-2023, an excel file with the log of grievances filed during the years 2022 and 2023 through the Audire platform, indicates that the company provides stakeholders with information in formats and languages that are culturally appropriate and accessible to affected communities and stakeholders, but it is not provided in a timely manner. The Audire report for January 2022, on page 14, indicates that 65% of the concerns exceeded the expected days to resolve the demand, with the set timeframe being up to seven business days for resolution.</p> <p>Stakeholder interviews conducted during the site visit, including a sample of those potentially affected (i.e., living closest to the mine or in potentially affected areas), indicate a range of responses. Some stakeholders report that communication through in-person visits conducted by the company's own employees and third party does not always fulfill expectations related to timely delivery of relevant information, and the sharing of technical information of personal significance (i.e., dust, noise, water quality and quantity, traffic safety, or potential watershed impact, etc.) by subject matter experts, giving rise to feelings of information withholding or disrespect in some instances when concerns are not met.</p>
<p>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.</p>	<p>⊗</p>	<p>The evidence lacks details to evaluate stakeholder information requests concerning potential delays or withheld information.</p> <p>Interviews with a sample of stakeholders from some communities, report information, and requests for clarifications are not always provided fully or in a timely manner.</p>

Chapter 1.3—Community and Stakeholder Engagement

Basis for rating

<p>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.</p>		<p>The evidence, Human Rights Policy and Diversity and Inclusion Policy (December 6, 2022), indicates the company adopted a human rights policy, that among with a diversity and inclusion policy, documents the company's responsibility to respect all internationally recognized human rights, including an acknowledgement to respect the International Bill of Human Rights and the eight ILO core conventions.</p>
<p>1.3.1.2. The policy shall:</p> <ul style="list-style-type: none"> 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. 		<p>The evidence, Human Rights Policy and Diversity and Inclusion Policy (December 6, 2022) corporate-level policies, as well as interviews with a sample of company managers, including those with accountabilities in human rights, indicates the policies are:</p> <ul style="list-style-type: none"> a. approved by the company's Board of Directors and b. ensure the protection of the fundamental rights of personnel, the communities where the company operates, business partners and other parties directly linked to its mining project. <p>The evidence, Code of Ethics Training from December 2020 until June 2022, indicates:</p> <ul style="list-style-type: none"> d. that these two policies were communicated internally and are also publicly available on the company's website (https://ri.gerdau.com/governanca-corporativa/estatutocodigos-e-politicas/). c. The company also presented guidelines aimed at preventing human rights violations, but mainly focused on health and safety in its operations and business, such as the Critical Occupational Health and Safety Risks Procedure (July 10, 2021), Risk Task Refusal Form (no date), and the Third-Party Management Procedure (October 20, 2021).

	<p>The evidence does not indicate that the company stipulated its fully human rights expectations of personnel, business partners and other parties directly linked to its mining project and that these policies are reflected in the mining project's operational procedures, with specific guidelines aimed at preventing human rights violations (e.g., at minimum those included in the International Bill of Human Rights and the eight ILO core conventions).</p>
<p>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 there are significant changes in the mining project, business relationships, or in the operating environment.</p>	<p>This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.</p> <p>Initial Audit Findings:</p> <p>The evidence includes an operational risk assessment with a focus on worker safety (Mining Operational Risks Worksheet, no date), and a risk matrix for potential health and safety risks and impacts to communities (May 2022). These two risk matrices identify potential operational and community health and safety risks and include an analysis of the probability of occurrence of the risk, ranging from very low to very high; as well as a breakdown of the severity of each risk's impact. The operational risk matrix is evaluated monthly by a specialized internal technical team during routine risk management meetings (evidence of January, February and March 2023 reviewed). As these documents are focused on potential health and safety risks and impacts, they only have some human right risks assessed, such as exposure to labor risks, hazardous conditions for workers, and increased demand for public services related to communities. Further evidence, a social and human rights risk matrix (Risk Map, August 2023), indicates that the company has compiled a list of the significant potential risks and impacts to community health and safety.</p> <p>The evidence does not include broad assessment of a range of potential impacts on human rights related to the mining project or</p>


an ongoing process in place to periodically update the human rights impacts assessment when there are significant changes in the mining project, business relationships or in the operating environment. Best practice human rights assessments take into account the methodology identified in IRMA requirements 1.3.2.2 - 1.3.2.5 and related reference sources and are updated periodically, i.e., when there are significant changes at the mine.


CAP Findings:

Following the IRMA Initial Audit, the company commissioned an independent consultant to review its human rights risk and impact assessment processes for its two mines, Várzea do Lopes and Miguel Burnier (July 2024). The review includes a Human Rights Risk section (Table 5.1), which identifies and evaluates risks for each mine in a matrix, categorized by severity and likelihood. Some risks are common to both sites, while others are unique to each location. For each risk, the consultant documented existing management measures, evaluating them for effectiveness as either highly effective or partially effective, depending on how well they are integrated into the company's current management system (Table 2.2, page 13). The Actual Impacts table (Table 5.2) for the Várzea do Lopes site documents specific impacts, highlighting the corresponding human rights, affected individuals, possible scenarios, impact severity, and whether these risks or impacts are mitigated. The final section, Table 6.1, is an Action Plan with recommended steps for addressing remaining risks and ensuring alignment with international human rights standards.

The audit team reviewed the human rights risk assessment study and updated General Management Procedure (July 2024) alongside interviews with key company staff, as part of the corrective action verification process.

While the General Management Procedure (July 2024, page 8) indicates that the operational level risk matrix for human rights risks and impacts will be adjusted in cases of expansions, new business

		<p>relationships, and shifts in operating conditions (i.e., land acquisitions, hiring new contractors) with the potential to influence human rights, the evidence does not include the details to confirm updates to its human rights risks and impacts assessment occur on a regular basis.</p> <p>The regularity and frequency of updates to the company's human rights risk assessment will be reviewed during the surveillance audit.</p>
<p>1.3.2.2. Assessments, which may be scaled to the size of the company and severity of human rights risks and impacts, shall:</p> <ul style="list-style-type: none"> 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. 		<p>This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.</p> <p>Initial Audit Findings:</p> <p>The evidence, Risk Management Procedure (March 2020) and Risk Management Brazil - People (June 2022), does not indicate that the company conducted a human rights risk/impact assessment considering the sub-requirements a through c; as follows:</p> <ul style="list-style-type: none"> a. The methodology used to assess the risks/impacts was not detailed, only the methodology used to mitigate an identified risk was presented; b. The profile of the professionals who carried out the assessment was not presented; c. The human rights risk/impact assessments developed are not scaled to the size of the company and the severity of the human rights impacts and risks it has the potential to generate, and was not developed in consultations with potentially affected rights holders, including men, women, children (or their representatives) and other vulnerable groups, and other relevant stakeholders. <p>CAP Findings:</p> <p>The evidence reviewed during the corrective action verification, includes an updated human rights risk and impact assessment (July 2024) carried out by an external consultancy, an updated General</p>

		<p>Management Procedure (July 2024), alongside interviews with key company staff. The evidence indicates that the assessment was:</p> <ul style="list-style-type: none"> a. based on the definitions and guidelines presented in the United Nations Guiding Principles on Business and Human Rights (2011) and the OECD Guidelines for Multinational Enterprises (2011), among other resources; b. carried out by an internationally recognized company providing audit and consulting services; and c. informed by consultations with eight (8) members of the ten (10) potentially affected communities. <p>The evidence does not include:</p> <ul style="list-style-type: none"> a. the methodology used by the consultancy to assess human rights risks and impacts, including the criteria for evaluating the effectiveness of the company's actions to reduce the likelihood of potential negative impacts; or the comprehensive criteria for assessing significant risks (e.g., tailings failure and infringement on Indigenous peoples' rights). The consultancy classified these risks as low probability based on an assumption that the mining sector does not typically cause such impacts, rather than providing specific evidence to support this conclusion. b. the qualifications of those responsible for developing the risk assessment; and c. information on whether consultations with stakeholders fully represent potentially affected stakeholders, including elderly individuals, women, children and youth (or their representatives), and other vulnerable groups. <p>Further details of the company's human rights risks and impacts assessment will be reevaluated during the surveillance audit.</p>
<p>1.3.2.3. As part of its assessment, the operating company shall document, at minimum:</p> <ul style="list-style-type: none"> a. The assessment methodology; 		<p>This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.</p>

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 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.

Initial Audit Findings:

The evidence, Risk Management Procedure (March 2020), Risk Management Brazil - People (June 2022) and Bow Tie Model and CSA (July 2022), as well as interviews with a sample of stakeholders and key staff, including workers, indicates that the company has considered:

- b. country and project-specific human rights contexts,
- c. relevant human rights laws and norms,

The evidence does not include:

- a. an assessment methodology;
- d. a list of the potential human rights risks related to mining project activities and business relationships, and an evaluation of the potential severity for each;
- e. a robust analysis of the differential risks to / impacts on specific local community groups such as women, men, children, the elderly, persons with disabilities, minorities and other disadvantaged or vulnerable groups, and disaggregation of results by those rights holders groups; and
- f. recommendations for preventing, mitigating, and remediating identified risks and impacts, giving priority to the most salient human rights issues identified.

Refer to OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector (2017), Guiding Principles on Business and Human Rights (2011) and UN OHCHR (2014), as they were relied upon by the auditors in assessing this requirement.

CAP Findings:

The evidence reviewed includes the human rights risk and impact assessment (July 2024) developed by an independent consultant, which documents:

- a. the study methodology (Section 2, pp. 11-17);
- b. country and project-specific human rights contexts (Annex A - Preliminary inherent risk matrix);

- c. relevant human rights laws and norms (Annex A - Preliminary inherent risk matrix);
- d. a comprehensive list of human rights risks, as well as an evaluation of the potential severity of impacts for each identified human rights risk (Section 5.1, pp. 25-36);
- e. identified rights holders, with a partial analysis of the potential differential risks to and impacts to some broad subgroups, and a simplified disaggregation of results by rights holder group (Annex B – Right Holders Consultation Guide); and
- f. recommendations for preventing, mitigating, and remediating identified risks and impacts, giving priority to some of the most salient human rights issues (Section 6.1, pp. 50-58).

The evidence does not include:

- a. details of the methodology the consultancy used to assess human rights risks and impacts, as while the 2024 assessment lists definitions and external resources referenced, it does not specify the risk assessment methodology applied for evaluating the company's actions to reduce the likelihood of potential negative impacts identified, nor the processes used to sample and engage stakeholders in identifying and validating human rights concerns.
- e. a robust analysis of the differential risks to / impacts on specific local community groups such as women, children and youth, the elderly, and other disadvantaged or vulnerable groups, including a disaggregation of results by these rights holder groups.
- f. adequate preventive measures in the action plan for high magnitude risks with significant human rights implications, such as violation of the rights of Indigenous Peoples and traditional communities. Although these risks are monitored and managed as part of the company's management system (documented commitments, procedures, designated responsibilities, and ongoing monitoring), the human rights risk and impact assessment (July 2024) does not provide additional preventive and emergency measures to specifically mitigate human rights risks and impacts.

Refer to OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector (2017), Guiding Principles on

		<p>Business and Human Rights (2011) and UN OHCHR (2014), as they were relied upon by the auditors in assessing this requirement.</p> <p>The evidence lacking in the current human rights risks and impacts assessment will be reevaluated in the updated version, during the surveillance audit.</p>
<p>1.3.2.4. At minimum, stakeholders and rights holders who 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.</p>	<p>⊗</p>	<p>This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.</p> <p>Initial Audit Findings:</p> <p>The evidence, Critical Occupational Health and Safety Risks (July 10, 2021), indicates that the company has shared their health and safety assessment with the directly hired employees.</p> <p>The evidence does not include information to confirm that the company has shared the draft key issues and findings and solicited feedback from external stakeholders and rights holders who participated in the assessment.</p> <p>CAP Findings:</p> <p>Does not meet. No evidence was provided to confirm that the company has shared the key issues and findings of the human rights risk and impact assessment (July 2024) and solicited feedback from external stakeholders and rights holders who participated in the assessment.</p> <p>The evidence lacking in the current human rights risks and impacts assessment will be reevaluated in the updated version, during the surveillance audit</p>

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.

This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.

Initial Audit Findings:

The evidence, an operational risk assessment mainly related to workers (Mining Operational Risks Worksheet, no date), and a risk matrix for potential health and safety risks and impacts to communities (Community Health and Safety Risk Matrix, May 2022), indicates that the company has integrated some but not all human rights risks/impacts identified at the mine site operational level. Further evidence, a social and human rights risk matrix (Risk Map, August 2023) as well as interviews with key staff, indicate that the company has compiled a list of the significant potential risks and impacts to community health and safety. The company did not provide evidence indicating that they conducted a human rights risk/impact assessment, according to 1.3.2.2., and cannot demonstrate that procedures and processes have been revised based on the assessment findings or that new systems have been developed to inform relevant staff of human rights findings, address human rights challenges, communicate differently prior to decisions/actions, train or guide staff in relation with human rights issues, policies, and related processes, oversee human rights matters or monitor and evaluate the effectiveness of the efforts being implemented.

CAP Findings:

The evidence includes a human rights risk and impact assessment (July 2024), developed by an external consultancy, and an operational-level risk matrix for human rights risks and impacts (Action Plan for Human Rights, no date), developed by the company. The risk matrix is organized into two sections: one for potential risks and another for actual impacts. Each section includes a table detailing the mitigation and/or preventive actions for the human

		<p>rights risks and impacts the 2024 assessment identified as not fully mitigated or aligned with international best practices. Interviews with key staff indicate that the company intends to review processes and procedures to integrate assessment findings at the mine site operational level. The evidence does not include the details to confirm that all assessment findings have been integrated into processes and procedures at the time of the corrective action verification (July 2025).</p> <p>The effectiveness of the updated human rights risks and impacts assessment findings implementation will be reevaluated during the surveillance audit.</p>
1.3.3.1.	<p>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.</p>	<p>The company uses several means to dialog with stakeholders in a timely manner on issues relevant to them. Individuals and communities can reach the company, including for grievances related to human rights, and receive a response through several means: (1) directly, such as telephone, e-mail, and WhatsApp, (2) through "Neighbors Chat" and "Neighborhood Prose" programs, and (3) the online platform AUDIRE.</p> <p>Communications and their outcomes are tracked through the company Stakeholder Engagement Database last updated on April 17, 2023.</p> <p>Interviewed workers and contractors recognize that they can use the mechanisms to raise any type of problem. A sample of stakeholders from six (6) communities and neighborhoods were interviewed and are aware of the existence of the operational-level complaints and grievance mechanism to raise concerns about human rights impacts related to company activities. Individuals interviewed from two communities, Azevedo and Vieiras de Cima, were not aware of the company's grievance process and were unaware of how to reach the company to raise concerns about human rights risks and impacts related to company activities.</p>
1.3.3.2.	<p>Responding to human rights risks related to the mining project:</p>	<p>The evidence, an operational risk assessment mainly related to workers (Mining Operational Risks Worksheet, no date), and a risk</p>

<p>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).</p> <p>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.</p> <p>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.</p>	<p>matrix for potential health and safety risks and impacts to communities (Community Health and Safety Risk Matrix, May 2022), and its updated version (Risk Map, August 2023) does not indicate that the company responds to human rights risks related to the mining project other than operational, health and safety, and labor risks for workers.</p> <p>The evidence does not demonstrate how the company has responded to human rights risks related to the mining project in a manner that meets sub-requirements a. through c.</p>
<p>1.3.3.3. Critical. Responding to actual human rights impacts related to the mining project:</p> <p>a. If the operating company determines that it has caused an actual human</p>	<p>Not relevant. The evidence, including an operational risk assessment with a focus on worker safety (Mining Operational Risks Worksheet, no date) and a risk matrix for potential health and safety risks and impacts to communities (May 2022), does not indicate that the company has caused any actual human rights impacts.</p>

rights impact, the company shall:

i. Cease or change the activity responsible for the impact; and

ii. 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.	
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.	<p>The evidence, an operational risk assessment mainly related to workers (Mining Operational Risks Worksheet, no date), a risk matrix for potential health and safety risks and impacts to communities (Community Health and Safety Risk Matrix, May 2022), its updated version (Risk Map, August 2023), a report that gathers all the complaints made to the mine during the year 2022 (Manifestations Report Audire, December 2022), as well as interviews with key staff, indicate that the company monitors whether salient adverse human rights risks and impacts are being effectively addressed.</p> <p>⊕</p> <p>The evidence does not provide details to confirm that the monitoring includes qualitative and quantitative indicators for salient human rights risks, in addition, it does not specify if the company has established a process to include feedback from internal and external sources, including affected rights holders.</p> <p>Note: the company did not provide evidence indicating that a broad assessment of a range of potential impacts on human rights related to the mining project was conducted (see 1.3.2.1).</p>
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	<p>—</p> <p>Not relevant. There is no evidence indicating that the company's due diligence efforts repeatedly failed to prevent, mitigate, or remediate actual human rights impacts, or that the company has unknowingly or unintentionally caused, contributed to, or was linked to any serious human rights abuses. Therefore, no external monitoring of human rights due diligence has been initiated.</p>

	<p>unintentionally causing, contributing to or being linked to any serious human rights abuse. Additionally:</p> <p>a. The company shall fund the external monitoring; and</p> <p>b. The form of such monitoring, and selection of external monitors, shall be determined in collaboration with affected rights holders.</p>	
1.3.5.1.	<p>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.</p>	<p>The evidence does not include any public reports on the effectiveness of its human rights due diligence activities at the company or corporate level.</p>
1.3.5.2.	<p>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.</p>	<p>Not relevant. No external monitoring of human rights due diligence has been required.</p>

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.

Not relevant. As established in 1.3.4.2., external monitoring of the company's human rights due diligence has not been evidenced.

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, minutes of monthly visits (Chat, Prose, February 2 and 6, 2023), communication tracked in the company's Stakeholder Engagement Database (April 17, 2023), Code of Ethics Training Report (2020-2022), and Code of Ethics and Conduct (2020), indicates that grievance mechanisms are in place and are broadly available to stakeholders and that there are multiple ways through which stakeholders can report a concern in relation to the company and its mining-related activities. The evidence, Ethics channel - guidelines on the Intranet (no date), Audire manual (no date) and Chat and Prose process (no date), indicates that all allegations are confidential, will be investigated, and will not be subject to retaliation.

Interviewees during the site visit indicated an understanding of the grievance process, which either takes place verbally or via WhatsApp (with Gerdau personnel) or via the Audire program (with contracted subject matter experts as in the online platform, "Neighbors Chat" and "Neighborhood Prose" programs, telephone, and email), including an anonymous means.

A sample of stakeholders from six (6) communities and neighborhoods was interviewed. Most individuals interviewed indicated knowledge of how to reach the company, including a general understanding of how to file a grievance, if needed.

Individuals interviewed from two communities, Azevedo and Vieiras

		de Cima, were not aware of the company's grievance process and were unaware of how to reach the company in the event of an emergency. No information was provided that measured Grievance Mechanism Procedure implementation effectiveness at the operating level.
1.4.2.1.	<p>The operating company shall consult with stakeholders on the design of culturally appropriate complaints and grievance procedures that address, at minimum:</p> <p>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;</p> <p>b. How complaints and grievances will be filed, acknowledged, investigated, and resolved, including general timeframes for each phase;</p> <p>c. How confidentiality of a complainant's identity will be respected, if requested;</p> <p>d. The ability to file anonymous complaints, if deemed necessary by stakeholders;</p> <p>e. The provision of assistance for those</p>	<p>The evidence, Chat and Prose process (no date), as well as interviews with key staff, indicates the stakeholder engagement programs (Chat and Prose) were created in August 2019 and aim to provide support and economic assistance to communities through the provision of goods and rural services during monthly visits conducted by a third-party specialized in community communication. Community members can raise grievances during these visits or through the Audire platform, which allows comments to be made and addressed anonymously if requested. The evidence, Ethics channel - guidelines on the Intranet (no date), Audire manual (no date), and Chat and Prose process (no date), indicate that:</p> <p>b. all allegations will be investigated,</p> <p>c. are confidential,</p> <p>d. can be made anonymously and will not be subject to retaliation.</p> <p>The evidence does not indicate that the available complaints and grievance mechanisms have been consulted during its design with a range of stakeholders (including a diversity of women and men of different ages, and representatives of marginalized and vulnerable groups) to ensure they are culturally appropriate and address the minimum components of this requirement.</p>

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



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, Ethics channel - guidelines on the Intranet (no date), Audire manual (no date) and Chat and Prose process (no date), as well as interviews with a sample of key staff and stakeholders, indicate that the company has a documented complaints and grievance procedures. The evidence, Promotional brochure for the communication channel (no date), indicates the mine has documented grievance procedures that are publicly available through different channels (on websites, notice boards, hotline, and paper). The procedures are in formats and language that are understood by stakeholders. The brochure was observed distributed to some communities and working as intended at the time of the onsite audit. Employees (including workers and contractors) confirmed to be aware of these procedures and documented records of complaints, grievances, and follow-up actions. A sample of external stakeholders from six (6) communities and neighborhoods indicated knowledge of how to reach the company, including a general understanding of how to file a grievance, if needed.

Individuals interviewed from two communities, Azevedo and Vieiras de Cima, were not aware of the company's grievance process and

		were unaware of how to reach the company in the event of an emergency.
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.	<p>There is no evidence to confirm if a remedy provided by an operational-level grievance mechanism 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 indicated that aggrieved parties could present a subsequent complaint if they disagree with the results. This mechanism is not specified in the documental evidence.</p> <p>Interviews conducted with workers, contractors, and other stakeholders indicate that there are no restrictions on the right to appeal the same complaint through other available mechanisms, including administrative, extrajudicial, or judicial appeals.</p> <p>The evidence does not provide details to confirm that the company prohibits the practice of requiring an aggrieved party to waive their rights in order to obtain remedy in practice.</p>
1.4.4.1.	Complaints and grievances and their outcomes and remedies shall be documented.	<p>The evidence, Manifestations Gerdau 2022-2023, an excel file with the log of grievances filed during the years 2022 and 2023 through the Audire platform, indicates the grievances outcomes and remedies are documented.</p> <p>The evidence does not include some grievances raised directly to company personnel, which are not being formally tracked, and that there is a procedure for documenting grievances.</p>
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:	The evidence, Audire monthly management report (Manifestations Report Audire, January 2022) and Audire monthly management report (February 2022), as well as interviews with key staff, indicate that the company carries out monitoring and evaluation of the performance of the operational-level complaints and Audire platform mechanisms through monthly monitoring management reports,

<p>a. If changes need to be made to improve its effectiveness as per 1.4.2.1.a;</p> <p>b. If changes in company activities can be implemented to prevent or mitigate similar grievances in the future; and</p> <p>c. If outcomes and remedies provided through the mechanism accord with internationally recognized human rights.</p>		<p>which are synthesized in an annual management report (Report Audire - Gerdau Mine, December 2022). The system that composes the current grievance channels, available through several means: directly, such as telephone, e-mail, and WhatsApp; the neighborhood programs; and the online platform Audire, was created in August 2019 and since then has been changed to improve its effectiveness (a), as indicated in the evidence Audire Platform Adjustments (no date). The evidence, Manifestations Gerdau 2022-2023, an excel file with the log of all grievances filed during the years 2022 and 2023, indicates that some grievances that the company considered as completed were forwarded to the ethical channel, which exclusively handles complaints regarding ethical concerns, violations of the company's Code of Conduct, policies, guidelines or legislation, including one raised by a woman that is a contractor that filed a grievance regarding payment delays.</p> <p>The evidence does not indicate:</p> <p>b. if changes in company activities were implemented to prevent or mitigate similar grievances in the future; and</p> <p>c. whether outcomes and remedies align with internationally recognized human rights.</p>
<p>1.4.4.3 Stakeholders shall be provided with clearly communicated opportunities to submit feedback on the performance of the complaints and grievance mechanism.</p>		<p>The evidence, the grievance mechanism publicity material (not dated) and interviews key staff, indicates that the company has communicated to stakeholders, by means reasonably designed to reach all stakeholders, the opportunities to submit feedback on the performance of the grievance mechanism. The evidence, Report Audire - Gerdau Mine (December 2022, page 15), indicates that 13.8% of those who filed concerns on the Audire platform responded to the survey to submit feedback on the performance of the complaints and grievance mechanism.</p>
<p>1.4.5.1. The operating company shall take reasonable steps to inform all stakeholders of the existence of the</p>		<p>The evidence, Communication channel brochure (grievance mechanism publicity material, no date), indicates that the company took steps to inform external stakeholders of the existence of the</p>

operational-level complaints and grievance mechanism, its scope, and its procedures.

operational-level complaints and grievance mechanism, its scope, and its procedures. The mine indicated there is also an internal system in place to submit feedback on the performance of the grievance mechanism exclusively for its internal personnel and contractors.

The evidence does not include details to confirm that internal stakeholders have been made aware of how to submit feedback on the grievance mechanism.

Some but not all stakeholders interviewed indicated awareness of the grievance mechanism or its associated procedures. Interviews with a sample of stakeholders, particularly those residing down-wind and along mine transportation routes, indicated that they have raised complaints about dust from the continuous mine operation during engagement processes directly to company personnel and through the Audire platform mechanisms and indicate they do not feel their concerns received a proper response such as additional monitoring to verify air quality and dust levels and mitigation if needed.

The evidence and interviews indicate that these complaints from stakeholders are not being formally documented in the grievance log.

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, Audire Platform Manual (no date), and the grievance mechanism publicity material, indicate that the company does not state or imply in any written materials related to the grievance mechanism that participation in the grievance mechanism precludes the stakeholder from seeking redress through administrative, judicial or other non-judicial remedies. Considering these two documents reviewed, as well as interviews carried out with workers, contractors, and other stakeholders, there are no restrictions to 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

The evidence, Audire Platform Manual (no date), indicates that the company informs relevant personnel and contractors about proper procedures for handling stakeholder complaints and grievances. The

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.

procedure does not detail how relevant personnel who interact with stakeholders should act with respectful treatment toward all complaints and grievances, including those that may appear frivolous. The evidence, an Audire annual management report (December 2022, page 15), indicates that those who filed concerns on the Audire platform and responded to the survey to rate their experience with the company positively evaluated the service received, with respect to the timeliness, the service itself, and the solution presented. Interviews with management indicated that some grievances raised directly to the company's employees are not following the Audire platform manual and procedures.

Interviews with a sample of stakeholders, among them contractors and community members, indicate opportunities for capacity-building on grievance mechanism standards and compliance expectations exist.

The evidence does not include staff training (i.e., slides or attendance records) on the respectful handling of complaints or grievances or documentation on how the effectiveness of the grievance mechanism is assessed and updated based upon staff input over time.

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.



The evidence, Manifestation management flow procedure (no date), describes the flow that the handling of any kind of concerns (grievances, suggestions, complaints) must follow, which includes reporting back to the initiator of the concern with its resolution within a period of up to seven business days. The evidence also indicates that the manner of reporting protects the confidentiality and safety of those filing concerns. The evidence, a sample of Audire monthly management reports (January and February 2022), indicate that 65% (January 2022) and 27% (February 2022) of the responses were not provided within the set time frames. Interviews with management indicated that some grievances raised directly to the company's employees were not following the indicated procedure (Manifestation management flow, no date) and therefore were not included in the grievance log monthly management report.

According to some interviewees, including a sample of those potentially affected (i.e., living closest to the mine or in potentially affected areas) communication through the different grievances mechanisms available may not always fulfill expectations related to timely delivery of relevant information, and the sharing of technical information of personal significance (i.e., dust, noise, water quality and quantity, traffic safety, or potential watershed impact, etc.) by subject matter experts.



The evidence does not indicate that the company provides external reporting to stakeholders on grievances received.

Chapter 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.
- (Note: for the purposes of self-assessment, the respondent should only consider for question 1.5.1.1 whether the EU or an equivalent mandatory transparency regime is relevant (either because a company is legally required to comply or because the company voluntarily chooses to meet the EU or

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.

	equivalent country requirements). If EU or an equivalent mandatory transparency regime is not relevant, then the respondent should mark 1.5.1.1 as not relevant and move to 1.5.1.2 below.)		
1.5.1.2.	<p>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.</p> <p>(Note: for the purposes of self-assessment, if 1.5.1.1 is relevant then the respondent should mark both 1.5.1.2 and 1.5.1.3 as not relevant.)</p>		<p>The evidence, Quarterly Information - GERDAU S.A. (Financial Statements, June and September 2022, page 10), confirms the company publishes, at a corporate level, a report disclosing material payments made to the government of the country in which the mining project is located, Brazil. These reports are released on a quarterly basis, that is within 12 months after the end of each fiscal year and are publicly available on the company's website (https://ri.gerdau.com/divulgacao-e-resultados/central-de-resultados/).</p> <p>The evidence does not indicate that material payments specifically for the mine's operation are reported to the mining project host country.</p>
1.5.1.3.	<p>The types of payment disclosed shall include as a minimum, as applicable:</p> <ul style="list-style-type: none"> a. The host government's production entitlement; b. National state-owned enterprise production entitlement; c. Profits taxes; d. Royalties; e. Dividends; 		<p>The company does not disclose any information on revenue payments to the government.</p>

	<p>f. Bonuses, such as signature, discovery and production bonuses;</p> <p>g. Licence fees, rental fees, entry fees and other considerations for licences and/or concessions;</p> <p>h. Payments for infrastructure improvements; and</p> <p>i. Any other significant payments and material benefits to government, including in kind payments.</p>	
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.	<p>⊗</p> <p>Reporting is not broken down by recipient government body, project, or payment type.</p>
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.(Note: for the purposes of self-assessment, the respondent should only answer question 1.5.2.1 if the EU or an equivalent mandatory transparency regime is relevant (either because a company is legally required to comply or because the company voluntarily chooses to meet EU or equivalent country	<p>—</p> <p>Not relevant. The company does not voluntarily follow the EU rules and is not required to comply with disclosure requirements of an equivalent mandatory transparency regime.</p>

requirements). If question 1.5.2.1 is not relevant, move to 1.5.2.2 below.)

- 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
 - g. Fines or other similar penalties that have been issued in relation to the project.



The company reports annually on some sub-requirements a through g but not in a format that all information is accessible to the public, as follows:

The company annually discloses to the National Mining Agency (ANM) its Annual Mining Report for 2022 (January 2023), detailing the mine production, disaggregated by product type and volume. Document accessible to the public upon request.

e, g. The company discloses quarterly in its Financial Statements (Quarterly Information - GERDAU S.A., June and September 2022) its revenues from sales, disaggregated by product type b.; legal required taxes expenditures, tariffs or other relevant payments related to transportation of minerals, and e. fines or other similar penalties that have been relation to the project g. Document publicly available on the company's website.

The evidence does not indicate that the company is reporting annually, in a format that is accessible to the public, on all sub-requirements a. through g., including: mine production, disaggregated by product type and volume a.; material payments and other material benefits to government as listed in paragraph 1.5.1.3, disaggregated according to the receiving government entity c.; social expenditures, including the names and functions of beneficiaries d.; and payments to politicians' campaigns, political parties or related organizations f.

<p>(Note: for the purposes of self-assessment, if 1.5.2.1 is relevant then the respondent should mark 1.5.2.2 as not relevant.)</p>		
<p>1.5.2.3. The operating company shall publish annual accounts, following international accounting standards.</p>	●	<p>The evidence, the Standardized Financial Statements for 2022 (February 2023), on page 39, outlines that the financial statements of the report were prepared and presented in accordance with the International Financial Reporting Standards, issued by the International Accounting Standards Board.</p>
<p>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.</p>	⊗	<p>The company does not publish a statement that it endorses Extractive Industries Transparency Initiative Principles.</p> <p>Even though the Brazilian government requires companies to comply with Technical Accounting Pronouncement CPC 21, correlated to International Accounting Standards - IAS 34 (IASB - BV 2011) and to submit these data in a manner consistent with the standards issued by the Brazilian Securities and Exchange Commission, Brazil is not considered a country with a mandated transparency regime.</p>
<p>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:</p> <p>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</p> <p>b. Provide links on its external website to</p>	—	<p>Not relevant. The company is situated in a country, Brazil, where EITI is not active.</p>

<p>completed and up-to-date Company Forms for its operation, if the EITI implementing country has completed at least one validation.</p>		
<p>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.</p> <p>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.</p> <p>b. Where these terms are governed by law, free, public access to the relevant statutory documentation is deemed sufficient to meet the IRMA requirement.</p>		<p>The evidence, Annual Mining Report for 2022 (January 2023), indicates that the 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), who indicates the Annual Mining Report must describe material terms for mineral exploration, development and production agreed between the company and government.</p> <p>The evidence does not indicate that the company's Annual Mining Report is publicly accessible on company or government websites.</p>
<p>1.5.4.2. The beneficial ownership of the operating company shall be publicly accessible.</p>		<p>The company publicly discloses its beneficial owners at the company's website (https://api.mziq.com/mzfilemanager/v2/d/21e1d193-5cab-456d-8bb8-f00a49a43c1c/05c0a2fa-28a1-f8a8-69af-91ef03a75ee6?origin=1). The evidence, Gerdau shareholding control (Gerdau shareholding control, May 2023), includes the complete shareholding control on a corporate level.</p> <p>The evidence does not indicate that the complete shareholding</p>

		control is applicable to this operation and can be applied to a site level.
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.	<p>The evidence, Gerdau Code of Ethics (May 5, 2020), Code of Ethics for Third Parties (October 27, 2020), Anticorruption Policy (October 27, 2020), Corporate Guidelines (February 2, 2022), a sampled contractor agreement that includes anti-corruption and anti-bribery provisions, as well as related online employee training records (February-April 2023), indicate that the company has developed and documented policies and procedures to prohibit bribery and other forms of corruption by employees and contractors. Policies are available online, through Gerdau's website, and are provided in writing in Portuguese to employees and contractors.</p> <p>Interviews with a sample of workers and contractors (all management levels) indicate a broad understanding of these policies and Code of Ethics. A review of a sample of the company's grievance logs (Manifestations Gerdau 2022-2023 and Manifestations Gerdau 2021) indicates there have been no complaints related to bribery/corruption January 2021 to July 2023.</p>
1.5.5.2.	<p>Procedures shall include:</p> <p>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</p> <p>b. Disciplinary actions to be taken if cases of bribery or corruption are discovered.</p>	<p>The evidence, Gerdau Code of Ethics (May 5, 2020, page 13), includes a requirement to internally report pecuniary or other advantages offered and/or received from public officials or the employees of business partners, directly or through third parties. The evidence, Operational Guideline - Consequences Management (March 2021, pages 3 to 7) includes information on the disciplinary actions to be taken if bribery or corruption are discovered.</p> <p>Interviews with workers, including contractors, indicate that Gerdau has well-established processes and procedures to communicate expected behaviors and practices in reference to inappropriate financial practices, including influencing business partners and government officials.</p>

1.5.5.3. Relevant employees and contractors shall be trained in the application of the operating company's policy and procedures.

The company trained all employees on the company's anti-corruption policies and procedures (online training conducted during February, March, and April 2023). This is supported by interviews with Gerdau employees, who demonstrated awareness of the company's anti-corruption policies, procedures, and expectations.

The company's supplier manual (Gerdau Suppliers Manual, Annex 3, no date) includes a blank contract form (Terms of Responsibility and Commitment), which indicates that contractors are required to read, accept, and adhere to all principles outlined in the company's Code of Conduct, including anti-corruption policies. The evidence also includes a sample of a third-party contract (April 2022) which includes anti-corruption clauses and indicates that the contractor is required to adhere to all company policies and guidelines.

While training is confirmed, interviews with a sample of contractors are needed during the reassessment audit to confirm that contractors understand the company's policies and procedures.

Principle 2: Planning for Positive Legacies

Chapter 2.1—Environmental and Social Impact Assessment and Management	Basis for rating
<p>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 level of its environmental and social risks and impacts, shall be completed prior to the commencement of any site-disturbing operations associated with the project.</p>	<p>Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.</p>
<p>2.1.1.2. To enable a reasonable estimation of potential impacts related to the mining project, the ESIA process shall commence only after the project design has been sufficiently developed. Should the proposal be significantly revised a new assessment process shall be undertaken.</p>	<p>Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.</p>
<p>2.1.1.3. The ESIA shall be carried out in accordance with publicly available, documented procedures.</p>	<p>Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.</p>
<p>2.1.2.1. Prior to the implementation of the ESIA process the operating company shall ensure that there has been wide, public announcement of the project proposal and the associated ESIA process, and</p>	<p>Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.</p>

that reasonable and culturally appropriate efforts have been made to inform potentially affected and interested stakeholders in potentially affected communities about the proposed project.

- 2.1.2.2.** Prior to the implementation of the ESIA process the operating company shall prepare a report and publish it on the operating company's external website, in the official national language(s) of the country in which the mining project is proposed to take place. The report shall provide:
- a. A general description of the proposed project, including details on the proposed location, and nature and duration of the project and related activities;
 - b. The preliminary identification of potential significant environmental and social impacts, and 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.

Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.

2.1.3.1. Critical. (See NEW MINES VS EXISTING MINES below)

(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.

(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.

Várzea do Lopes is an existing mine with an expansion in progress. The evidence includes several recent environmental social impact assessments (ESIAs) for its expansions:

- Várzea do Lopes Leste-Norte Project (January 2017)
- Corrective Installation License for the Sterile Pile PDE-01 (September 2017)
- Operational Continuity Project of the Várzea do Lopes Mine (August 2018)

The evidence indicates that the company has undertaken evaluations to identify potential social and environmental impacts associated with the mine's expansions. Impact assessments are conducted by means of the specific terms of reference made available by the:

- Secretary of Environment and Sustainable Development of the State of Minas Gerais,
- ESIA and EIR located at the Atlantic Rainforest, regulated by State Environmental System (Sisema), with recent documents following
- the State of Minas Gerais socioenvironmental impact study guidelines (January 2022), which includes a stakeholder consultation process.

The identification and evaluation of environmental and social impacts is ongoing at the site to address new developments at the mine. The most recent evaluations considered the Várzea Leste Norte Project, an expansion of the Várzea do Lopes Mine, permitted for extraction in November 2019. Besides increased ore extraction, the project included a new extraction area on the opposite side of Highway BR-040, compared to the previously licensed area. This new area is closer to the Arêdes Ecological Station, an ecologically important and protected area.



The evidence does not include a comprehensive evaluation that covers the mine operation outside of the recent expansions, such as an ESIA from before the commencement of operation in 2009 or an assessment of the potential environmental and social cumulative

		impacts associated with the entire mine site and considering conservation aspects in the entire area of influence.
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 scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.
2.1.3.3.	Scoping shall include the consideration of: <ul style="list-style-type: none"> 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 scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.
2.1.3.4	Scoping shall result in the identification of: <ul style="list-style-type: none"> a. Potentially significant environmental and social impacts of the proposed project; b. Alternative project designs to avoid significant adverse impacts; 	Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.

	<p>c. Other actions to mitigate identified adverse impacts; and</p> <p>d. Additional information and data needed to understand and assess the potential impacts.</p>	
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 scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.
2.1.4.2.	Additional studies shall be carried out as necessary to fulfill the information needs of the ESIA.	Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.
2.1.5.1	<p>The operating company shall:</p> <p>a. Predict in greater detail the characteristics of the potentially significant environmental and social impacts identified during scoping;</p> <p>b. Determine the significance of the predicted impacts;</p> <p>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</p> <p>d. Determine the relative importance of</p>	Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.

	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.		
2.1.6.1.	<p>The operating company shall prepare an ESIA report that includes, at minimum:</p> <ul style="list-style-type: none"> a. A description of the proposed mining project; b. Detailed description of the direct, indirect and cumulative impacts likely to result from the project, and identification of significant adverse impacts; c. Description of the alternatives considered to avoid 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 e. Names and affiliations of ESIA authors and others involved in technical studies. 		Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.
2.1.7.1.	The operating company shall develop and maintain a system to manage	●	<p>The company has developed an environmental and social management system that includes:</p> <ul style="list-style-type: none"> - Corporate Guidelines for Environmental Management (May 2021,

<p>environmental and social risks and impacts throughout the life of the mine.</p>		<p>version 4);</p> <ul style="list-style-type: none"> - Environmental Management System Manual (January 2023, version 7); - Environmental Aspects and Impacts Management Procedure (September 2019, version 4); - a Social and Human Rights Risk Matrix (Risk Map, August 2023). <p>The evidence indicates the mine has developed and is maintaining a system to manage environmental and social risks and impacts throughout the life of the mine, which includes performance indicators, a tracking system and general responsibilities.</p> <p>Interviews with key staff confirm that they are aware of their respective roles and responsibilities related to the environmental and social management system.</p>
<p>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.</p>	<p>⊕</p>	<p>The evidence, the Environmental Aspects and Impacts Management Procedure (September 2019, version 4) and a Social and Human Rights Risk Matrix (Risk Map, August 2023), indicates the company has developed and maintains an environmental and social management plan for the site, that:a. Outlines the specific mitigation actions that will be carried out to address significant environmental and social impacts identified during and after the ESIA process (Environmental Aspects and Impacts Management Procedure, item 6.9, p. 4, and Risk Map);b. Assigns personnel responsible for the implementation of various elements of the plan (Environmental Aspects and Impacts Management Procedure, item 4, p. 1 and Risk Map, column M "Control/Actions).The evidence does not include details to confirm that the company has estimated the resources needed to implement the environmental and social monitoring plan; c.</p>
<p>2.1.7.3. The environmental and social management plan shall be implemented and revised or updated as</p>	<p>⊕</p>	<p>The evidence, the Environmental Management System Manual (January 2023, version 7) and a Social and Human Rights Risk Matrix (Risk Map, August 2023), indicates that the company has implemented the environmental and social management plan and</p>

<p>necessary based on monitoring results or other information.</p>		<p>revises it in most cases as necessary based on monitoring results or other information.</p> <p>The evidence, a sample of monthly risk management meetings conducted by a specialized internal technical team (January, February and March 2023), where operational risks are evaluated and discussed, indicates the company reviews monitoring and other information for update of some of its environmental and social management plans on a regular basis.</p> <p>The evidence, Social and Human Rights Risk Matrix (Risk Map, August 2023), indicates that some risks identified (i.e., air quality, water characteristics, damaged roads, natural heritage damage and de-characterization, among others) have not been revised or updated based on monitoring results or other information.</p>
<p>2.1.8.1. As part of the ESMS, the operating company shall establish a program to monitor:</p> <p>a. The significant environmental and social impacts identified during or after the ESIA process; and</p> <p>b. The effectiveness of mitigation measures implemented to address environmental and social impacts.</p>		<p>The evidence, Environmental Control Program (May 2020) and the Social and Human Rights Risk Matrix (Risk map, August 2023), as well as interviews with key staff, indicate that the company established and maintains a program to monitor:</p> <p>a. some significant environmental and social impacts identified during or after the most recent ESIA processes;</p> <p>b. the effectiveness of some mitigation measures implemented to address environmental and social impacts.</p> <p>The evidence does not indicate that the company monitors all significant environmental and social impacts associated with the existing mining operation, facilities or structures (i.e., water quantity, potential watershed impact, air quality), as well as the effectiveness of some implemented mitigations (i.e., erosion control).</p>
<p>2.1.8.2. The monitoring program shall be designed and carried out by competent professionals.</p>		<p>The evidence, ESIA's completed in 2017 and 2018 (see 2.1.3.1) and Environmental Control Plans (January 2017 and August 2018), prepared by external consultants and reviewed by environmental agencies for approval, as well as interviews with key staff, indicate the company's environmental and social monitoring programs are</p>

		<p>designed by competent professionals including a multidisciplinary team composed of mining engineers, agronomists, biologists, archeologists, geographers, environmental engineers, occupational safety engineers, geologists, historians, economists, sociologists and anthropologists. . The document includes a list of the staff in charge of each component and their credentials, which consists of a multidisciplinary team, composed of mining engineers, agronomists, biologists, archeologists, geographers, environmental engineers, occupational safety engineers, geologists, historians, economists, and sociologists.</p> <p>Consultant credentials and accountabilities included in the evidence were confirmed through observations of best practices implementation at the operating level as well as interviews with a sample of key personnel and regulators.</p> <p>Environmental Aspects and Impacts Management Procedure (no date), outlines accountabilities for implementation.</p> <p>The evidence does not include information to confirm competencies of social program monitoring design or the credentials of those responsible for carrying out environmental and social monitoring.</p>
2.1.8.3.	<p>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.</p>	<p>The evidence, Manifestations Gerdau 2022-2023, an Excel file with the log of grievances filed during the years 2022 and 2023 through the Audire platform, indicates that no requests for independent monitoring have been filed. While no stakeholder requests have yet been made, interviews with a sample of key staff indicate the company would facilitate independent monitoring if requested.</p>
2.1.9.1.	<p>(See NEW MINES VS EXISTING MINES below)</p> <p>(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)</p>	<p>Várzea do Lopes is an existing mine with an expansion in progress. The evidence does not include information to confirm that the company provides opportunities for timely and effective stakeholder consultation, review or comment during the ESIA process.</p>

consultation, review and comment on:

- a. The issues and impacts to be considered in the proposed scope of the ESIA (see 2.1.3);
- b. Methodologies for the collection of environmental and social baseline data (see 2.1.4);
- c. The findings of environmental and social studies relevant to the conclusions and recommendations of the ESIA (see 2.1.5.1.a and b);
- d. Options and proposals to mitigate the potential impacts of the project (see 2.1.5.1.c);
- e. Provisional conclusions and recommendations of the ESIA, prior to finalization (see 2.1.6.1); and
- f. The final conclusions and recommendations of the ESIA (see 2.1.6.1).

(EXISTING MINES) As part of the ESIA process, the operating company shall consult with relevant stakeholders in the identification and evaluation of potential environmental and social impacts associated with the mine.

2.1.9.2. (See NEW MINES VS EXISTING MINES below)



Várzea do Lopes is an existing mine. The evidence does not include information to confirm that the

<p>(NEW MINES) The operating company shall encourage and facilitate stakeholder participation, where possible, in the collection of data for the ESIA, and in the development of options to mitigate the potential impacts of the project during and subsequent to the ESIA process.</p> <p>(EXISTING MINES) The operating company shall encourage and facilitate stakeholder participation, where possible, in the development of options to mitigate the potential impacts of the project.</p>		<p>company encouraged and facilitated stakeholder participation in the development of options to mitigate potential impacts of the mine regarding the company's most recent environmental impact assessments.</p>
<p>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.</p>	<p>⊗</p>	<p>The evidence does not include information to confirm that the company provides opportunities for stakeholder consultation, review or comment on the scope or design of the environmental and social monitoring program.</p>
<p>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.</p>	<p>⊗</p>	<p>The evidence does not include information to confirm that the company encourages and facilitates stakeholder participation in the implementation of the environmental and social monitoring program.</p>
<p>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</p>	<p>⊗</p>	<p>The evidence does not provide details to confirm the company records stakeholder comments received and/or the mine's responses in relation to ESIA scoping, implementation, ESIA findings, conclusions and recommendations, and the environmental and social monitoring program.</p>

	monitoring program. The company shall record how it responded to stakeholder comments.		
2.1.10.1.	<p>(See NEW MINES VS EXISTING MINES below)</p> <p>(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.</p> <p>(EXISTING MINES) At minimum, a summary of the potential significant environmental and social impacts associated with the mining operation shall be publicly available.</p>	●	<p>Várzea do Lopes is a existing mine. The evidence includes a link to the Minas Gerais Integrated Environmental Information System website (link: http://www.siam.mg.gov.br/siam/lc/2018/0177620040292018/6016362018.pdf) where the company has published its Environmental Impact Report (August 2018), which summarizes the potential significant environmental and social impacts described in the ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018) as well as the respective Environmental Control Plan (August 2018), and indicates the company publishes summaries of expected impacts of its operation.</p>
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 taken into account.		Not scored. This requirement does not need to be scored at existing mines per IRMA Guidance issued in 2021.
2.1.10.3	The environmental and social management plan shall be made available to stakeholders upon request.	●	<p>The Environmental and Social Management Plan is available at an online system managed by the local environmental authority (link: https://ecossistemas.meioambiente.mg.gov.br/sla/#/acesso-visitante), and when requested, information on how to access the documentation is provided to stakeholders either by the company or the government. The evidence includes a link to the Minas Gerais Integrated Environmental Information System website (link: http://www.siam.mg.gov.br/siam/lc/2018/0177620040292018/6016362018.pdf)</p>

		<p>http://www.siam.mg.gov.br/siam/lc/2018/0177620040292018/6016362018.pdf where the company has published its Environmental Control Plan (August 2018) to address the potential impacts described in the ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018), indicating the company publishes its Environmental and Social Management Plan.</p>
<p>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.</p>	<p>⊕</p>	<p>The evidence includes a link to the Minas Gerais Integrated Environmental Information System website (link: http://www.siam.mg.gov.br/siam/lc/2018/0177620040292018/6016362018.pdf) where the company has published its Environmental Control Plan (August 2018) which describes the monitoring, compensation, and rehabilitation methodologies used to assess and address environmental and social aspects that may be impacted by the mine's expansion as described in the ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018).</p> <p>The evidence does not include information to confirm the company publishes a summary reports of the findings of its environmental and social monitoring programs including monitoring data.</p>
<p>2.1.10.5 (See NEW MINES VS EXISTING MINES below)</p> <p>(NEW MINES) The existence of publicly available ESIA and ESMS information, and the means of accessing it, shall be publicized by appropriate means.</p> <p>(EXISTING MINES) The existence of publicly available ESMS information, and the means of accessing it, shall be publicized by appropriate means.</p>	<p>⊗</p>	<p>The evidence provided does not include information to confirm that the company publicizes the existence of its ESMS and the ways in which stakeholders can access that information.</p>

Chapter not assessed.

IRMA guides auditor review of 2.2 Free, Prior and Informed Consent (FPIC) chapter criteria through the IRMA Standard (2018), the IRMA Standard Guidance (November 2024), and the Supplementary Guidance on Indigenous Peoples and Free, Prior and Informed Consent (March 2025), including definitions, objectives, and applicability.

Definitions: IRMA defines Indigenous Peoples 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” (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.

In Brazil, the quilombola communities are recognized as tribal peoples under Article 1(1)(a) of ILO Convention No. 169 ratified by the Brazilian State in 2002 (Decree No. 143/2003), due to their distinct cultural identity, traditional practices, and historical continuity within today’s broader national landscape. Quilombolas are descendants of African slaves who escaped, migrated to remote areas, and banded together to resist recapture during Brazil’s colonial period. These communities historically provided a refuge of freedom for descendants of African slaves and continue to preserve surviving elements of traditional lifestyles— a key characteristic of quilombola identity that reflects their African ancestral roots and cultural resilience.

Objectives: The objective of this IRMA Chapter is to “demonstrate respect for the rights, dignity, aspirations, culture, and livelihoods of indigenous peoples, participate in ongoing dialogue and engagement, and collaborate on strategies to minimize impacts and create benefits for indigenous peoples, thereby creating conditions that allow for indigenous peoples’ free, prior and informed consent and decision-making regarding mining development” (IRMA Standard, Version 1, 2018) IRMA requires auditors to confirm Indigenous peoples legal or customary rights or interests may be affected by the company’s operations. It is incumbent on the company to conduct an adequate due-diligence process to determine that Indigenous peoples are not

affected in order to deem this chapter non-relevant. IRMA requires auditors to confirm whether there are no Indigenous peoples whose legal or customary rights or interests may be affected by the company's operations.

Examples of rights or interests may include lands, territories, and resources that Indigenous peoples 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.

At existing mines, where Indigenous peoples are present and Chapter 2.2 is deemed relevant, and FPIC was not obtained in the past, companies are required to demonstrate efforts to operate in alignment with the objectives of this chapter. Specifically, an existing mine shall obtain FPIC from Indigenous people if there are proposed changes to a company's plans or activities that may significantly change the nature or degree of existing impacts or introduce additional impacts on Indigenous peoples' rights, lands, territories, resources, properties, livelihoods, cultures, or religions. Companies may demonstrate application of FPIC for current operations by providing evidence of signed or otherwise verified agreements with Indigenous peoples. In the absence of such agreements for operations that started prior to 2018, companies are expected to demonstrate that a process is in place to respond to past and present community concerns, and to remedy and/or compensate for past impacts on Indigenous peoples' rights and interests. It is also expected that such processes and any associated remedies are developed in consultation with, and agreed to by, the Indigenous peoples potentially impacted by the operation. Nothing in this chapter reduces the State's primary responsibility to consult with Indigenous peoples, obtain their FPIC, and protect their rights.

Applicability: Várzea do Lopes is an existing mine, and the evidence reviewed included the company's Environmental and Social Impact Assessments (ESIAs) (January 2017, September 2017, and August 2018), as well as government data on Indigenous and traditional rights-holder communities in the area surrounding the mine. According to Fundação Cultural Palmares (FCP), a Brazilian government agency dedicated to preserving and promoting Afro-Brazilian culture and heritage, there is one (1) quilombola community (Taquaraçu) in the municipality of Moeda, located approximately 8.5 km from the site accessible by track. The ESIs conducted for the mine evaluated potential environmental impacts, including physical, biotic, and social variables. Within the scope of the Várzea do Lopes Mine ESIs (2017 and 2018), the company assessed potential impacts on this quilombola community and concluded that there were no significant impacts from the mining operations. Based on this result, Chapter 2.2 was deemed Not Relevant from the document review (Stage 1) of the initial audit.

During the initial onsite assessment, however, auditors confirmed that the company engages with the Taquaraçu community, as well as with an additional self-identified quilombola community (Marinho da Serra) located close to the mine concession. Although this community has not yet received formal recognition by FCP, it could meet the other criteria stipulated by IRMA, ILO 169, and UN guidelines. Considering the initial audit plan and scope, this chapter could not be fully assessed, but interviews conducted during the site visit revealed that both members of these quilombola communities located near the mine believe

that their legal, customary rights or interests may be affected by the company's operations. Consequently, the applicability has been classified as not assessed.

Not assessing Chapter 2.2 means this aspect was not evaluated during the initial and CAP audit processes. This chapter must be evaluated during the surveillance audit.

Sources:

- Indigenous and Tribal Peoples ILO Convention, 1989 (No. 169)
- Fundação Cultural Palmares, a Brazilian government agency dedicated to preserving and promoting Afro-Brazilian culture and heritage
- FUNAI, the National Indian Foundation of Brazil, responsible for protecting the rights and interests of indigenous peoples and their territories in Brazil
- City Secretariats of Environment and Culture, from the municipalities adjacent to the mining operation area
- Local NGOs
- Communities' leaders; and
- Stakeholders.

Chapter 2.3—Obtaining Community Support and Delivering 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





The company has a Corporate Guideline (October 2020) that outlines its participatory planning procedure to guide the company's contributions to community development initiatives and benefits.

The evidence does not indicate that the company publicly commits to:

a. maintaining or improving the health, social and economic wellbeing of affected communities, and

b. developing the project only if it gains and maintains broad support.

gains and maintains broad community support.		
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. Várzea do Lopes is an existing mine.
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: <ul style="list-style-type: none"> 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 	—	Not relevant. Várzea do Lopes is an existing mine.

<p>and marginalized members, prior to any decision or resolution.</p>		
<p>2.3.2.3. For existing mines, the operating company shall demonstrate that the mine has earned and is maintaining broad community support.</p>		<p>The company presented a study conducted in the municipalities of Itabirito, where the Várzea do Lopes mine is located, and Moeda, by the FSB Institute in May 2021 which indicates that 68% of the interviews agree with the continuity of mining activity, 12% neither agree nor disagree, 6% do not agree, and 15% did not answer. The study is available on the website (https://www7.fiemg.com.br/Cms_Data/Contents/central/Media/Documentos/Biblioteca/PDFs/2021/Pesquisa_FIEMG_Itabirito_e_Moeda.pdf). The evidence, Manifestations Gerdau 2022-2023, an excel file with the log of grievances filed during the years 2022 and 2023 through the Audire platform, indicates that some affected community members made complaints related to the mining project.</p> <p>Interviews with stakeholders indicated that although there was perceived room for improvement in relations between the company and communities, and some felt as though more benefits could be transferred to communities, the company works with the affected community in good faith to resolve issues to the satisfaction of the community.</p>
<p>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.</p>		<p>The evidence, Corporate Guideline (October 2020), indicates that the company has a participatory planning to guide the company's contributions to community development initiatives and benefits. The document outlines the company's own resource management, external fundraising, corporate volunteering, and indicators.</p> <p>Evidence of a public notice for a social investment presented for the enrollment of local Non-Governmental Organizations community projects for the districts of Itabirito and Moeda were provided (link: https://prosas.com.br/editais/11775-gerdau-investimento-social-mg-2023?subdominio=prosas), indicating the implementation of the participatory planning process.</p>

		The evidence does not indicate that the process was designed by the company in collaboration with affected communities and relevant stakeholders.
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.	<p>Evidence of a public notice for a social investment presented for the enrollment of local Non-Governmental Organizations community projects (link: https://prosas.com.br/editais/11775-gerdau-investimento-social-mg-2023?subdominio=prosas). Interviews with community stakeholders indicate most of them are aware of this public notice for a social investment presented by Gerdau. Some of the interviewees reported feeling that the participation rules were not inclusive of communities.</p> <p>The evidence does not include details to confirm that the planning process was designed to ensure social inclusion, including participation of women, men and vulnerable groups and/or traditionally marginalized community members or their representatives.</p>
2.3.3.3.	If requested by the community and not provided by the appropriate public authorities, the operating company shall provide funding for mutually agreed upon experts to aid in the participatory process.	<p>The evidence does not indicate that stakeholder requests have yet been made, which was confirmed during interviews with key staff.</p> <p>While the evidence does not include details to confirm the company would provide funding for mutually agreed upon experts to aid in the participatory process upon request, interviews with key staff indicate they have several initiatives to facilitate community outreach and dialogue, including contracting specialized third-parties to improve communication with affected communities.</p>
2.3.3.4	Efforts shall be made to develop: <ul style="list-style-type: none"> a. Local procurement opportunities; b. Initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable 	<p>The evidence, the social investment portfolio for the year 2022, indicates the company has developed:</p> <ul style="list-style-type: none"> b. initiatives that benefit a wide range of community members (i.e., children, youth, women, and vulnerable groups); and c. that at least some of the projects or benefits can be self-sustaining after mine closure (i.e., computer and digital inclusion classes, support center for micro entrepreneurs).

<p>and traditionally marginalized groups); and</p> <p>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).</p>		<p>According to interviews carried out with local communities' members and with the Gerdau team, the mine has carried out some productive projects dedicated to the self-sustainability of the communities, such as the donation of electrical equipment to one of the Moeda community school and the provision of training courses in finance and marketing for women in the region. Some community members interviewed indicated that they would like to receive training to be able to work in the mine, either as employees or contractors.</p> <p>The evidence does not indicate that the company has made efforts to develop:</p> <p>a. local procurement opportunities and that the communities have been enrolled in the participatory planning process.</p>
<p>2.3.3.5. The planning process and any outcomes or decisions shall be documented and made publicly available.</p>	●	<p>The evidence indicates that the planning process and any outcomes or decisions are documented and made publicly available, as follows:</p> <ul style="list-style-type: none"> - Registration form for the residential renovation program for residents of communities near the mine (link: https://www.reformaquetransforma.com.br/); - Corporate Social Action Report, published in 2021, with the social projects supported by Gerdau and available at the company's website (link: https://www2.gerdau.com/sites/gln_gerdau/files/2022-11/Gerdau_Relatorio-de-Responsabilidade-Social-2021). During on-site interviews, stakeholders mentioned that Gerdau and the third-party company responsible for stakeholder engagement inform them of the company's support activities.
<p>2.3.3.6. 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.</p>	⊗	<p>No evidence was provided to indicate that the company, in collaboration with the community, periodically monitors the effectiveness of any mechanisms or agreements developed to deliver community benefits.</p>

Chapter not relevant. IRMA guides auditor review of 2.4 Resettlement chapter criteria through the IRMA Standard (2018) and the IRMA Standard Guidance (June 2023), including definitions, objectives, and applicability.

Definitions: Voluntary resettlement is defined as “voluntary land transactions, i.e., market transactions in which the seller is not obliged to sell and the buyer cannot resort to expropriation or other compulsory procedures sanctioned by the legal system of the host country if negotiations fail” (IRMA Standard, Version 1, 2018). Involuntary Resettlement is defined as “physical displacement (relocation or loss of shelter) and economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. Under this definition, resettlement is involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail” (IRMA Standard, Version 1, 2018).

Objectives: In this Chapter, IRMA asks auditors to confirm that in case mining-related activities could result or have resulted in the physical or economic displacement and involuntary resettlement of people, resettlement was carried out in accordance with international human rights law (i.e., IFC), and that the company has implemented measures to maximize benefits for any household resettled as a result of project activities. In other words, the objective of this Chapter is to “avoid involuntary resettlement, and when that is not possible, equitably compensate affected persons and improve the livelihoods and standards of living of displaced persons” (IRMA Standard, Version 1, 2018).

Applicability: IRMA has differing resettlement applicability requirements for new vs. existing mines. Várzea do Lopes is an existing mine licensed to operate by Gerdau since 2007. The evidence, including environmental impact assessments, as well as on-site observations and interviews with a sample of company personnel, community stakeholders, and governmental agencies, indicates that there have been no instances of land acquisition leading to any kind of resettlement. Furthermore, there is no indication of land acquisition plans that could result in involuntary resettlement.

Sources:

- Recent environmental impact assessments (EIAs):
- Várzea do Lopes Mine East-North Project (January 2017)
- Waste rock storage facility PDE-01 (September 2017)

- Várzea do Lopes Mine continuity of operations project (August 2018)
- City Secretariats of Environment, from the municipalities adjacent to the mining operation area
- Local NGOs
- Communities' leaders; and
- Stakeholders.

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 United Nations Environment Programme, Awareness and Preparedness for Emergencies at the Local Level (APELL) for Mining.



The company has implemented and maintains seven (7) Emergency Action Plans developed by a competent third party as provided in the evidence:

- Várzea do Lopes and Várzea Leste Norte (October 2017 and January 2023),
- the engineered sediment pond PDE-01 North Dike (PAEBM-01 Dique Norte da PDE, March 2022), and
- for six waste rock storage facilities (1 active, 3 inactive, 2 planned) (PAE for PDE-01 Phase 1 and 2, PDE-A Norte and Sul, and PDE VLN Oeste and Leste – all documents from January 2023)

The emergency plans address the components listed in the APELL including internal and external emergency contact information and communication plans, response procedures regarding various emergency scenarios, emergency equipment and resources, clean-up, remediation, and return to normal operations.

Additional evidence, including Public meeting minutes (Minutes of the Annual Orientation Seminar, November 2022), Records of emergency drills (no date), a report from the civil defense describing simulation exercises for the year 2021 (May 2021), a report on testing the emergency alarm system jointly with two other mines in the area and civil defense (Instant Noise Report, April 2023), and a third-party Report on Compliance and Operability of the PAEBM (H&P, June

	<p>2022), indicates ongoing collaboration with potentially affected stakeholders, including local emergency response teams and employees, in improving the sites and regional emergency preparedness and response, as well as awareness of potential hazards and impacts. It also indicates that coordinated drills between the company, the civil defense, and nearby mine companies with the participation of stakeholders are conducted.</p> <p>On-site interviews with government response coordinators, company managers, and emergency response personnel, including contractors, indicate familiarity with the plans and response as part of the mine site response team, and in cooperation with local emergency preparedness and response efforts. For the sediment pond PDE-01 North Dike, the emergency action plan and interviews indicate that no communities were identified in the potentially affected area.</p> <p>The evidence does not include details to confirm the company has developed an integrated site-wide plan.</p>
<p>2.5.1.2. The operating company shall:</p> <p>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</p> <p>b. Update the communications contacts of the emergency response plan at least annually.</p>	<p>The mine has two general mining areas (Várzea do Lopes and Várzea Leste Norte), one engineered sediment pond (PDE-01 North Dike), and three existing and three planned waste rock storage facilities; each with its own emergency response plan (see 2.5.1.1.).</p> <p>a. The company conducts periodic exposure exercises every 6 months for the emergency response plans at once (evidence of exercises conducted in November 2021 and July 2022). Workers and contractors attend these exercises. A report from the civil defense on simulation exercises for the year 2021 (May 2021) and the Emergency Response and Preparedness Plan for the sediment pond PDE-01 North Dike (PAEBM-01 Dique Norte da PDE, March 2022) indicate that no communities were identified in the potentially affected area, which was confirmed through interviews.</p> <p>b. The communications contacts of the emergency response plan for</p>

	<p>the sediment pond are updated at least annually, following a federal legal requirement. The evidence, a Conformity and Operability assessment (H&P, June 2022), indicates that the document was revised and updated in December 2022.</p> <p>Interviews with a sample of workers, including contractors, indicate that not all of them are aware of the emergency action plan.</p>
<p>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.</p>	<p>The company is legally required to maintain Emergency Response and Preparedness Plans for the general mining facilities at Várzea do Lopes and Várzea Leste Norte (October 2017 and January 2023), the engineered sediment pond PDE-01 North Dike (PAEBM-01 Dique Norte da PDE, March 2022), and for six waste rock storage facilities (PAE for PDE-01 Phase 1 and 2, and PDE-A Norte and Sul, and VLN Oeste and Leste – all documents from January 2023). The documents were developed by a competent third-party company. The drafts of these emergency action plans were presented to society via (1) the Civil Defense (Municipal and State); (2) the City Halls of municipalities located in the self-rescue zone and secondary security zone; and (3) through an orientation seminar cycle held in 2022 with the participation of some members of potentially affected communities and other interested parties.</p> <p>The inputs given by these stakeholders were incorporated into the Emergency Action Plans, following the guidelines given by the Brazilian Mining Agency (Resolution n. 95/2022 Art. 48) which requires the company to conduct this type of consultation with potentially affected populations, which is further supported by Annex B of the emergency plan which lists revisions including the incorporation of comments received in the past.</p> <p>The evidence indicates that the company conducts periodic exposure exercises every 6 months for the five emergency response plans at once with participation of workers and contractors as indicated by a third-party Report on Compliance and Operability of the PAEBM (H&P, June 2022) listing emergency drills conducted in November 2021 and July 2022. A report from the civil defense on simulation</p>

		<p>exercises for the year 2021 (May 2021) and the Emergency Response and Preparedness Plan for the sediment pond PDE-01 North Dike (PAEBM-01 Dique Norte da PDE, March 2022) indicate that no communities were identified in the potentially affected area, which was confirmed through interviews.</p> <p>Interviews with a sample of workers and contractors indicate the company regularly trains and includes workers participation (workers involved with emergency response activities) in planning activities and exercises. However, not all interviewees are aware of the emergency action plan and/or how the company has considered their inputs.</p> <p>The evidence does not include details to confirm the participation of non-emergency workers, and/or their representatives in the development of emergency response plans.</p>
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.	<p>The evidence, Insurance Statement from Chubb Seguros Brasil SA Insurance Company (February 7, 2022, valid to February 01, 2024), indicates that operations related to the mining project are covered by a public liability accident insurance policy that covers unplanned accidental events related to some of Gerdau's operations including the Várzea do Lopes mine. The insurance policy has a specific clause that excludes coverage for certain risks, such as those associated with dams, reservoirs, locks, and dikes.</p> <p>The evidence does not include a public liability accident insurance policy that provides financial insurance for unplanned accidental events related to dams, reservoirs, locks and dikes.</p>
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.	<p>The company presented a public liability accident insurance policy (Insurance Statement from Chubb Seguros Brasil SA Insurance Company (February 7, 2022, valid to February 01, 2024).</p> <p>The evidence indicates that the insurance policy does not cover unplanned accidental events that have not been ceased within 72 hours of their initiation, including those triggered by force of nature,</p>

		such as flood damage, landslides, subsidence, mine waste facility failures, major spills of process solutions, leaking tanks, or others.
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.	●	The evidence, a public liability accident insurance coverage (Insurance Statement from Chubb Seguros Brasil SA Insurance Company, February 7, 2022, valid to February 01, 2024), on page 7, has a clause stating that the policy would remain in force after there is a change in the ownership of the mining project/property, as long as it stays as property of the same economic group.
Chapter 2.6—Planning and Financing Reclamation and Closure		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.	⊕	<p>The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022) and confirmation of its submittal to the mining national agency (ANM, November 2022), guidelines for mine closure (ANM, 2021: Resolution No. 68) and Gerdau's financial statement for third quarter 2022 (Gerdau, 2022: Results 3T2022), indicates the company's intent to cover costs of reclamation. The company's management team interviews indicate reclamation for exploration is included within the conceptual mine plan scope.</p> <p>The evidence does not include a formal guarantee that the cost of implementing reclamation for exploration activities related to the mining development will be met by the company.</p>
2.6.1.2. The operating company shall implement exploration-related reclamation in a timely manner.	●	The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022) and interviews with contractors involved with exploration activities (i.e., drilling and testing), suggest exploration-related reclamation is completed in a timely manner as directed by the company management team (i.e., geologist).

		At the time of the site visit, all exploration activities were observed within the area of extraction (not requiring reclamation).
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).	● The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), confirmation by the National mining agency that the mine closure plan was received (November 2022), guidelines for mine closure (ANM Resolution Nr. 68, 2021), the company's grievance log (2022 to July 2023), and interviews (stakeholders, workers and the site's management team), indicate the absence of complaints related to incomplete exploration reclamation at the time of the site visit.
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.	● Várzea do Lopes is an existing mine with a planned expansion in progress. The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), indicates the company has a reclamation and closure plan that is compatible with protection of human health and the environment and describes how affected areas will be returned to a stable landscape and post-mining end use agreed upon by the regulatory agency.
2.6.2.2	At a minimum, the reclamation and closure plan shall contain: <ul style="list-style-type: none"> 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; 	● The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), indicates the following items of this requirement are met: <ul style="list-style-type: none"> a. Chapter 9 presents the principles and objectives for reclamation and closure. b. Chapter 5.1 presents the site location and chapters 6.0 and 7.0 present the environmental and socioeconomic background. c. Chapter 5 presents the description of the entire facility. d. Chapter 11 describes the planned involvement of community in reviewing future plans, e. Chapter 10 presents the potential alternatives considered to define post-mining land use and facility use. f. Chapter 5.7 indicates that the material at the tailings dam is inert, but there is no information about the waste rock. g. Chapter 12.2 presents the engineering measures needed to prevent

- 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;
- 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. Stormwater 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;

- the degradations of water resources and Chapter 14.2.1.3. describes post-closure water monitoring.
- h. Chapter 14.2 presents the monitoring and maintenance activities that are going to be needed based on the monitoring results.
- j. Chapter 12.2.6 presents the earthwork concept. 12.2.7 and annex B present the storm water management (iii) and 12.2.3 presents the geotechnical considerations for stabilization (iv).
- k. Chapter 12.2.8 presents the revegetation concept and chapter 12.2.3.3 details the plant material selection (i), revegetation standards (ii), revegetation actions (v) including control of noxious weeds (iv), and Annex D includes a revegetation schedule and budget further indicating conformity with sub-requirements iii. and v.
- l. Chapter 12.2 presents the management for hazardous materials including disposal.
- m. Chapter 12.2 presents the activities related to facility demolition and disposal.
- n. Chapter 14 presents the long-term maintenance activities.
- o. Chapter 14.2 presents the post-closure monitoring plan.
- q. Chapter 15.0 and Annex D presents a schedule for all activities presented in the plan.

The mine reclamation and closure plan does not include:

- f. source and pathway characterization, including geochemistry and hydrology of waste piles (see also findings in 4.1 and 4.2)
- i. plans for progressive reclamation and revegetation (see also findings in 4.6),
- j. topsoil salvage and storage (ii, iii),
- p. the role of community in long-term monitoring and maintenance if any.

k. Revegetation/Ecological Restoration:

- i. Plant material selection, prioritizing native species as appropriate for the agreed post-mine 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;
- 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 reclamation and closure plan shall include a detailed determination of the estimated costs of reclamation and closure, and post-closure, based on the assumption that reclamation and closure will be completed by a third party, using costs associated with the reclamation and closure plan as implemented by a regulatory agency. These costs shall include, at minimum:

- a. Mobilization/demobilization;
- b. Engineering redesign, procurement, and construction management;
- c. Earthwork;
- d. Revegetation/Ecological Restoration;
- e. Disposal of hazardous materials;
- f. Facility demolition and disposal;
- g. Holding costs that would be incurred by the regulatory agency following a bankruptcy in the first two years before actual reclamation begins, including:
 - i. Interim process water and site management; and
 - ii. Short-term water treatment;

The reclamation and closure plan includes a detailed determination of the estimated costs of reclamation and closure, and post-closure, based on the assumption that reclamation and closure will be completed by a third-party using costs associated with the reclamation and closure plan as implemented by a regulatory agency. The information is presented in the closure plan (2022).

Chapter 15 of the plan covers the following items:

- a. Annex D-page 1/22, line 2.1.5 mobilization and demobilization costs.
- b. Annex D-page 1/22, Sections 1 and 2.1 costs required as well as the costs related to the items c., d., e., f., h, and i. except for v.

The evidence does not include:

- g. holding costs that would be incurred by the regulatory agency following a bankruptcy in the first two years before actual reclamation begins,
- i. indirect costs, i-v, and
- j. a multi-year inflation increase in the financial surety or an annual review and update of financial surety.

h. Post-closure costs for:

i. Long-term water treatment; and

ii. Long-term monitoring and maintenance;

i. Indirect Costs:

i. Mobilization/demobilization;

ii. Engineering redesign, procurement and construction management;

iii. Contractor overhead and profit;

iv. Agency administration;

v. Contingency; and

j. Either:



i. A multi-year inflation increase in the financial surety; or

ii. 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



The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), indicates in Chapter 2.3 that the company has an intent to update its reclamation and closure plan every time there is a major change at the mine. Additional updates were not available for review at the time of the audit.

with an interim reclamation progress report.		The evidence does not include details to confirm that the closure plan is updated at least every 5 years.
<p>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:</p> <p>a. If necessary, the operating company shall provide resources for capacity building and training to enable meaningful stakeholder engagement; and</p> <p>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.</p>		<p>The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), confirmation that the mine closure plan was received by the mining regulatory agency (November 2022), and guidelines for mine closure (ANM Resolution No. 68, 2021), do not provide information on the availability of the mine reclamation plan to stakeholders to provide comment for 60 days including,</p> <p>a. measures for capacity building and training, or</p> <p>b. the opportunity for input through independent review.</p>
<p>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.</p>		<p>The most recent version of the Conceptual Mine Closure Plan for Várzea do Lopes (October 2023) is publicly available at the company website (link: https://www2.gerdau.com.br/certificados-de-qualidade-edocumentos/).</p>

<p>2.6.3.1. Open pits shall be partially or completely backfilled if:</p> <p>a. A pit lake is predicted to exceed the water quality criteria in IRMA Chapter 4.2; and</p> <p>b. The company and key stakeholders have agreed that backfilling would have socioeconomic and environmental benefits; and</p> <p>c. It is economically viable.</p>	—	<p>The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), indicates that a pit lake could be considered as part of the closure plan. A final decision for restoration as a pit lake has not been made by the company.</p> <p>At the time of the audit, auditors did not observe any pit lakes.</p>
<p>2.6.3.2 Underground mines shall be backfilled if:</p> <p>a. Subsidence is predicted on lands not owned by the mining company; and</p> <p>b. If the mining method allows.</p>	—	<p>Not relevant. At the time of the audit, the company did not operate underground (only open pit mines).</p>
<p>2.6.4.1. Critical. Financial surety instruments shall be in place for mine closure and post-closure.</p>		<p>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 early legislation related to reclamation, closure, and related financial surety is in place for this region, there is not yet a formal mechanism for financial surety.</p>
<p>2.6.4.2 Financial surety instruments shall be:</p> <p>a. Independently guaranteed, reliable, and readily liquid;</p> <p>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;</p> <p>c. In place before ground disturbance</p>		<p>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 early legislation related to reclamation, closure, and related financial surety is in place for this region, there is not yet a formal mechanism for financial surety.</p>

	begins; and		
	d. Sufficient to cover the reclamation and closure expenses for the period until the next financial surety review is completed.		
2.6.4.3	Self-bonding or corporate guarantees shall not be used.		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 early legislation related to reclamation, closure, and related financial surety is in place for this region, there is not yet a formal mechanism for financial surety.
2.6.4.4	The results of all approved financial surety reviews, with the exception of confidential business information, shall be made available to stakeholders upon request.	⊗	Since the financial surety instrument is not in place as reviewed in 2.6.4.1, there is no evidence indicating that all approved financial surety reviews are made available to stakeholders upon request.
2.6.4.5	<p>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:</p> <p>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</p>	⊗	Since the financial surety instrument is not in place as reviewed in 2.6.4.1, there is no evidence indicating that the public has at least 60 days to comment on the adequacy of the financial surety as indicated in a. to c.

	<p>fact that the information has been withheld shall be disclosed along with the financial surety.</p> <p>b. If necessary, the operating company shall provide resources for capacity building and training to enable meaningful stakeholder engagement; and</p> <p>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.</p>	
<p>2.6.4.6 The terms of the financial surety shall guarantee that the surety is not released until:</p> <p>a. Revegetation/ecological restoration and reclamation of mine and waste sites and have been shown to be effective and stable; and</p> <p>b. Public comment has been taken before partial or final surety release.</p>	<p>⊗</p>	<p>Since the financial surety instrument is not in place as reviewed in 2.6.4.1, there is no evidence indicating that the financial surety is not released until:</p> <p>a. Revegetation/ecological restoration and reclamation of mine and waste sites and have been shown to be effective and stable; and</p> <p>b. Public comments have been taken before partial or final surety release.</p>
<p>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</p>	<p>●</p>	<p>The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), includes the following post-closure monitoring and maintenance requirements:</p> <p>a. Inspection of surface (open pits) and underground mine workings;</p> <p>b. Inspection and maintenance of mine waste facilities including effectiveness of cover and any seepage capture systems; and</p>

	<p>all mine facilities, including, but not limited to:</p> <p>a. Inspection of surface (open pits) and underground mine workings;</p> <p>b. Inspection and maintenance of mine waste facilities including effectiveness of cover and any seepage capture systems; and</p> <p>c. Mechanisms for contingency and response planning and implementation.</p>		c. Mechanisms for contingency and response planning and implementation.
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.	⊕	<p>The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022, Chapter 14, Figure 35), shows the locations of monitoring stations for surface water to sufficiently detect offsite contamination from closed mine facilities as well as at the points of compliance.</p> <p>The evidence does not include monitoring of groundwater quality or quantity.</p>
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.	⊕	<p>The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (April 2022), in Chapter 14.2.1.3, describes the company's plan to monitor surface water following the parameters and the water quality criteria established by the local agency (Resolutions by CONAMA No. 357/2005 and 420/2009).</p> <p>The evidence does not include monitoring until IRMA Water Quality Criteria has been met for at least 5 years, with a minimum of 25 years of post-closure data.</p>
2.6.5.4	Biologic monitoring shall be included in post-closure monitoring if required to	●	The evidence, Conceptual Mine Closure Plan for Várzea do Lopes (2022), in Chapter 14.2.2.4, includes post-closure biologic monitoring

	ensure there is no ongoing post-closure damage to aquatic and terrestrial resources.		of aquatic and terrestrial resources and organisms as well as monitoring methodology after closure.
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.	—	<p>Not relevant. No pit lakes were observed at the time of the onsite audit.</p> <p>Note: The Conceptual Mine Closure Plan for Várzea do Lopes (April 2022, Chapter 5.6.1), indicates that a pit lake may be evaluated at Várzea do Lopes, but a decision has not been made.</p>
2.6.6.1.	<p>Long-term water treatment shall not take place unless:</p> <p>a. All practicable efforts to implement best practice water and waste management methods to avoid long-term treatment have been made; and</p> <p>b. The operating company funds an engineering and risk assessment that:</p> <p>i. Is carried out by an independent third-party:</p> <p>ii. Evaluates the environmental and financial advantages/disadvantages and risks of long-term water treatment versus other mitigation methods;</p> <p>iii. Incorporates data on the failure rates of the proposed mitigation measures and water treatment mechanisms;</p> <p>iv. Determines that the contaminated water to be treated perpetually poses no</p>	—	Not relevant. The evidence, including the Conceptual Mine Closure Plan for Várzea do Lopes (June 2022), does not indicate that long-term water treatment is necessary.

	<p>significant risk to human health or to the livelihoods of communities if the discharge were to go untreated; and</p> <p>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.</p>	
2.6.6.2	<p>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.</p>	<p>—</p> <p>Not relevant. The evidence, including the Conceptual Mine Closure Plan for Várzea do Lopes (June 2022), does not indicate that long-term water treatment is necessary.</p>
2.6.7.1.	<p>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. Financial assurance shall guarantee that funds will be available, irrespective of the operating company's finances at the time of mine closure or bankruptcy.</p>	<p>⊗</p> <p>Does not meet.</p>
2.6.7.2	<p>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</p>	<p>—</p> <p>Not relevant. The evidence, including the Conceptual Mine Closure Plan for Várzea do Lopes (June 2022), does not indicate that long-term water treatment is necessary.</p>

	<p>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.</p>	
2.6.7.3	<p>The post-closure financial surety shall be recalculated and reviewed by an independent analyst at the same time as the reclamation financial surety.</p>	<p>⊗ Since the financial surety instrument is not in place as reviewed in 2.6.4.1, there is no evidence indicating that the post-closure financial surety is recalculated and reviewed by an independent analyst at the same time as the reclamation financial surety.</p>
2.6.7.4	<p>Long-term Net Present Value (NPV) calculations utilized to estimate the value of any financial surety shall use conservative assumptions, including:</p> <p>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</p> <p>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).</p>	<p>⊗ Since the financial surety instrument is not in place as reviewed in 2.6.4.1, there is no evidence indicating that long-term net present value calculations include conservative assumptions as in a. and b.</p>

Principle 3: Social Responsibility

Chapter 3.1—Fair Labor and Terms of Work	Basis for rating
<p>3.1.1.1. 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.</p>	<p>The company has a comprehensive Human Rights Policy (December 2022) and a procedure (Corporate guideline on consequence management, 2021) aligned to national laws. These documents establish guidelines and rules for adopting formal mechanisms of Consequence Management, ensuring uniformity and transparency in decision-making processes related to the recognition, correction, and punishment of behaviors. It aims to align with Gerdau Principles, improve efficiency, and implement disciplinary sanctions outlined in the Corporate Guideline on Disciplinary Sanctions (July 2021).</p> <p>On-site interviews indicate employees and labor unions acknowledge the policy and procedures. The policy is posted on the organization's website.</p>
<p>3.1.2.1. Critical. The operating company shall respect the rights of workers to freedom of association and collective bargaining.</p>	<p>The evidence, Human Rights Policy (December 2022) and the Collective Bargaining Agreement for 2022-2023 (July 2022), indicates Gerdau respects the rights of workers to associate and collectively bargain freely, without interference or victimization. The company is fully compliant with regard to employees who are affiliated with the union and have monthly union membership fee deductions from their payroll. Additionally, there are two employees currently serving as union-elected leaders. The company has a negotiated and approved Collective Bargaining Agreement in effect, and the right to free association is explicitly protected in its Code of Ethics (May 2020).</p> <p>On-site interviews confirmed employees and the elected union president participate in an applicable union including the Sindicato Metabase dos Inconfidentes. The company's supplier manual (Gerdau Suppliers Manual, no date) indicates that contractors are required to</p>

		follow the company's Code of Conduct, which includes freedom of association.
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.	Not relevant. The company is located in a country (Brazil), where workers enjoy the freedom to form workers' organizations without any restrictions. According to federal legislation, the rights to workers' freedom of association and collective bargaining are fully permitted and protected.
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.	<p>The evidence, Gerdau Communication 2021 - Union Registration (September 2021), Union Elected Letter (no date) and Request for Release of Union Officers (May 2022), indicates the company provides the needed resources and conditions for workers to engage in association, including allowing representatives to participate in related meetings.</p> <p>The absence of complaints or grievances in the grievance log, as well as during the interviews held with workers and labor unions (Manifestations Gerdau 2022-2023) related to the company's provision of information and timing thereof, indicates that the company provides the worker's representatives and organizations with the necessary information in a timely manner.</p>
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	The evidence, bargaining agreements between the organization and the labor union do not specify access to or use of facilities needed for labor unions to carry out their functions. However, on-site interviews confirmed that workers' representatives have access to designated non-work areas during organizing efforts to communicate with workers. The agreements also do not specify conditions for accommodations for workers' representatives at mine entry and exit sites or other remote locations, as needed.

<p>or other remotely located mine sites, where relevant.</p>		<p>On-site interviews with workers' representatives indicate they have no concerns regarding the access provided by the company.</p>
<p>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.</p>	●	<p>The evidence, the Code of Ethics and Conduct (May 2020), Gerdau Communication 2021 – Union Registration (September 2021), the Collective Bargaining Agreement for 2022-2023 (July 2022), and an union pamphlet (no date), indicates that the company maintains a neutral stance in legitimate unionizing and worker-organizing efforts. It refrains from producing or distributing any material that disparages trade unions, does not interfere with the operation of unions or worker organizations, and imposes no sanctions on worker organizations participating in a legal strike. The company supports elected union leaders by granting them the freedom needed to perform union activities, such as distributing communication materials. The Code of Ethics explicitly acknowledges the right to free association, and interviews with workers and union representatives confirmed that the organization informs employees about unions during induction and does not restrict access to or membership in unions. Additionally, the company's supplier manual (Gerdau Suppliers Manual, undated) requires contractors to adhere to the company's Code of Conduct, which includes respecting freedom of association.</p>
<p>3.1.2.6. Upon employment, the operating company shall:</p> <ul style="list-style-type: none"> 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; 	●	<p>The evidence, Working Contract Template (no date), indicates the company provides the following information at the time of hiring:</p> <ul style="list-style-type: none"> a. Informing workers of their rights under national labor and employment law. b. Informing workers that they are free to join a workers' organization of their choosing without facing any negative consequences or retaliation from the company. c. Informing workers of their rights under any applicable collective agreement. d. The evidence, a copy of an e-mail sent to all employees (November 25, 2022), indicates that the company provides an electronic copy of the collective bargaining agreement to all workers.

<p>c. If relevant, inform workers of their rights under any applicable collective agreement; and</p> <p>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.</p>		<p>While the evidence does not indicate that the company provides workers with the contact information for the appropriate trade union, all workers interviewed indicated that the company empowered their choice and information provided was sufficient for them to make an informed decision as to join the union. The company's supplier manual (Gerdau Suppliers Manual, no date) indicates that contractors are required to follow the company's Code of Conduct, which includes freedom of association.</p>
<p>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.</p>	●	<p>The evidence, including the company's Code of Ethics and Conduct (May 2020), the Collective Bargaining Agreement for 2022-2023 (July 2022), and interviews with workers, worker representatives, and human resources managers indicate that the company does not discriminate or retaliate against workers who participate or seek to participate in a legitimate worker organization or legal strike. The evidence, Code of Ethics and Conduct (May 2020), indicates the company has corporate guidelines on the prevention of retaliation and the disciplinary sanctions against harassment to maintain a work environment free of intimidation and hostility. The company's supplier manual (Gerdau Suppliers Manual, Annex 3, no date) includes a blank contract form (Terms of Responsibility and Commitment), indicates that contractors are required to read, accept, and adhere to all principles outlined in the company's Code of Conduct, which indicates that the same guidelines on the prevention of retaliation and the disciplinary sanctions against harassment to maintain a work environment free of intimidation and hostility apply to contractors. The evidence also includes a sample of a third-party contract (April 2022) indicating that the contractor is required to adhere to all company policies and guidelines.</p>
<p>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</p>	●	<p>The evidence, the Collective Bargaining Agreement for 2022-2023 (July 2022), indicates that the company is a party to a collective bargaining agreement with its workers, respects the terms, and made a commitment to fully implement them. The collective agreement signed by the company representatives is a consensual</p>




	exist, or an agreement does not address specific requirements in this chapter, the operating company shall meet the relevant IRMA requirements.		agreement in which the company and the union declare that mutual respect, understanding, collaboration, and good faith constitute the basis of their relationships and the factors that will facilitate mutual consent.
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.	●	The evidence, the Collective Bargaining Agreement for 2022-2023 (July 2022), and an employment contract (no date), as well as interviews with workers and the union representative, indicate the company does not make use of short-term contracts or other measures to undermine a collective bargaining agreement, worker organizing effort, or to avoid or reduce worker obligations.
3.1.2.10	The operating company shall not hire replacement workers in order 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.	●	The evidence indicates that the company operates according to the Collective Bargaining Agreement for 2022-2023 (July 2022) and respects the agreements. Interviews with workers and the union representative indicate that the company does not hire replacement workers in order to prevent, undermine, or break up a legal strike, support a lockout, or avoid negotiating in good faith.
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.	●	<p>The evidence, Corporate Recruitment and Selection Guideline (2022), Human Rights Policy (2022), Diversity and Inclusion Policy (2022), and Code of Ethics and Conduct (2020), indicates the company employs workers based on principles of equal opportunity and fair treatment and does not discriminate against workers based on personal characteristics unrelated to inherent job requirements.</p> <p>On-site interviews indicate that the company posts job openings and promotes employees without discrimination.</p>

<p>3.1.3.2 Exceptions to 3.1.3.1 may be made with respect to hiring and recruitment in the case of:</p> <ul style="list-style-type: none"> 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. 	<p>—</p>	<p>Not relevant. The evidence provided for 3.1.3.1 indicated that the company bases employment relationships on the principles of equal opportunity and fair treatment.</p>
<p>3.1.3.3. Critical. The operating company shall take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to female workers.</p>	<p>●</p>	<p>The company takes measures to prevent and address harassment, intimidation, and/or exploitation, as indicated in the evidence, Diversity and Inclusion Policy (2022) and Code of Ethics and Conduct (2020). The company also provided records of Diversity and Inclusion annual training records from 2021 and 2022 (Ethics and Compliance - training) and a procedure to report incidents, indicating the company has taken prevention measures. The grievance log (Manifestations Gerdau 2022-2023) indicates that no complaints related to harassment, intimidation or exploitation were filed during 2022 and 2023.</p> <p>Interviews with a sample of employees and contractors, including female workers, indicate that they are aware of the sexual harassment and discrimination policies, and related procedures, including those to file a complaint. Interviewees are also aware that a procedure, Incident Handling Ethics Channel (no date), for follow-up investigations of incidents is in place. All female workers (employees and contractors) interviewed indicated that harassment has not been an issue on the job site.</p>

<p>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.</p>	<p>—</p>	<p>Not relevant. There are no records of past or current retrenchment of workers at the mining project.</p>
<p>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 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.</p>	<p>●</p>	<p>The evidence indicates that the company issues notices of dismissal and severance payments mandated by law and collective agreements in a timely manner to affected workers. The evidence, examples of termination of employment contract (3 samples, no date), indicates that dismissed employees receive a Termination of Employment notification at least 30 days in advance, which aligns with applicable regulations, and includes required termination benefits, salary balances, proportional vacation, and deductions. The terminations are officially approved and documented through an agreement between the company and the former employee.</p> <p>On-site interviews based on a sample of workers and union representatives indicate the company issues notices of dismissal and severance payments mandated by law and collective agreements in a timely manner.</p>
<p>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.</p>	<p>●</p>	<p>The evidence listed below indicates that the company has a grievance mechanism for workers and contractors to raise workplace concerns, which are aligned to corporate policies. The grievance mechanisms include: a dedicated hotline (0800 300 4488), an ethics</p>

<p>The mechanism, at minimum:</p> <ul style="list-style-type: none"> 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. 	<p>reporting webpage that allows employees to report ethical violations at webpage https://canalconfidencial.com.br/gerdau/, a postal address for sending letters. The company's grievance mechanism systems align with a. to d. of this requirement:</p> <ul style="list-style-type: none"> a. the system is easy to use and indicates that a review of any questions or a response in the matter will be done in timely manner; b. the system gives the complainant the option of submitting a complaint anonymously, - an employee webpage, and - a physical mailbox, where written grievances and complaints can be submitted anonymously, c. do not prohibit worker's representatives from being present, if requested, and d. do not impede access to other judicial or administrative remedies under the law or through existing arbitration procedures. <p>On-site interviews with a sample of workers and contractors indicated that they are aware of the grievance mechanisms, that it is transparent and works as intended.</p>
<p>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.</p>	<p>The evidence indicates that the company provides a grievance mechanism for workers and contractors (and their organizations) to raise workplace concerns. The evidence, Ethics channel - guidelines on the Intranet (no date), Code of Ethics Training Report (2020-2022), and Code of Ethics and Conduct (2020), indicates that the company informs workers and contractors, at the time of recruitment, about the Code of Ethics (which mentions the Ethical Channel and gives instructions on how to file reports or complaints); as well as during trainings (training records from 2020 until 2022). The company indicated that these guidelines are also available on the company's intranet and posted onsite.</p> <p>On-site interviews with workers and contractors indicated that they</p>

		are aware of the different grievance channels and that they are accessible.
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.	<p>The evidence, Manifestations Gerdau 2022-2023, includes a record of all grievances filed during 2022 and 2023 and their status, indicating that the company maintains a record of grievances and actions taken to respond to and/or resolve the issues. Each record includes the date, type of incident, location, investigations undertaken, and remedies or resolutions for the grievance. Interviews with workers indicate that they are aware of the procedure to file complaints and grievances, and they have seen the company's prompt response to complaints. Interviews with a sample of contractors indicated that contracted truck drivers onsite raised a complaint related to their weekly rest (24 consecutive hours off every 7-day period) for some shifts.</p> <p>The grievance log does not contain records of these grievances, nor does it indicate the actions taken to respond to and/or resolve the issue.</p>
3.1.6.1.	The operating company shall have documented disciplinary procedures (or their equivalent) that are made available to all workers.	<p>The evidence, Corporate Guideline on Disciplinary Sanctions (July 2021) and Corporate Guideline on Consequence Management (March 2021), indicates the company has documented disciplinary procedures. The company indicated that all workers and contractors receive training on the Code of Ethics and have access to it through the intranet. The interviewed workers and contractors confirmed their access to disciplinary procedures.</p>
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.	<p>The evidence, Code of Ethics and Conduct (2020) and Human Rights Policy (2022), indicates the company has zero tolerance for harsh or disrespectful treatment including sexual or physical harassment, mental, physical, or verbal abuse, coercion, or intimidation of workers during disciplinary actions. The interviewed workers and contractors indicated that the disciplinary measures ensure respectful treatment of involved workers.</p>

<p>3.1.6.3. The operating company shall keep records of all disciplinary actions taken.</p>		<p>The evidence, examples of disciplinary actions issued in 2022 and 2023, indicates that the company maintains records of all disciplinary actions taken against employees. Supporting evidence was provided, such as Corporate Guideline on Disciplinary Sanctions (July 2021) and Corporate Guideline on Consequence Management (July 2021), and examples of corrective actions, such as Disciplinary Measure Warning (April 2022), Disciplinary Measure Educational Alert (May 2022), and Disciplinary Measure Suspension (June 2022).</p>
<p>3.1.7.1. The operating company shall document the ages of all workers.</p>		<p>The evidence, Employees Report - Age (2023), indicates that the company documents the current age of all hired employees, their age on the hiring day, and government-issued identification documents. The company indicated that candidates must present a national identification document showing their personal information before employment.</p> <p>During the onsite interview, the company provided documentary evidence indicating that it requests contracting companies to provide all their workers' information and that the company records it in software (BancoDoc). The implementation of this practice was confirmed through interviews with human resources representatives of the company and contractors.</p>
<p>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).</p>		<p>The evidence, Employees Report - Age (2023), includes the current age of all hired employees, their age on the hiring day and indicates that the company employs only persons aged 18 or above in alignment with its policies that prohibit child labor (Code of Ethics and Conduct, 2022, item 2, page 7).</p> <p>Interviews with the human resources and medical staff indicate that they verify age during the recruitment process, onboarding, and health and safety orientation per the company's health and safety procedures.</p> <p>The company employs apprentices over the age of 18. Apprentices may be younger than 18 according to national law if the company fulfills provisions of decree 9.579/2018 (articles 45 to 50). These</p>

		<p>provisions require that apprentices may not engage in any form of hazardous work or night work.</p> <p>The evidence, Industrial Apprenticeship Contract (2023), List of Mine Apprentices (2023), interviews with a sample of workers (employees and contractors) and worker representatives, and observational evidence collected at the time of the site visit, indicate that the company complies with national legislation and its own policies.</p>
<p>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.</p>	●	<p>The company does not employ people below 18 years of age as evidenced in its documentation prohibiting child labor (Code of Ethics and Conduct, 2022, item 2, page 7), Industrial Apprenticeship Contract (2023), List of Mine Apprentices (2023). These records show that there are no apprentices younger than 18 years old, and their hiring adheres to the provisions of decree 9.579/2018 (articles 45 to 50). According to these regulations, apprentices are prohibited from engaging in any form of hazardous work or night work.</p> <p>During the site visit, there was no sign that minors were working at site (see 3.1.7.2). This was confirmed by interviews with a sample of workers (employees and contractors) of varying positions, levels, ages, and areas of operation at the mine.</p>
<p>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.</p>	—	<p>Not relevant as there are no employees below the age of 18.</p>
<p>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</p>	—	<p>Not relevant as there are no employees below the age of 18.</p>

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, and that take into consideration the welfare of the 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 supplier manual, Gerdau Suppliers Manual (no date), includes a commitment clause prohibiting the use of force and child labor. By accepting the contract terms, the company's policies, and guidelines, all active suppliers must adhere to this commitment (Supplier Commitment Agreement, April 2016). This manual aligns with the Ten Principles of the United Nations Global Compact on human rights, labor, the environment, and anti-corruption, which seeks to prevent child labor and prohibits children below the minimum age from performing hazardous or non-hazardous work. Although there is no formal monitoring program for suppliers, the supplier manual indicates that the company has a third-party management program system (BancoDoc) that ensures the security and accuracy of suppliers' information, including reference verification.

The evidence, an operational risk assessment with a focus on worker safety (Mining Operational Risks Worksheet, no date) and a social and human rights risk matrix (Risk Map, August 2023), indicates that the company has not evaluated human rights risks related to child labor and therefore has not determined the significance of this risk.

The evidence does not include information to confirm that the company monitors its suppliers to determine if they employ children.

3.1.8.1. Critical. The operating company shall not employ forced labor or participate in the trafficking of persons.

The evidence, Code of Ethics and Conduct (May 2020) and Human Rights Policy (December 2022), indicate the company's contracts align with national labor laws and prohibit the use of forced labor and labor exploitation in policy (Gerdau's commitment to Universal Declaration of Human Rights, Declaration on Fundamental Principles and UN Principles on Business and Human Rights) and in practice.

Observations and on-site interviews representing a random sample of employees and contractors at the time of the onsite audit indicated that the company does not employ forced labor or participate in the trafficking of persons.

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 its 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 evidence, an operational risk assessment with a focus on worker safety (Mining Operational Risks Worksheet, no date), and a Community Health and Safety Risk Matrix (May 2022), indicates that the company has not evaluated human rights risks related to forced labor and therefore has not determined the significance of this risk. The company's supplier manual, Gerdau Suppliers Manual (no date), includes a commitment clause prohibiting the use of force and child labor. By accepting the contract terms, the company's policies, and guidelines, all active suppliers must adhere to this commitment (Supplier Commitment Agreement, April 2016). This manual is aligned with the Ten Principles of the United Nations Global Compact on human rights, labor, the environment, and anti-corruption, which is in line with this requirement in terms of avoiding forced or trafficked labor. Although there is no formal monitoring program for suppliers, the supplier manual indicates that the company has a third-party management program system (BancoDoc) that ensures the security and accuracy of suppliers' information, including reference verification. Interviews with workers and communities did not indicate that they consider this to be a relevant risk.

The evidence did not include supply chain due diligence reports, supplier monitoring records or similar documents that indicate that the company monitors its suppliers to determine if they use forced labor or trafficked workers.

<p>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.</p>		<p>The company has a Collective Bargaining Agreement for 2022-2023 (July 2022), with workers' representatives regarding pay wages, indicating that the company pays wages to workers that meet or exceed the wages agreed to by both parties. Other documents provided for this requirement (payroll slips for multiple months, 2022 and 2023), indicate that the company's wages are higher than required by Brazilian law. Interviews with the human resources representative, employees, the union representative, workers and contractors indicate that they are paid according to the collective wage agreements.</p> <p>The evidence does not include wages established in the collective wage agreements applicable to contractors. Contractors have different unions for workers.</p>
<p>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.</p>		<p>The company has an agreement with workers' representatives regarding overtime hours as indicated in the Collective Bargaining Agreement for 2022-2023 (July 2022). The evidence, payroll slips (multiple months for 2022 and 2023), indicates overtime hours are paid at a rate defined in the collective bargaining agreement.</p> <p>The collective bargaining agreement does not cover terms for contractor employment as contractors have their own unions. The evidence did not include information on the overtime pay of contractors.</p>
<p>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.</p>		<p>The company provides workers and contractors with written and understandable information about wages (wages, benefits, and variable remuneration) before they enter employment. On the day of hiring, employees sign an acknowledgment form stating that the rules about overtime hours are outlined in the Collective Bargaining Agreement for 2022-2023 (July 2022). Information regarding overtime hours and deductions are communicated monthly through the pay slip after the employee's admission, which is provided to workers and contractors for each pay period, as evidenced by payroll slips for multiple months in 2022 and 2023. The evidence also includes a work</p>

		<p>contract template, a salary proposal application, and a template for a remote work contract.</p> <p>Interviews with employees indicated that the company informs them of wages in a timely manner.</p>
3.1.9.4.	<p>The operating company shall pay wages in a manner that is reasonable for workers (e.g., bank transfer, cash or check).</p>	<p>The evidence, payroll slips (multiple months for 2022 and 2023), indicates that wages are paid in a manner that is reasonable for workers (through direct deposits into the employee's bank account). Interviews with employees indicated that wages are paid through direct deposits into the employee's bank account.</p>
3.1.9.5.	<p>The operating company shall ensure that deductions from wages are not made for disciplinary purposes unless one of the following conditions exist:</p> <p>a. Deductions from wages for disciplinary purposes are permitted by national law, and the law guarantees the procedural fairness of the disciplinary action; or</p> <p>b. Deductions from wages for disciplinary purposes are permitted in a freely negotiated collective bargaining agreement or arbitration award.</p>	<p>The company does not make wage deductions for disciplinary purposes except in cases of suspension where the day of work is deducted due to non-performance. This practice aligns with federal labor laws and is implemented following the guidelines outlined in a corporate procedure, Corporate guideline on consequence management (2021).</p> <p>Interviews with workers, contractors and human resources staff of the company and contractor companies confirmed that the company does not make wage deductions for disciplinary purposes unless allowed by law or agreed to in collective bargaining agreements.</p>
3.1.10.1	<p>The operating company shall ensure that:</p> <p>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</p>	<p>The Collective Bargaining Agreement 2022-2023 (July 2022) establishes:</p> <p>a. The terms of regular working hours, work shifts, and overtime;</p> <p>b. That workers are provided with at resting periods and</p> <p>c. That overtime is consensual and limited to 12 hours a week.</p> <p>The company is located in a country, Brazil, where the national law determines that the regular working hours cannot exceed eight hours per day and 44 hours per week, workers must be provided with</p>

<p>number of regular hours worked over a 3-week period does not exceed 8 hours per day and 48 hours per week;</p> <p>b. Workers are provided with at least 24 consecutive hours off in every 7-day period; and</p> <p>c. Overtime is consensual, and limited to 12 hours a week.</p> <p>d. Exceptions to 3.1.10.1.b and c shall be allowed at mines in remote locations if:</p> <p>i. A freely negotiated collective bargaining agreement is in force that allows variances to the rest and/or overtime hours above; and</p> <p>ii. 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.</p>		<p>at least 24 consecutive hours off in every 7-day period, and that overtime is consensual and limited to 12 hours a week.</p> <p>Interviews with workers and workers' association representatives indicate that working hours and collective agreements are respected. Interviews with a sample of contractors and documents review indicated that contracted truck drivers onsite raised a complaint related to their weekly rest (24 consecutive hours off every 7-day period) not being respected for some shifts, who had less than 24 hours of rest after 6 consecutive days of work.</p> <p>The evidence does not indicate whether the company has taken actions to respond to and/or resolve the issue.</p>
<p>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:</p> <p>a. An annual paid holiday of at least three working weeks per year, after achieving one year of service; and</p>	<p>—</p>	<p>Not relevant. The company is located in a country (Brazil) where the national law includes provisions for worker leave.</p>

b. A maternity leave period of no less than 14 weeks.

Chapter 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, including occupational health and safety policies, procedures and corporate directives (Integrated Health and Safety, Environment, and Quality Policy December 2021, Health, Safety and Medical Procedures, 2021), annual performance indicators (Medical Control Program, January 2022, and Risk Management Program, August 2022), and interviews with workers and OHS managers, indicate the company and its contractors maintain a comprehensive occupational health and safety management system equipped to measure and improve performance over time.

A review of incidents and preventive measures from a log sample (PowerPoint presentation) provided by OHS managers at the time of the site visit indicates that evaluation is ongoing through the safety department and based upon a formal risk assessment process (i.e., Corporate Procedure on Critical Occupational Health and Safety Risks, June 10, 2021, and use of the Bowtie Method). Interviews indicate OHS best practices, primarily safety alerts from incidents, are shared or made available to all employees and contractors either through their supervisor or email based upon each incident's critical ranking status. According to OHS managers, rankings reflect root cause analysis procedures (March 12, 2020, and OHS Critical Hazards Manual, December 10, 2018) and are used to evaluate safety incidents continuously. Two recent incidents (both involving moving equipment) were shared with auditors by OHS managers (July 21 and 24, 2023) as an indication of the ranking for significant risks. A general ranking example for no lost time incidents by area and department was also shared.

	<p>Workers, including contractors, were interviewed and safety procedures were observed in practice during the site visit for a sample of operational activities (i.e., cleaning, truck driving, equipment maintenance). Worker interviews and observations indicate safety training is ongoing, in line with best practice, and with oversight by knowledgeable, competent professionals (SAP Success Factor Tracking and competency inquiries).</p> <p>The evidence does not include safety metrics tracking (i.e., rolling, 12-month safety incidents logs or other data) to understand how the company aggregates OHS monitoring, near miss, and other indicators to inform decision-making, or how performance indicators, including by area and department, are used to measure and report program effectiveness leading to continual improvement of the health and safety management system.</p>
<p>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.</p>	<p>Risks are evaluated by the company at multiple levels, including the OHS department, safety committee, management teams, operational areas, and individually by workers and supervisors. The frequency of assessments varies—daily, activity-specific, weekly, monthly, or quarterly—depending on the task or area. Evidence reviewed, such as the most recent operational risk spreadsheet (August 2022), indicates that the company evaluates physical, chemical, biological, ergonomic, and accident-related risks on an ongoing basis, in alignment with corporate and OHS directives. General risk identification procedures are formalized in Gerdau's Preliminary Risk Analysis documents (January 6, 2023, version 7; July 7, 2022, version 1) and the Operational Guideline for Business Risk Management (March 12, 2020). Based upon observations in the workplace and interviews with workers (contractors and employees), critical risk applicable assessment methodology is implemented at the operational level, in all positions, activities, and areas using respected methodology including pre-work, area, and equipment inspections, pre-job safety analysis (JSA), personal work-readiness checks (e.g., fit for duty), and stop-look-analyze-manage observations,</p>

	<p>among others. JSAs are in place for all critical risks or activities such as hot work, confined spaces, work in excavations, hoisting, explosives handling, work with energy sources (lock out tag out), chemicals management, work from heights, and equipment operation, among others. Preliminary Risk Analysis are carried out according to the general management procedure (January 6, 2023, version 7). Each activity has its own safety procedure, with detailed steps. A sample of safety procedures for specific activities (e.g., equipment maintenance, trucking, and site security) was reviewed during the site visit and workers and contractors were interviewed. Workers and their supervisors indicated full awareness of risk assessment responsibilities and capabilities, and JSAs are signed by supervisors, and in some cases, work permits are issued prior to beginning work. Health assessments are considered for specific tasks (i.e., those requiring a respirator).</p> <p>Interviews and auditor reviews of the risk assessment process in practice to avoid common and critical hazards (i.e., fire, failed equipment, pinch points, fall from height, lack of oxygen, electric shock, etc.) indicate the program and process for completing health and safety risk assessments is systematic, in line with best practice (following recognized risk methodologies), fully implemented at all levels, and ongoing with oversight by knowledgeable, competent professionals, including emergency preparedness and first aid.</p> <p>An observation of a recent near-miss incident at the crushing plant indicates opportunities for improvement in tracking leading indicators of safety performance and enhancing both risk perception and proactive risk assessment.</p>
<p>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:</p>	<p>  Várzea do Lopes is an existing mine consisting of two pits, and whose production was slowed due to process improvements underway at Várzea do Lopes at the time of the audit. The evidence, including Preliminary Risk Analysis (January 6, 2023, version 7), a general procedure for assessing risks, paired with observations and interviews with a sample of OHS and department managers, supervisors, workers and contractors, indicates the company assesses a full range </p>

- 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;
- 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.

of potential hazards associated with the mining project, both site-wide and regionally, and at the department and task level relating to:

- a. the design, construction, and operation of the workplace - the company's production operations, primarily mining and crushing, and maintenance activities underway run by the contract company Facundes reflect emerging best practices. Workers, including employees and contractors interviewed and equipment observed indicate people and equipment operate in an environment of caring. All activities undertaken by employees and contractors, based upon a sample of workers, were observed performing activities in consideration of potential risks. Areas of increased foot travel (i.e., cafeteria, office, parking lots) were clearly marked, and ground conditions were stable.
- b. site personnel and visitors, who were observed and interviewed and confirmed to undergo safety orientation, all adhere to the same safety performance guidelines and standard of care and are trained for their specific responsibilities while onsite.
- d. routine and non-routine activities and procedures were observed and conducted through supervision by a competent person, a pre-job safety analysis, workplace inspection, or other means in combination with procedures in the identification and assessment of potential hazards.
- e. evidence of a general procedure was provided as evidence of implementation for modifications, i.e., personnel, processes, and facilities (July 7, 2022, version 1); how this works in practice was not observed.

The evidence, observations and records of safety incidents, indicate opportunities exist for improved vehicle safety (i.e., visibility, signage and training), and systems such as implementing one-way vs. two-way travel routes for areas of high and/or mixed traffic (mining vehicles and equipment and personal vehicles), as well as at the interface of municipal roads. In addition to assessments, including

		<p>potential unwanted events as in c., such as changing, disturbed ground conditions in combination with extreme rain events. Further review, i.e., a 12-month record of incidents associated with specific areas or activities at the mine was not available to confirm the effectiveness of the risk identification and assessment process.</p>
<p>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.</p>		<p>The evidence, including the Job Adequacy for Inclusion Assessment of Capacity and Potentiality report (Gerdau Partial Activity Report, SESI, December 22, 2022), Operational Guideline Health Requirements for Critical Risk Activities (September 19, 2022, version 4), the Occupational Health Medical Control Program (January 2022), as well as interviews with a sample of potentially vulnerable or susceptible workers and contractors (such as apprentice, pregnant women, night workers, and those with potential mobility or height limitations) and competent professionals (OHS manager and representatives, industrial health specialists, the company doctor) indicate the company has taken structured steps to identify, understand, and assess the possible barriers related to disability, including the identification and assessment of hazards specific to susceptible or vulnerable workers. Assessments are conducted at multiple levels, including workforce-wide, activity-specific, and individually through confidential assessments at the company clinic (ICF - Individual Assessment Study). Various accommodations observed during the onsite audit, such as access to height aids and specialized glasses, support safe job performance.</p> <p>Female workers and contractors interviewed indicated that accommodations and alternative work arrangements were made or available to maintain safe working conditions during pregnancy and to allow paid recovery time and nursing as needed.</p>
<p>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</p>		<p>The evidence, a general risk management procedure (March 26, 2020, revision 1), Business Risk Management Operational Guidelines (March 12, 2020), an example of assessment using the bowtie method (Worker Fatigue, August 26, 2022), and abbreviated, partial risk matrix (Copy of Operational Risk Spreadsheet, late 2017 - early 2022), along with interviews of OHS managers indicate the company has</p>

consequences and protect workers and others from remaining hazards.

developed processes that build upon industry best practice in hazard identification and significant hazard elimination. Observations of the workplace indicate mechanisms are in place to protect workers (i.e., training, personal protective equipment, supervision, and safety postings) aligned to the ILO Convention on Safety and Health in Mines hierarchy of controls.

The evidence does not include an occupational health and safety risk management plan relevant to managing significant OHS risks where hazard elimination is not possible for which updates occur on an ongoing basis informed by evaluations of incidents, accidents, investigations, and monitoring over time.

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 Várzea do Lopes operation consists of open-pit excavations without any underground activities. The company has developed procedures and implemented measures to the points mentioned from sub-criteria a. to h. based upon documental evidence (i.e., evidence of assessment, operating procedures, safety training, inspections, etc.), interviews with workers and OHS managers, and onsite observations of the same in practice based upon a sample of areas visited during the site visit and industry best practices:

- a. Electrical, mechanical, and other equipment. The systems used for communication in the workplace, primarily electronic devices such as personal phones, as well as sirens for equipment start-up, emergencies, and operational equipment (electrical, mechanical) were observed in working order; interviews with supervisors indicate operating equipment followed regular maintenance schedules and procedures at the time of the site visit; this was echoed by workers in various activity areas (i.e., maintenance, emergency responders, security, etc.).
- b. Operations, including expansions and decommissioning. Operations are active and aligned with implemented procedures, but slowed due to improvements underway at both pits (Várzea do Lopes; Várzea Leste-Norte) as well as the crushing facility.
- c. Ground stability. Mine operations, including Várzea do Lopes, are dynamic and always changing. The company has many inspections

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.

and piezometers for which they monitor ground conditions on a regular basis. Auditors evaluated management systems documental evidence (i.e., General Procedure for Managing Geotechnical Slope Stability (November 29, 2022, version 1), and competencies of company engineers and specialists, performed interviews and made onsite observations of procedures in practice, and not specific data sets relating to performance, recognizing disturbed areas observed as secure at the time of the site visit can rapidly change when exposed to heavy rain and other changing conditions (natural and man-made).

d. e. - not relevant

f. Safe system of work and worker protection in zones susceptible to particular hazards. Observations and interviews at the time of the site visit reflected safe systems of work in practice. Work zones susceptible to particular hazards (i.e., electrical, welding crusher rolls, installing/removing heavy equipment, work from height), were not in practice for auditors to observe at the time of the site visit.

g. Prevent, detect, and combat accumulations of hazardous gas, dust, fire, and explosion. Based upon interviews with OHS representatives, workers, including contractors and supervisors, and observations in the workplace, the company has a system in place for the prevention of hazardous gas (i.e., procedures and gas detection monitors for specialized work such as confined space), up-to-date fire extinguishers in all areas of the operation and in work vehicles at the time of the site visit. Workers are trained and equipped to respond to fire and handle explosive materials (i.e., first responder, blasting contractor) per their job function and Emergency Response Plan (January 26, 2023, version 1).

h. Evacuation under unsafe conditions. A broad sample of interviewed workers at the time of the site visit indicated that they are informed of evacuation plans and/or procedures, that they understand where to go in the event of an evacuation; and confirm that communication systems are in place to alert workers of evacuations.

		The evidence does not include OHS management plans to address potential hazards specific to ground conditions or vehicle travel.
<p>3.2.3.1. Workers shall be informed of their rights to:</p> <ul style="list-style-type: none"> 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. 		<p>The company has a well-documented process to communicate to its workers the right to inform accidents and be informed of accidents that occur in its operation. All workers participate in the three-day Mining Integration Program as soon as they are hired and also periodically as confirmed through a sample of worker interviews (various positions), OHS representatives, and the company doctor, as well as records in the Success Factor, a Systems Applications and Products training software, and in the Apollo training program. This evidence indicates workers are provided with information on their rights and means to exercise those as per sub-requirements:</p> <ul style="list-style-type: none"> a. Report accidents - the body of workers interviewed indicated full awareness; some have communicated incidents; b. Investigations at the request of workers - this was indicated as uncommon, but always possible; c. Employees felt fully informed about workplace hazards and gave no rise in concern about unaddressed workplace hazards that may affect their safety or health; d. Workers understood the process (some have engaged in the process) to obtain information relevant to their safety or health, including medical records; e. Remove themselves from any location at the mine if they perceive a serious danger to their safety or health, and f. collectively select safety and health representatives; this aspect was usually described by employees as being done through elections or the union; and f. Collectively select safety and health representatives (the process is outlined in a procedure (Health and Safety Committee) and confirmed in employee interviews.
<p>3.2.3.2. In all cases a worker attempting to exercise any of the rights referred to in</p>		<p>The evidence, including the Code of Ethics and Conduct (May 5, 2020), item 13 Ethics Channel, Regulatory Standard No. 01 - General</p>

<p>3.2.2.1 in good faith shall be protected from reprisals of any sort.</p>	<p>Provisions and Occupational Risk Management (ensures that workers are protected against reprisals when exercising their rights including 1.4.3 where workers may interrupt their activities when they observe a work situation where, in their view, there is a serious and imminent risk to their life and health, and also supported by Gerdau's Code of Ethics) and worker interviews with a sample of employees and contractors (i.e., welders, equipment maintenance, fuel host) indicate the company has effectively implemented a system to avoid reprisals in the workplace. Workers and contractors indicated they are familiar with the company's code of ethics and are free to report any safety incident or unsafe working conditions, or stop work in the case of an unsafe situation without retaliation.</p>
<p>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.</p>	<p>The evidence, including interviews with a sample of workers and contractors (various positions), indicates the company's OHS system allows for and encourages employees to communicate on and contribute to matters related to health and safety through numerous means including the Gerdau Routine Portal (the place for employees to report input to OHS representatives electronically), and to their supervisor regularly (i.e., job safety analysis, safety toolbox talk, safety share, observations, among others). In general, all interviewed workers indicated a culture of open communication on matters relating to OHS.</p>
<p>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:</p> <p>a. Health and safety hazard identification and assessment;</p>	<p>The evidence, including interviews with a sample of workers (various positions), indicates engagement to ensure effective worker consultation and participation in matters relating to occupational health and safety as in a. to d. takes place primarily at the operating level through safety meetings, toolbox talks, workplace inspections, job safety analysis, and other means as in a., as well as through a joint safety committee, with elected workers (employees and contractors) from unions.</p>

<p>b. Design and implementation of workplace monitoring and worker health surveillance programs;</p> <p>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</p> <p>d. Development of appropriate assistance and programs to support worker health and safety, including worker mental health.</p>		
<p>3.2.3.5. The operating company shall provide workers' health and safety representatives with the opportunity to:</p> <p>a. Participate in inspections and investigations conducted by the employer and by the competent authority at the workplace;</p> <p>b. Monitor and investigate safety and health matters;</p> <p>c. Have recourse to advisers and independent experts; and</p> <p>d. Receive timely notice of accidents and dangerous occurrences.</p>		<p>The evidence, including interviewees of employees and contractors (various positions), and workers' representatives, indicates workers (including elected committee members):</p> <p>a. participate in inspections and investigations</p> <p>b. monitor and investigate safety and health matters, and</p> <p>d. receive timely notice of accidents and dangerous occurrences.</p> <p>The evidence does not indicate that workers' representatives have the opportunity to c. have recourse to advisers and independent experts.</p>
<p>3.2.3.6 Visitors and other third parties accessing the mining premises shall receive an occupational health and safety briefing,</p>		<p>The company has a well-established process for visitors, requiring them to undergo a health and safety induction upon arrival. Visitors and service providers accessing the mine premises are greeted at the</p>

and be provided with relevant protective equipment for areas of the mine site that or associated facilities that they will be entering.

gate, receive printed safety material, and participate in training through a safety video. Visitors are issued protective equipment adequate for the areas they may enter and tasks they may carry out and may be accompanied by a representative of the company. Interviews with a sample of workers, contractors, and visitors, as well as auditors' experience, confirm this is the practice. This training is different than new miner or contractor training, which is more in-depth as observed and confirmed through interviews.

3.2.4.1. Critical. 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

The company's Occupational Health and Safety Management System (2021, version 5), workplace injuries/illnesses procedure (Ambulance/ PA procedure), and PPE delivery system were presented as evidence of its OHS implementation. The management system is the same for employees and contractors and indicates that workers must be physically and mentally fit, knowledgeable about the risks, trained, and qualified to perform their duties. All workers participate in a three-day Mining Integration Program induction training as soon as they are hired and periodically. Such training includes the prevention of occupational injuries or illnesses in the workplace and the use of issued PPE. The training communicates:

- a. hazards and preventive measures workers may encounter in the workplace and roads;
- b. delivery of worker PPE with associated instructions;
- c. the process for seeking first aid and prompt medical attention attributable to workplace injuries or illnesses,
- d. comprehensible information on safety and health matters and work assignments; and
- e. adequate supervision on each shift.
- f. Not relevant; the site does not have underground operations.

Interviews with a sample of workers in a range of positions, areas, and contracting groups during the site visit including process operators, truck and vehicle drivers, equipment operators, production supervisors, and support staff (i.e., cleaning, cafeteria, monitoring) confirm workers receive initial and ongoing training relating to a. and c. hazards and preventive measures in the workplace related to their

<p>instructions on safety and health matters as well as on the work assigned;</p> <p>e. Providing adequate supervision and control on each shift; and</p> <p>f. If relevant, establishing a system to identify and track at any time the probable locations of all persons who are underground.</p>	<p>work assignments, including pre-work hazard analysis exercises, as well as b. PPE at no cost appropriate for their work including hard hats protective boots, ear plugs or muffs, gloves, safety glasses, and respirators or masks where (and when) needed.</p> <p>All workers were able to communicate the process for c. seeking first aid and prompt medical attention attributable to workplace injuries or illness.</p> <p>The evidence does not include the means by how occupational health monitoring results are aggregated, i.e., hearing protection (noise), respiratory protection (dust), or other exposure monitoring is compared to performance indicators, used to inform decision-making or shared with workers or worker representative for input as in a. and d.</p>
<p>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.</p>	<p>The evidence includes a partial report of activities regarding the adequacy of work for the inclusion of people with disabilities (Suitability of Work for Inclusion Capacity and Potential Assessment, December 22, 2022), where evaluations were carried out based on a collection of occupational information to understand the capacities and potentialities of employees with disabilities and possible barriers. The Occupational Health Medical Control Program (January 2022), in item 13, page 12, establishes that specific controls are carried out for workers who carry out certain activities in the company, considered critical, and for people with disabilities.</p> <p>Interviews with a sample of women workers of child-bearing age (employees and contractors, both field and administrative) and company medical staff indicate accommodations are made to mitigate employees' unique occupational health and safety risks, including training and informational materials.</p>
<p>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</p>	<p>The evidence, including observations of sanitary facilities, food storage, and preparation, etc., and interviews with employees, contractors, and water monitoring employees, indicate the company has implemented a system to maintain clean and sanitary conditions at the mine. Kitchens and sanitary facility maintenance are</p>

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.

performed by a specialized contractor and were observed to be clean. Field excavation and other remote working areas of the mine (i.e., pits, waste piles) were observed equipped with clean, gender-specific portable toilets and sanitizer, with access to bottled or other potable water.

Interviews with a sample of workers including contractors and employees in a variety of positions and work locations were able to confirm access to sanitary facilities during the workday commensurate with the number and gender of workers.

The evidence does not include information regarding water quality testing information.

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: i. 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; ii. 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 iii. [flag] If an occupational illness manifests after a worker has retired, the operating

Interviews with company key personnel indicated that the company complies with local legislation on aid for work-related injuries and illnesses as outlined in sub-requirements a., b., and c. As required in local legislation Brazilian Federal Law No. 8.213 of July 24, 1991, Article 86, accident aid will be granted as compensation to the insured when, after consolidation of the injuries resulting from an accident of any nature or medical result that implies a reduction in the capacity for the work they usually performed. The aid is also applicable for work-related diseases.

The evidence does not include proof of compensation payments to workers that incurred illnesses or injuries as a result of employment at the mine.

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. b. 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 c. 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.

3.2.5.2. The operating company shall carry out workplace monitoring and worker

The evidence, the management procedure Safety Hour (January 11, 2022, revision 1), jointly completed workplace inspections, and 2023 monthly meeting minutes, indicates the participation of workers in the identification of Health, Safety, and Environment opportunities and effectiveness of controls and protective measures.

The evidence, the Operational Guideline of the Occupational Health Medical Control Program - (August 5, 2021, version 2), Annual Medical

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 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.

Control Program of Occupational Health Report (January 2022), and interviews with company OHS industrial health representatives and the company doctor indicate the company carries out workplace monitoring and worker health surveillance to protect the right to confidentiality of medical information as in b. with accountabilities by competent professionals as in item a. The OHS industrial health representative described the means of monitoring and how the results inform OHS management decision-making.

The evidence does not include aggregated, 12-month health monitoring and surveillance monitoring data, analyses or summary reports to confirm results, in various areas of the operation, seasons, and for a mix of positions, how such results were sampled (by accredited labs), and have been compared to OEL/BEI standards to confirm c., d. and e., or the qualifications of competent professionals who designed the program as in a.

A sample of workers were interviewed (various positions and departments) relating to this topic. Interviews with workers indicate hearing and vision testing results are provided annually upon request. One worker indicated an understanding of ambient sampling results related to his area and his position for noise exposure and air quality. In general, there was limited awareness of OHS monitoring and surveillance by employees and contractors. No specific evidence or interview information was provided to assess whether an exceedance observed by the audit team was shared with workers or used to inform decision-making (i.e., reduce or limit exposure using different PPE, duration of activity, equipment maintenance, management controls, etc.).

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 the general management procedure for Preliminary Risk Analysis (January 6, 2023, version 7), the general procedure for modifications (July 7, 2022, version 1); and the Operational Guideline for Business Risk Management (March 12, 2020). In the last risk management program (November 2022) the physical, chemical, biological, ergonomic, and accident risks were evaluated. Interviews with OHS managers, the company doctor, and the industrial health monitoring representative indicate health risk monitoring is ongoing and includes annual vision, hearing, blood pressure, and drug testing on a random schedule. A sample of workplace monitoring results was shared by the industrial health representative, including an overview of sampling relating to the company's respiratory protection program.



The evidence does not include aggregated monitoring or inspection results (i.e., worker exposure data or accident statistics), root cause analyses of identified hazards, or specific procedures that demonstrate how health risk assessments are communicated to workers or used to inform updates to inspection and monitoring schedules, health risk management plans, or training procedures aimed at risk reduction.

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, general management procedure (March 1, 2013), establishes that all incidents and other events with potential severity must be recorded in the Gerdau Routine Portal system and investigated. Communication with the Brazilian government is done via a form called a Communication of Accident at Work that is submitted electronically (E-Social system) to the National Institute of Social Security. The company provided screenshots of the electronic system, ESocial, where their Communication of Accident at Work (workplace injuries, fatalities, accidents, and dangerous occurrences) are automatically reported to competent authorities.

Interviews with OHS representatives corroborate the evidence, indicating incidents, including serious near misses, are ranked by the

		<p>safety department, and critical incidents are properly communicated after a root cause analysis.</p>
<p>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.</p>		<p>The evidence, Operational Guideline of the Occupational Health Medical Control Program (August 5, 2021, version 2), outlines the company's plan relating to health actions directed to workers. The program provides for the professional confidentiality of information, in addition to ensuring that the results must be presented and discussed with those responsible for health and safety at work, including the Internal Commission for Accident Prevention. Interviews with a sample of workers (various positions) indicate that employees understand that their records are secure and that they have access to this information at any time by request. A review of a sample of anonymous records and interviews with OHS personnel and the company's medical doctor indicates that the company maintains accurate, confidential records of health risk assessments, workplace monitoring, and workers' health surveillance results through the Apollus system, and that this information is available to workers.</p> <p>Interviews with worker representatives indicate they have access to health risk assessments, non-confidential workplace monitoring, and health surveillance results, as well as data on occupational injuries, diseases, accidents, fatalities, and dangerous occurrences through health and safety committee actions and meetings and upon request, except data protected for medical confidentiality.</p>
<p>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 health data management system.</p>		<p>The evidence, including the Apollus System, and Operational Guideline of the Occupational Health Medical Control Program (August 5, 2021, version 2), indicates that the company has a secure data management system to protect and retain health records for a period of not less than 30 years (page 7) with access protections ensuring confidentiality and quick access to the entire health history of each worker. The system enables the secure storage of worker health data, that is protected by medical confidentiality. The procedure for storage and disposal of data dictates that data is not disposed of within 30 years of its collection. Designated personnel are</p>

		<p>accountable for the implementation of data storage and disposal procedures.</p> <p>Interviews with a sample of workers, OHS representatives, and the company doctor confirm that the health surveillance data management system enables the secure storage of confidential data, only certain people have access privileges and the system is protected by medical confidentiality.</p>
3.2.6.3	<p>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.</p>	<p>The evidence, General Incident Management Procedure (November 24, 2023, revision 5), confirms that workers may access personal information regarding accidents, dangerous occurrences, inspections, investigations and remedial actions, health surveillance, and medical examinations through the Gerdau Routine Portal and through a written request (Form available at Occupational Health) to Occupational Health at the Mining units' Emergency Departments (item 6.7 page 7).</p> <p>Interviews with a sample of workers, OHS representatives, and the company doctor confirm that workers have access to health and safety data upon request.</p>

Chapter 3.3—Community Health and Safety		Basis for rating
3.3.1.1.	<p>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:</p>	<p>Várzea do Lopes is an existing mine. Currently, there are ten communities in the area around its operation and conducted a scoping exercise to identify significant potential risks and impacts to community health and safety from mining-related activities as indicated by its Social and human rights risk matrix (Risk Map, August 2023). This matrix includes the risk probability and severity of impacts and maps the risk by phases (implementation, operation, closure, and post-closure), location, potential impact, cause,</p>

- 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
- 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.

correlation with human rights, risk source, source of information, probability of risk materialization, and impact scale. A specialized technical team reviews and evaluates the risk matrix regularly during risk management meetings (evidence of March and April 2023). The document indicates that for most of the communities the assessed risks include:

- a. general mining operations,
- b. operation of mine-related equipment and vehicles on public roads,
- c. operational accidents,
- d. failure of structural elements
- e., mining-related impacts on priority ecosystem services
- f. mine workers migration
- g. mining-related impacts on the availability of services,
- h. hazardous materials and substances that may be released as a result of mining-related activities, and
- i. sexually transmitted diseases that could occur as a result of the mining project. Scoping of impacts related to water-borne diseases as in
- i. has not been done as the EISA established that these pose no significant risk.

The evidence does not indicate that scoping or risk assessment exercises included all relevant risks associated with the operation phase, particularly in relation to item a., there is no indication that the risk of slope failure during operations was identified or assessed as part of the process.

<p>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).</p>		<p>The evidence, a Social and Human Rights risk matrix (Risk Map, August 2023), indicates that the company compiled a list of the significant potential risks and impacts on community health and safety for each stage of the mine life cycle (implementation, operation, closure and post closure).</p>
<p>3.3.1.3. Scoping shall include consideration of the differential impacts of mining activities on vulnerable groups or susceptible members of affected communities.</p>		<p>The evidence, a risk matrix (Risk Map, August 2023) that includes the risk probability and severity of impact and maps the risk by phases, indicates the risks per communities in the area around the mining operation.</p> <p>The evidence does not include an evaluation of differential impacts of mining on the health and safety of a variety of vulnerable groups or susceptible members of affected communities.</p>
<p>3.3.2.1. The operating company shall carry out an assessment of risks and impacts to:</p> <p>a. Predict the nature, magnitude, extent and duration of the potential risks and impacts identified during scoping;</p> <p>b. Evaluate the significance of each impact, to determine whether it is acceptable, requires mitigation, or is unacceptable.</p>		<p>The evidence, a Social and human rights risk matrix (Risk Map, August 2023), as well as interviews with key staff, indicate the company has implemented a process to carry out risk assessments as in item a. to predict the nature and magnitude of potential impacts to community health and safety identified during scoping. The risk assessment provides an analysis of the probability of risk occurrence ranging from very low to very high, as well as a breakdown of the severity of the risk's impact. Those responsible at the mine use this tool to identify and prioritize risks and controls as in b.</p> <p>The evidence does not present an evaluation of the acceptability (or unacceptability) of each potential risk or impact related to community health and safety as in b.</p>
<p>3.3.3.1. The operating company shall document and implement a community health and safety risk management plan that includes:</p> <p>a. Actions to be taken to mitigate the significant risks and impacts identified</p>		<p>The evidence, a social and human rights risk matrix (Risk Map, August 2023), indicates that the company has introduced:</p> <p>a. controls to mitigate potential impacts identified in their scoping process related to community health and safety, which are regularly reviewed by a specialized technical team during risk management meetings (evidence of March and April 2023 provided).</p>

<p>during its risk and impact assessment; and</p> <p>b. Monitoring that will be conducted to ensure that measures to prevent or mitigate impacts remain effective.</p>		<p>The evidence, including interviews with company personnel, do not include a community health and safety management plan or monitoring information as in: b. for which auditors could confirm implementation or its effectiveness, including controls designed to prevent or mitigate potential impacts to air and water quality, i.e., from land disturbing activities (stripping, blasting, crushing, hauling, waste rock and tailings storage or runoff) or that may contain potential heavy metals, respirable crystalline silica, radioactive elements or other contaminants, potential impacts from the loss of natural buffer areas such as upland forests that mitigate the effects of erosion and flooding or that protect priority ecosystem services; from cumulative impacts relating to changing dynamics in water storage and use; potential impacts from the operation of mine-related equipment and vehicles on public roads; or from other potential impacts associated with historical mining activities at the site.</p>
<p>3.3.3.2. Mitigation measures shall prioritize the avoidance of risks and impacts over minimization and compensation.</p>	✕	<p>No evidence was provided to assess this item.</p>
<p>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.</p>	●	<p>The evidence, a Social and human rights risk matrix (Risk Map, August 2023) and a sample of risk management meeting logs (March and April 2023) from a specialized technical internal team, indicates that the community health and safety risk management plan is updated when monitoring or other information, indicates that mitigation measures are not being effective. Potentially significant impacts are assessed as part of the Environmental and Social Impact Assessment (ESIA) when new measures are planned to be implemented due to changes in the mining project.</p>
<p>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</p>	—	<p>Not applicable. There is no significant risk of community exposure to HIV/AIDS, tuberculosis, malaria, or another emerging infectious disease related to mining activities.</p> <p>Public reports issued by the Brazilian Health Ministry reveal no</p>

<p>emerging infectious disease related to mining activities, the operating company shall develop, adopt and implement policies, business practices, and targeted initiatives:</p> <p>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;</p> <p>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</p> <p>c. Make information publicly available on its infectious disease mitigation program.</p>		<p>significant risk of community exposure to HIV/AIDS, tuberculosis, malaria, or another emerging infectious disease that is in some way related to the presence of the mining project. Stakeholders interviewed consider that the exposure of the community to HIV/AIDS, tuberculosis, or malaria due to mining-related activities is not significant.</p>
<p>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:</p> <p>a. In relation to HIV/AIDS, the operating</p>	<p>—</p>	<p>Not applicable. There is no significant risk of community exposure to HIV/AIDS, tuberculosis, malaria, or another emerging infectious disease related to mining activities.</p> <p>Public reports issued by the Brazilian Health Ministry reveal no significant risk of community exposure to HIV/AIDS, tuberculosis, malaria or another emerging infectious disease that is in some way related to the presence of the mining project. Stakeholders interviewed consider that the exposure of the community to</p>

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;

iii. Provide access for contractors to education and other preventative programs, and to work with the operating company's or facility's contracting companies or others to identify ways for contract workers to access affordable treatment; and

iv. Work with public health authorities, communities, workers' organizations and other stakeholders towards ensuring universal access to treatment for dependents of mine workers/employees and affected community members.

b. In relation to tuberculosis, the operating company shall, at minimum, provide free and voluntary testing for mine workers/employees where it is not reasonably likely to be provided by public or private health programs at an affordable rate.

c. In relation to malaria, the operating company shall, at minimum:

i. Develop a vector control plan;

ii. Ensure that company facilities are

HIV/AIDS, tuberculosis, or malaria due to mining-related activities is not significant.

<p>not breeding environments for malaria-carrying mosquitoes; and</p> <p>iii. Provide protection from infection by malaria-carrying mosquitoes in company facilities and any company-provided housing.</p>		
<p>3.3.5.1. The operating company shall collaborate with relevant community members and stakeholders, including workers who live in affected communities and individuals or representatives of vulnerable groups, in: a. Scoping of community health and safety risks and impacts related to mining; b. Assessment of significant community health and safety risks and impacts related to mining; c. Development of prevention or mitigation strategies; d. Collection of any data needed to inform the health risk and impact assessment process; and e. Design and implementation of community health and safety monitoring programs.</p>	<p>⊗</p>	<p>The evidence, including meeting minutes held with potentially affected communities held as part of the development of the most recent ESIA (ESIA Leste-Norte Project, January 2017, ESIA Waste rock storage facility PDE-01 (September 2017), and Operational Continuity Project of Várzea do Lopes Mine (August 2018)) and interviews at the time of the site visit (company, stakeholders), indicates the company has held meetings with some community members and other stakeholders to present plans and ESIA related to recent expansions. The evidence does not include participation by potentially affected community members or groups, including workers who live in affected communities (i.e., Moeda) and individuals or representatives of vulnerable groups, in: a. Scoping of community health and safety risks and impacts related to mining; b. Assessment of significant community health and safety risks and impacts related to mining; c. Development of prevention or mitigation strategies; d. Collection of any data needed to inform the health risk and impact assessment process; and e. Design and implementation of community health and safety monitoring programs.</p>
<p>3.3.6.1. The operating company shall make information on community health and safety risks and impacts and monitoring results publicly available.</p>	<p>⊗</p>	<p>The company does not make information on community health and safety risks and impacts and monitoring results publicly available.</p> <p>For IRMA purposes, “Publicly available” means that information should be on the company’s website, or in printed copies in publicly accessible locations. Source: IRMA-StandardGuidance-Updated, June 2023, page 354.</p>

Chapter 3.4—Mining and Conflict-Affected or High-Risk Areas

Basis for rating

3.4.1.1. The operating company shall conduct a screening analysis, based on evidence from credible sources, to determine whether or not the mining project is located in and/or sources minerals from a conflict-affected or high-risk area.

Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict-affected or high-risk area.

IRMA references Mining in Conflict-Affected or High-Risk Areas to be aligned with the OECD Due Diligence Guidance, with the objective of preventing mines that operate in, source minerals from, or transport minerals through conflict-affected or high-risk areas from contributing to conflict or the perpetration of serious human rights abuses. By carrying out such due diligence, mines can provide purchasers and others with added assurance that the extraction, processing, and transport of minerals or metals from these mines are not contributing to the financing of conflict or serious abuses of human rights.

The company conducted a screening analysis (May 2023) using credible sources, including the Heidelberg Institute for International Conflict Research (HIIC) Conflict Barometer Report 2022, Crisis Watch Conflict Tracker, and the Global Peace Index, confirming that the municipality of Itabirito, where the mining project is located, is not a conflict-affected area. The assessment also referenced the Atlas of Environmental Justice, a Brazilian environmental project that documents and catalogs social conflicts around environmental issues, which found no active mineral-related conflicts near the mine site (<https://ejatlas.org/featured/mining-latam>).

The company does not procure minerals from external sources.

3.4.1.2. If a determination is made that the mining project is located in a conflicted-affected or high-risk area or it sources minerals from such areas, then the

Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is

<p>operating company shall undertake the additional due diligence steps outlined in the remainder of this chapter.</p>		<p>located in or sourcing minerals from a conflict affected or high-risk area.</p>
<p>3.4.1.3. If a determination is made that the project is not located in a conflicted-affected or high-risk area, and no minerals are sourced from those areas, then conflict-related risks shall be monitored at a level commensurate with the potential that the project area may become a conflict-affected or high-risk area and/or minerals from such areas may enter the mine's supply chain. If new risks emerge or previously identified risks intensify, screening shall take place to determine if risks are significant enough to warrant undertaking the additional due diligence steps in the remainder of this chapter.</p>	<p>—</p>	<p>Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.</p>
<p>3.4.2.1. Critical. When operating in or sourcing minerals from a conflict-affected or high-risk area, the operating company shall not knowingly or intentionally cause, contribute to or be linked to conflict or the infringement of human rights by any party, or knowingly provide direct or indirect support to non-state armed groups or their affiliates, public security forces, or private security forces who:</p> <p>a. Illegally control mine sites, transportation routes and upstream</p>	<p>—</p>	<p>Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.</p>

actors in the supply chain;

b. Illegally tax or extort money or minerals at point of access to mine sites, along transportation routes or at points where minerals are traded; or

c. Illegally tax or extort intermediaries, export companies or international traders.

3.4.2.2 When operating in a conflict-affected or high-risk area, the operating company shall:

a. Adopt and communicate to the public and stakeholders a commitment that when operating in a conflict-affected or high-risk area the operating company will not knowingly or intentionally cause, contribute to or be linked to conflict or the infringement of human rights by any party;

b. Maintain documentation on the quantity and dates of mineral extraction; quantity and dates of minerals obtained from other sources (e.g., from ASM); locations where minerals are consolidated, traded or processed; all mining-related taxes, fees, royalties or other payments made to governmental officials for the purposes of extraction, trade, transport and export of minerals; all taxes and other payments made to public or private security forces or other

Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.

armed groups; identification of all actors in the upstream supply chain; and transportation routes. This information shall be made available to downstream purchasers and auditors and to any institutionalized mechanism, regional or global, with the mandate to collect and process information on minerals from conflict-affected and high-risk areas;

c. Assign authority and responsibility to senior staff with the necessary competence, knowledge and experience to oversee the conflict due diligence processes; and

d. Ensure that stakeholders have access to and are informed about a mechanism to raise conflict-related concerns or grievances.

3.4.3.1. The operating company shall assess the risks to the company, workers and communities associated with operating in or sourcing minerals from the conflict-affected or high-risk area. Assessments shall include, at minimum:

a. Analysis of structural, root and proximate causes of the current conflict, and potential triggers of conflict in the area of operation;

b. Review of the factual circumstances of the operating company's mineral extraction, transport, and, if relevant,

Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.

	<p>mineral sourcing and/or processing; and</p> <p>c. Analysis of the risk that any of the company's activities may lead to the direct or indirect infringement of human rights, support of armed groups or otherwise contribute to conflict.</p>		
3.4.3.2	Assessments shall follow a recognized risk assessment methodology, and be carried out and documented by competent professionals.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.3.3	Assessments shall be based on credible evidence including on-the-ground research, expert advice, and information from consultations with relevant stakeholders, including men, women, children (or their representatives) and other vulnerable groups.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.3.4	Conflict risk assessments shall be updated at minimum, on an annual basis, and more often if necessitated by the situation.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.4.1.	The operating company shall develop and implement a risk management plan that includes actions to be taken to prevent or mitigate risks identified through the risk assessment process.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.4.2	The operating company shall collaborate with relevant stakeholders to develop culturally appropriate strategies to	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is

	prevent or mitigate risks that are relevant to them; to develop performance objectives, timelines and indicators to measure the effectiveness of the risk management strategies; and to update or revise its prevention and mitigation strategies as needed.		located in or sourcing minerals from a conflict affected or high-risk area.
3.4.4.3	If risks to human rights are identified in the assessment, the operating company shall adhere to the requirements in IRMA Chapter 1.3.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.5.1.	The operating company shall implement and monitor the effectiveness of its risk management plan as per the performance objectives, timelines and indicators developed with stakeholders.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.5.2	If through monitoring or some other means it is discovered that the operating company has unknowingly or unintentionally been complicit in armed conflict or serious human rights abuses in conflicted-affected or high-risk areas, the operating company shall immediately cease or change the offending action, mitigate or remediate the impact, and carry out external monitoring of its due diligence activities as per as per IRMA Chapter 1.3.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.
3.4.6.1	The findings of conflict risk assessments, risk management plans and monitoring shall be reported to senior management	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is

	of the operating company; and stakeholders, contractors, mine workers and other employees shall be informed of findings that are relevant to them.		located in or sourcing minerals from a conflict affected or high-risk area.
3.4.6.2	On an annual basis, where the operating company is operating in or sourcing minerals from a conflict-affected or high-risk area, the company or its corporate owner shall publicly report on due diligence undertaken to ensure that its actions are not supporting armed conflict or the infringement of human rights in those areas.	—	Not relevant. Based on on-site observations, interviews, and supporting evidence, there is no indication that the mining project is located in or sourcing minerals from a conflict affected or high-risk area.

Chapter 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.	●	<p>The evidence, Human Rights Policy (December 2022), as well as interviews with a sample of key staff, indicates that the company has adopted and made 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 as required by the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas (2016).</p> <p>The policy is publicly available at https://api.mziq.com/mzfilemanager/v2/d/21e1d193-5cab-456d8bb8-f00a49a43c1c/ae01df50-fd1c-c1f1-0b3f8829fb639ded?origin=1</p>

<p>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:</p> <p>a. Security personnel take all reasonable steps to exercise restraint and utilize non-violent means before resorting to the use of force;</p> <p>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</p> <p>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.</p>	<p>Security at the site is managed by the company's security provider, SEGURPRO. The third-party, operating on behalf of Gerdau, has a policy and procedure in place regarding the use of force and firearms. The security policy and procedures are included as evidence, Pos SecurPro -Vigilance Itabirito -Ouro Preto (July 2022), and indicate alignment to best practices expressed in UN Basic Principles on the Use of Force and Firearms (Sections I, IV, and V, pages 5-6), specifically:</p> <p>a. Security personnel shall take all reasonable steps to exercise restraint and utilize non-violent means before resorting to the use of force (I-Principle of Expediency, p. 5),</p> <p>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 (IV-Principle of Necessity, p. 6), and</p> <p>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. (V-Principle of Proportionality, p. 6).</p> <p>Interviews with a sample of security personnel, including workers and supervisors, indicate the company takes reasonable steps and does not resort to the use of force and firearms.</p>
<p>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:</p> <p>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;</p>	<p>The evidence is a signed contract between the company and private security provider SEGURPRO (April 2022 and valid for a period of 60 months, or until April 2027, pages 7 to 12), which sets out agreed principles that are consistent with the Voluntary Principles on Security and Human Rights and the company's procedures on:</p> <p>a. the use of force and firearms;</p> <p>b. delineates respective duties and obligations with respect to the provision of security in and around the mining project and, if relevant, along transport routes;</p> <p>c. outlines required training for security personnel.</p>

<p>b. Delineates respective duties and obligations with respect to the provision of security in and around the mining project and, if relevant, along transport routes; and</p> <p>c. Outlines required training for security personnel.</p>		
<p>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.</p>	—	<p>Not relevant. The company does not use public security forces for the mining project or transport routes.</p>
<p>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.</p>	⊕	<p>The evidence, including a Theft and Robbery Risk Report (June 2022) and a Social Unrest Risk Report (February 2023), as well as interviews with a sample of key staff, indicates that the company has assessed potential human rights risks and impacts arising from security arrangements.</p> <p>The evidence does not indicate whether the risk assessment was updated if/when there have been significant changes in activities, security, or the operating environment.</p>
<p>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:</p> <p>a. Follow a credible</p>	⊗	<p>The evidence, including a Theft and Robbery Risk Report (June 2022) and a Social Unrest Risk Report (February 2023), indicates that the company has conducted assessments of security-related risks that may potentially arise from its security arrangements. The risks of theft, robbery and social movements were assessed.</p>




<p>process/methodology;</p> <p>b. Be carried out and documented by competent professionals; and</p> <p>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</p>		<p>The evidence does not include detail to confirm the assessment was scaled to the size of the company and severity of security risks, and potential human rights impacts, and that it:</p> <p>a. followed a credible methodology (company mentioned it followed the ISO 31000 methodology, but no evidence was provided);</p> <p>b. was carried out and documented by competent professionals;</p> <p>c. was drawn 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.</p>
<p>3.5.2.3. The scope of the security risk assessment shall include, but need not be limited to:</p> <p>a. Identification of security risks to the company, workers and communities, paying particular attention to risks to women, children and other vulnerable groups;</p> <p>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);</p> <p>c. Analysis of current and potential conflicts or violence in the host country and affected communities; and</p> <p>d. Risks associated with equipment transfers.</p>	<p>⊗</p>	<p>The evidence, including a Theft and Robbery Risk Report (June 2022) and a Social Unrest Risk Report (February 2023), indicates that the company has conducted assessments of security-related risks that may potentially arise from its security arrangements. Specifically, risks related to theft, robbery, and social unrest have been evaluated.</p> <p>The evidence does not provide information to confirm the company's security risk assessment meets a. through d.</p>

<p>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.</p>		<p>The evidence, including the reports Theft and Robbery Risk (June 2022) and Social Unrest Risk (February 2023), indicates that the company has developed a risk management plan that outlines actions to prevent or mitigate identified security-related risks. The evidence also references monitoring processes intended to ensure the effectiveness of these mitigation measures. Interviews with Gerdau management and the third-party security provider confirmed that the risk management plan is being implemented in practice.</p>
<p>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.</p>		<p>The evidence, including the reports Theft and Robbery Risk (June 2022) and Social Unrest Risk (February 2023), indicates that security arrangements have the potential to impact the right to life, freedom, and personal security of the community closest to the mine. The evidence does not include details to confirm that proposed prevention and mitigation strategies largely conform with requirements in IRMA Chapter 1.3. and that the company has collaborated 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.</p>
<p>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.</p>		<p>The evidence, contract between Gerdau and SEGURPRO (dated April 2022 and valid for a period of 60 months, or April 2027), indicates that Gerdau and the private security provider, SEGURPRO, have a signed contract that states "To observe, and determine that its employees and subcontractors comply with the Manual for the Qualification and Access of Service Providers and Materials referenced in the attached Liability and Commitment Agreement, developed by GERDAU" (page 10), which ensures security services providers must follow Brazilian legislation regarding qualification requirements. According to federal law, private security workers must undergo annual training at a Federal Police-approved location, and an incident-free criminal</p>

		<p>record is one of the requirements for completing the training. Interviews with Gerdau management and the SEGURPRO manager indicated that both companies have implemented 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.</p> <p>The evidence does not indicate that the company has developed written due diligence procedures for the hiring of security personnel and security providers</p>
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.	<p>—</p> <p>Not relevant. The company does not use public security forces for the mining project or transport routes.</p>
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 respect for the human rights of mine workers 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	<p>⊕</p> <p>The evidence, two security procedures (POS SegurPro - Vigilance Itabirito - Ouro Preto, July 2022) and PDV 2021 - Segurpro Mining (March 2021), as well as interviews with a sample of key staff, indicates that the private security contractor, SEGURPRO, operating on behalf of Gerdau, has provided training that incorporates the company's policy on the appropriate use of force and firearms.</p> <p>The evidence, training attendance records (Use of Firearms) (May 2023), indicates that the private security contractor, SEGURPRO, provides initial training and refresher courses for all company personnel involved in security, and for private security contractors that have not received equivalent training from their employers. The evidence, a course completion certificate (Prosegur University Certificate, June 2022), indicates that the private security contractor, SEGURPRO, provides specific training information related to human</p>

<p>have not received equivalent training from their employers.</p>		<p>rights and diversity.</p> <p>The evidence does not indicate that there is specific training on ethical conduct and respect for the human rights of mine workers and affected communities, with particular reference to vulnerable groups, pertaining to human rights and diversity.</p>
<p>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 training for public security personnel that provide mine-related security.</p>	<p>—</p>	<p>Not relevant. The company does not use public security forces for the mining project or transport routes.</p>
<p>3.5.5.1. The operating company shall:</p> <ul style="list-style-type: none"> 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 	<p>⊕</p>	<p>The evidence, Segurpro Mining (January 2022) and interviews with Gerdau management and SEGURPRO manager, indicate that Gerdau has developed and implemented systems for documenting and investigating security incidents, including those involving impacts on human rights or the use of force a.</p> <p>The evidence includes two security procedures (POS SegurPro - Vigilance Itabirito - Ouro Preto, July 2022, and PDV 2021 - Segurpro Mining, March 2021, training attendance records (POS Use of Firearms, May 2023) and a course completion certificate (Prosegur University Certificate, June 2022) and indicates that the private security contractor has received training to mitigate human rights impacts b. by learning about the company's policy, appropriate use of force and firearms human rights and diversity. The company has implemented a grievance mechanism that can be accessed through different channels so that concerns regarding potential human rights impacts can be addressed before they turn into abusive or unlawful acts (b).</p>

<p>rights impacts (as per IRMA Chapter 1.3), injuries or fatalities caused by security providers;</p> <p>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;</p> <p>e. Provide medical assistance to all injured persons, including offenders; and</p> <p>f. Ensure the safety of victims and those filing security-related allegations.</p>		<p>The evidence does not indicate that the security incidents record system meets the sub-requirements c. through f.</p>
<p>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.</p>	<p>—</p>	<p>Not relevant. No security-related incidents that result in injuries, fatalities or alleged human rights impacts on community members or workers were reported.</p>
<p>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.</p>	<p>●</p>	<p>According to information provided in the interviews with the company's manager of security affairs and the security contractor manager, no request was made by a representative community structure for a briefing on the company's procedures on the use of force and firearms.</p>

<p>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.</p>		<p>The evidence does not include information to confirm that the company regularly consults with stakeholders, including host governments and affected communities, about the impact of mining project security arrangements and reports to stakeholders annually on the company's security arrangements and its efforts to manage security in a manner that respects human rights.</p>
<p>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.</p>		<p>The company has grievance mechanisms in place, and they are broadly available to stakeholders, with multiple ways through which stakeholders can report a concern. The evidence, Communication channel brochure (grievance mechanism publicity material, no date), indicates that the company took reasonable steps to inform external stakeholders of the existence of the operational-level complaints and grievance mechanism and its scope, which includes all concerns related to the mine operation.</p> <p>Interviews with a sample of stakeholders indicated that not all are aware of the grievance mechanism and its scope in general.</p>
<p>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.</p>		<p>Not relevant. The company does not use public security forces for the mining project or transport routes.</p>

Chapter 3.6—Artisanal and Small-Scale Mining

Basis for rating

Chapter Not Relevant. Based on on-site observations, interviews with a sample of stakeholders (including a sample of those potentially affected, such as those living closest to the mine or in potentially affected areas), government agencies, workers, and company key staff, as well as documental evidence, there is no indication that the mining project is located in an area where artisanal or small-scale mining is practiced.

Chapter 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, Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), indicates that the screening to identify risks and potential impacts on cultural heritage was conducted by competent and experienced professionals in the field. The assessments identified potential risks related to local religious celebrations and proposed mitigation strategies, including the recommendation to conduct an in-depth survey of these celebrations and the origins of local devotions.

On-site interviews with company management indicate that methods used are scientifically robust.

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.



The evidence, Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), as well as interviews with key personnel, indicates that the company consulted some community members about the cultural heritage screening phase of the assessment. The document also indicates that there is a community near the mine, Ribeirão do Eixo, with relevant cultural activities.

The evidence does not include information to confirm that:
- stakeholders' consultations were included during the development of mitigation measures;

		<ul style="list-style-type: none"> - the government agency responsible for approving the assessments of cultural heritage (IEPHA, acronym in Portuguese) is in compliance with the Prior Cultural Impact Study and Cultural Heritage Impact Report; - the municipality of Congonhas and two Indigenous communities near the mine were included in the report; - assessment and mitigation measures listed in the screening phase were implemented.
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.	<p>The evidence, Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), indicates that the company consulted some community members about the cultural heritage screening phase of the assessment.</p> <p>Interviews with a sample of stakeholders, including members of the potentially affected communities, and key staff do not provide details necessary to confirm stakeholders were informed that procedures related to cultural heritage management would be available upon request.</p> <p>The evidence does not provide details, such as communications to stakeholders regarding the assessment, or procedures on how to share relevant information, to confirm cultural heritage assessments, management plans and procedures were made available to community and relevant stakeholders.</p>
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.	<p>Várzea do Lopes is an existing mine with an expansion in progress. For the most recent projects planned or underway, the company carried out screening processes by competent professionals of the potential impacts to replicable, non-replicable and critical cultural heritage. The evidence includes a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), the Várzea do Lopes Archaeological Survey Report (July 2022), as well as the recent environmental and social impact assessments (ESIAs):</p> <ul style="list-style-type: none"> -Várzea do Lopes Leste-Norte Project (January 2017) -Corrective Installation License for the Sterile Pile PDE-01 (September

	<p>2017) -Operational Continuity Project of the Várzea do Lopes Mine (August 2018).</p> <p>The evidence does not include a comprehensive evaluation that covers the mine operation outside of the recent expansions, such as an ESIA from before the commencement of operation in 2009 or an assessment of the potential cultural heritage cumulative impacts associated with the entire mine site. No evidence was provided to confirm relevant government agencies (e.g., State and Federal Institutes of Historical and Artistic Heritage or the Congonhas City Hall) approved the area of the scope defined in the Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018).</p> <p>Interviews with a sample of stakeholders, including government officials of the State Institute of Historical and Artistic Heritage (IEPHA), as well as on-site observations, indicate that two Indigenous communities and the municipality of Congonhas, which is recognized as a UNESCO World Heritage Site, are located in the area of influence of the mining operations in expansion and were not included in the scope of supplemental screening processes.</p>
<p>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 3.7.3, 3.7.4, 3.7.5 and 3.7.6), based on the type of cultural heritage likely to be affected.</p>	<p>The company provided a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018) and a Várzea do Lopes Archaeological Survey Report (July 2022), which indicate that potential impacts on replicable, non-replicable, and critical cultural heritage were assessed, including the nature and scale of such impacts, within the area of indirect influence defined in the most recent ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018).</p> <p>The evidence does not include a comprehensive evaluation encompassing the entire mine operation, such as an ESIA conducted prior to the commencement of operations in 2009 or an assessment of the potential cumulative cultural heritage impacts across the broader mine site. The available reports (2018 and 2022) do not</p>

		include within their scope two Indigenous communities and the municipality of Congonhas (recognized as a UNESCO World Heritage Site) which, according to the State Institute of Historical and Artistic Heritage (IEPHA), are located within the area of influence of the ongoing mining expansions.
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.	<p>The evidence, a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), the Várzea do Lopes Archaeological Survey Report (July 2022), as well as interviews with a sample of key personnel, indicates that cultural heritage screening identified the potential for archaeological sites and resources to be encountered during mining-related activities within the area of indirect influence defined in the most recent ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018). The Archaeological Survey Report (July 2022, pages 28–32) outlines mitigation measures to be applied when avoidance is not feasible, in alignment with the mitigation hierarchy: a. implementation of restoration measures in situ; b. restoration of the functionality of cultural heritage at a different location; c. permanent removal of historical and archaeological artifacts and structures. The report indicates that compensation (d) was considered not applicable, as the tangible cultural heritage identified was not in active cultural use by affected communities.</p> <p>Since the evidence provided does not include in its scope two Indigenous communities and the municipality of Congonhas, recognized as a UNESCO World Heritage Site, which are located in the area of influence of the mining operations in expansion, the evidence does not include information to confirm the company has fully implemented cultural heritage mitigation and management for future safeguarding measures of the tangible cultural heritage potentially affected by cumulative impacts associated with the entire mine site.</p>

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.



The evidence, a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), the Várzea do Lopes Archaeological Survey Report (July 2022), as well as interviews with a sample of key staff, indicate that mitigation work for the archeological sites and resources to be encountered during mining-related activities located in the area of indirect influence defined in the most recent ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018) must be carried out qualified professionals, and was developed following the premises of national legislation, which is in alignment with internationally recognized best practices.



Since the evidence provided does not include in its scope two Indigenous communities and the municipality of Congonhas, recognized as a UNESCO World Heritage Site, which are located in the area of influence of the mining operations in expansion, the evidence does not include information to confirm mitigation work of the tangible cultural heritage potentially affected by cumulative impacts associated with the entire mine site has been carried out and documented by competent professionals and in alignment with internationally-recognized best practices.

3.7.4.1. The operating company shall not remove any tangible nonreplicable cultural heritage, unless all of 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 evidence, a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), the Várzea do Lopes Archaeological Survey Report (July 2022), as well as interviews with a sample of key staff, indicates that cultural heritage screening did not reveal the need to remove any tangible nonreplicable cultural heritage, such as archaeological sites and resources, to be encountered during mining-related activities located in the area of indirect influence defined in the most recent ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018).

<p>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.</p>		<p>The evidence, a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), the Várzea do Lopes Archaeological Survey Report (July 2022), as well as interviews with a sample of key staff, indicates that cultural heritage screening did not reveal the need to remove any tangible nonreplicable cultural heritage, such as archaeological sites and resources, to be encountered during mining-related activities located in the area of indirect influence defined in the most recent ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018).</p>
<p>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:</p> <p>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</p> <p>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</p>		<p>The evidence, a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), the Várzea do Lopes Archaeological Survey Report (July 2022), as well as interviews with a sample of key staff, indicates that cultural heritage screening did not reveal the need to remove any tangible nonreplicable cultural heritage encountered during mining-related activities located in the area of indirect influence defined in the most recent ESIA for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018). The reports (2018 and 2022) indicate that when impacts on critical cultural heritage encountered during mining-related activities are unavoidable, the company will retain external experts to assist in the assessment and protection, using internationally recognized practices.</p>

IRMA Chapter 2.2 unless otherwise specified by the indigenous peoples).		
<p>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:</p> <ul style="list-style-type: none"> a. Comply with the requirement 3.7.5.1; 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. 	—	Not relevant. Várzea do Lopes is an existing mine.
<p>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).</p> <ul style="list-style-type: none"> • World Heritage Sites, and areas on a State Party's official Tentative List for World Heritage Site Inscription; 	—	Not relevant. The evidence does not indicate that there are protected areas (UNESCO, UICN, etc.) at mine site or surroundings. Besides, the mine is not new, but is an existing one.

	<ul style="list-style-type: none"> • International Union for Conservation of Nature (IUCN) protected area management categories I-III; • Core areas of UNESCO biosphere reserves. 	
3.7.5.4	<p>An existing mine located entirely or partially in a protected area listed in 3.7.5.3 shall demonstrate that:</p> <p>a. The mine was developed prior to the area's official designation;</p> <p>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</p> <p>c. The operating company collaborates with relevant management authorities to integrate the mine's management strategies into the protected area's management plan.</p>	Not relevant. The evidence does not indicate that there are protected areas (UNESCO, UICN, etc.) at mine site or surroundings.
3.7.5.5.	<p>To safeguard irreplaceable cultural heritage and respect indigenous peoples' right to self-determination, 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.</p>	The company has not carried out new exploration or development in areas known to be inhabited by Indigenous peoples living in voluntary isolation. The evidence, including the recent Environmental and Social Impact Assessments (January 2017, September 2017 and August 2018), as well as onsite observations, indicates that there are no Indigenous peoples living in voluntary isolation close to the mine site.
3.7.6.1.	<p>Where the operating company proposes to use the intangible cultural heritage, including knowledge, innovations or practices of local communities for</p>	Not relevant. The evidence does not indicate that the company has proposed to use the intangible cultural heritage of local communities.

	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.		
3.7.6.2	<p>The operating company shall not proceed with such commercialization unless it:</p> <p>a. Collaborates with affected communities using a good faith negotiation process that results in a documented outcome; and</p> <p>b. Provides for fair and equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with local customs and traditions.</p>	—	Not relevant. The evidence does not indicate that the company has proposed to use the intangible cultural heritage of local communities.
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. The evidence does not indicate that the company has proposed to use the intangible cultural heritage of local communities.
3.7.7.1.	A cultural heritage management plan or its equivalent shall be developed that outlines the actions and mitigation		The evidence, a Prior Cultural Impact Study and Cultural Heritage Impact Report (July 2018), is equivalent to a cultural heritage management plan and outlines the actions and mitigation measures to be implemented to protect cultural heritage that could be

measures to be implemented to protect cultural heritage.

potentially affected by the mine operation, enhance conditions and use of existing cultural heritage, and indicates that most actions, such as social and cultural programs, are being held as scheduled.

Since the evidence provided does not include in its scope two Indigenous communities and the municipality of Congonhas, recognized as a UNESCO World Heritage Site, which are located in the area of influence of the mining operations in expansion, the evidence does not include information to confirm a cultural heritage management plan has been developed for all cultural heritage potentially affected by cumulative impacts associated with the entire mine site.

- 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;
 - c. Allowing continued access to cultural sites, subject to consultations with affected communities and overriding health, safety, and security considerations; and

The evidence, a workshop presented to workers and contractors related to cultural heritage (November 2022), as well as interviews with a sample of workers and with key personnel, indicate that workers and contractors were trained and were given information material manage chance finds, including not further disturb, requirement a.

The evidence does not include details to confirm the company has documented procedures or agreements for the issues listed in sub-requirements b. through d.



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.



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, a workshop presented to workers and contractors related to cultural heritage (Workshop on Cultural Heritage – November 2022), as well as interviews with a sample of workers and with key personnel, indicate that workers and contractors were trained and were given information material to know how to act in case they find archeological remnants.

Principle 4: Environmental Responsibility

Note The objective of this IRMA Principle is to assess the management of wastes and materials to verify that the entity addressed the topics of short- and long-term physical and chemical risks, and health and safety of communities, as well as future land and water uses, as indicated by the IRMA Guidance (June 2018). 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. The evaluation of the requirements in this Principle pertaining to the structural stability of mining facilities (such as TSF, open pit, dams, reservoirs, etc.) should not be misconstrued as a certification or a professional engineering assessment of these structures. The responsibility for certifying the stability or the appropriateness of these structures is outside the scope of the IRMA assessment. Those responsibilities lie solely with authorized technical and governmental organizations.

Chapter 4.1—Waste and Materials Management	Basis for rating
<p>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.</p>	<p>The evidence, Solid Waste Management Plan (August 2019), describes the management procedure for solid waste, hazardous and non-hazardous waste, inert and non-inert waste, and byproducts with a focus on non-mining waste, and its objective states that it aims at minimizing environmental impacts.</p> <p> The evidence does not include a policy for managing mine waste facilities in a manner that eliminates, if practicable, and otherwise minimizes risks to human health, safety, the environment, and communities including guidance for the team in charge of the existing waste rock storage facilities (PDE-A North and South, PDE-01 Phases 1 and 2) and their respective sediment containment ponds.</p>
<p>4.1.1.2. The operating company shall demonstrate its commitment to the effective implementation of the policy</p>	<p> The evidence, Solid Waste Management Plan (August 2019), which is in parts equivalent to c. a waste policy, describes procedures for the management and disposal of material, substances, and wastes (other</p>

<p>by, at minimum:</p> <ul style="list-style-type: none"> 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 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. 	<p>than mine wastes) generated at the site indicating the company's commitment to implement the plan.</p> <p>The evidence does not include information to confirm alignment with sub-requirements a., b., and d.</p>
<p>4.1.2.1. The operating company shall:</p> <ul style="list-style-type: none"> 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. 	<p>The evidence, Solid Waste Management Plan (2019), contains a classification of waste types based on its potential to cause harm to the environment. The classification, requirement a., offers some examples of the specific waste for each category that has the potential to cause impacts on human health, safety, the environment, or communities, as well requirement b., documented instructions of procedures for the safe transport, handling, storage and disposal of those materials, substances and wastes including the tracking system used to ensure proper handling and disposal of solid waste.</p> <p>The evidence does not include a list of all materials, substances and wastes generated at the site, an aggregated list or map identifying waste facilities (a), or documentation to confirm the plan's implementation relating to storage, handling, and disposal practices - b.</p>

<p>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.</p>		<p>The evidence, including a Conceptual Mine Closure Plan (April 2022), a list of waste facilities (Summary of Mine Waste Facilities and E-mail, May 2023) and a sample of monthly risk meetings (January - March 2023), and indicates that the company has a good understanding of its existing waste storage facilities, which include:- operating: PDE-01 Phase 2.- inactive: PDE-01 Phase 1, PDE-A North, and PDE-A South.- planned: PDE-VLN, PDE-VLN East, and PDE-VLN West.The waste storage facilities also include sediment containment structures for each of the waste rock storage facilities, including the PDE-01 North Dike, which differs from the other sediment containment structures as it has an engineered dike to contain the water run-off from PDE-01 Phase 1. The mine closure plan lists the wheel washing bay and Sump 1 as a waste facility.The most recent evidence, including a list of waste facilities (Summary of Mine Waste Facilities and E-mail, May 2023) and a sample of monthly risk meetings (January - March 2023), reflects recent changes in waste facility operation (ending operation of PDE-Phase 1 and starting Phase 2) indicating the company updates some information on 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.</p> <p>The most recent evidence does not mention the PDE-01 Phase 2 Sump, which per the mine closure plan is the sediment containment structure for the currently active waste rock storage facility and does not contain all of the facilities listed in the mine closure plan and as observed on-site by the auditor, indicating that not all of the documentation regarding waste facilities is complete.</p>
<p>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:</p> <p>a. A detailed description of the facility that includes geology, hydrogeology and</p>		<p>IRMA's notes on the requirement indicate that if a mine waste facility has no chemical risks, evidenced by geochemical characterization proving non-reactivity of waste and construction materials, it is exempt from the detailed characterization in requirements 4.1.3.2.</p> <p>The ore from the Várzea do Lopes site is currently trucked to the ore treatment facility UTMII at the Miguel Burnier site, where the ore is further separated into iron ore and waste. The waste leaves UTMII as</p>

hydrology, climate 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.

wet tailings, which are then filtered and dry-stacked at a sterile disposal pile at Miguel Burnier.

The evidence, Technical Report on Classification of Solid Waste ABNT NBR 10.004: 2004 - Assessment of Corrosivity, Reactivity and Toxicity (May 2020), indicates that the tailings (as thickened sludge) from the ore treatment plant UTMII have been tested by a third-party laboratory SGS Geosol Laboratorios Ltda. and the report concludes that the samples are non-reactive, non-corrosive, and have an average pH of 7.3. indicating a low chemical risk and a low risk of ARD (b). The chemical characterization did not identify any other chemical constituents exceeding legal limits for the release of tailings. No contaminants of concern were identified. (e)

The PDE-01 North Dike is an engineered sediment containment structure that captures run-off from the waste rock storage facility PDE-01. The risk matrices included in the Compliance and Operability Report for the sediment containment structure (H&P, 2022) and regular safety inspection reports of it (Geohydrotech, April and September 2022), indicate that the waste captured in PDE-01 North Dike is considered as Class IIB inert indicating a low chemical risk (b, e).

The chemical characterizations of the tailings and PDE-01 North Dike have not identified any chemical constituents exceeding legal thresholds for tailings discharge or other contaminants of concern.

The evidence does not include a detailed chemical characterization of its active and decommissioned waste rock storage facilities (PDE 01 - Phase 1 and Phase 2, PDE-A North and South) and their respective sediment containment structure (except PDE-01 North Dike) to confirm that these facilities do not pose a chemical risk.

4.1.3.3. The operating company shall identify the potential physical risks related to tailings storage facilities and all other mine waste facilities where the potential exists for catastrophic failure resulting in impacts on human 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 4.1.6)
- 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 and schedule for tailings and waste rock or other facilities subject to stability concerns;
- g. Master tailings placement plan (based on life of mine);
- h. Internal and external inspection reports and audits, including, if applicable, an annual dam safety inspection report;

The evidence, Summary of mine waste facilities (May 2023), indicates that the mine has one operating (PDE-01 Phase 2), three inactive (PDE-01 Phase 1, and PDE-A North and South) and three planned (PDE-VLN, PDE-VLN East, and PDE-VLN West) waste rock storage facilities. Each of the waste rock storage facilities has a sediment containment structure, including PDE-01 North Dike, which is the only pond with an engineered dike to contain sediments. The company has identified potential physical risks for its mine waste facilities as follows:



Waste rock storage facilities:

The evidence, a sample of meeting records (e.g., ERM E GRO, January - March 2023), indicates that the company assesses potential physical risks of its waste rock storage facilities at least monthly. The evidence indicates that the risk evaluation is based on site investigations and stability analyses (a, e), independent reviews (b, h) and short-term and long-term placement plans (f).

Sediment containment ponds:

The evidence includes the Compliance and Operability Report (H&P, 2022) for the engineered sediment containment pond PDE-01 North Dike, two regular safety inspection reports for the sediment containment pond (Geohydrotech, April and September 2022) and the Conceptual Mine Closure Plan (WSP Golder, April 2022). The evidence indicates that the associated potential damage (DPA) of PDE-01 North Dike is medium. The inspection reports provide more detail on the risk category, which is identified as being low, and the closure plan provides a risk classification according to Norm Portaria DNPM 70.389, which is a combination of the associated potential damage and risk category and puts the PDE-01 North Dike into Class C. The mine closure plan indicates all other containment structures are classified as low risk according to Brazilian Norm COPAM 87/2005.

The documents indicate the physical risk assessments of sediment containment structures considered design reports including site investigations and stability analyses (a, e), independent reviews (b, h), facility classifications (c), descriptions of facility design criteria (d),

<p>i. Facility water balances (See also 4.1.3.2.d); and</p> <p>j. Dam breach inundation (if applicable) and waste rock dump runout analyses.</p>		<p>facility water balances (i), and dam breach inundation (j) (applicable for PDE-01 North Dike only).</p> <p>Sub-requirement (g) is not applicable as the site does not have a tailings storage facility.</p> <p>Interviews with the company indicated that it conducts several evaluations and inspections to identify physical risks conducted by internal personnel every month and by external consultants twice a year.</p> <p>The evidence does not provide the details to confirm that potential physical risks of waste rock storage facilities are informed by facility classifications (c), descriptions of facility design criteria (d), facility water balances (i), and waste rock dump runout analyses (j).</p>
<p>4.1.3.4. Facility characterizations shall be updated periodically to inform waste management and reclamation decisions throughout the mine life cycle.</p>		<p>The evidence, two regular safety inspection reports for the engineered sediment containment pond PDE-01 North Dike (April and September 2022), indicates that the risk classification for the sediment containment pond PDE-01 North Dike is updated regularly. A recent closure and reclamation plan for the site (Conceptual Mine Closure Plan, April 2022) indicates that the closure plan shall be updated every 3 to 5 years (Chapter 12.1.3). The closure plan considers the most recent facility classifications (Chapter 5).</p> <p>While the evidence provided is recent and shows that facility characterizations are being carried out, there is no evidence yet to demonstrate that waste management and reclamation plans are updated periodically as required (e.g. when there are changes in the physical, hydrological, or geochemical characterization or whenever significant changes to the mine operation would prompt an update to its waste facility characterization).</p>
<p>4.1.3.5. Use of predictive tools and models for mine waste facility characterization shall be consistent with current industry best</p>		<p>The evidence, a design report for PDE-01 Phase 2 and its sediment containment structure PDE-01 North Dike (Executive Project - Stack 1 - 2nd Construction Stage, 2018) and a design report for the planned</p>

practice, and shall be continually revised and updated over the life of the mine as site characterization data and operational monitoring data are collected.

facility PDE-VLN West (VLN Descriptive Memorial and Calculation Memos, 2022) indicates designs are supported by best practices available.

A safety inspection report (2022) for PDE-01 Phase 2 and PDE-01 North Dike, includes updated hydrological information and the emergency action plan (2023) includes updated geotechnical information, indicating continual revisions of characterizations based on new information.

The evidence does not indicate whether the company uses predictive tools or models to inform the characterization of active and inactive mine waste facilities (i.e. PDE-01 Phase 1 and 2, PDE-A North and South).

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,

The company has implemented a risk-based approach to mine waste assessment and management has been partially implemented as in a. to d., 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. The chemical and physical risks identification covers most waste facilities (e.g., waste rock dumps, tailings piles, and water management) as identified by competent professionals (internal and external). The potential risks are addressed in the Environmental Impact Assessments (EIAs) which are developed during the planning stage of each mine expansion (i.e., the most recent EIA/EIR for the Operational Continuity Project for the Várzea do Lopes Mine, August 2018). The documents indicate that the chemical components of the tailings generated after the iron ore beneficiation process are characterized as Class II non-inert waste, according to Brazilian regulation NBR 10,004. In addition, the industrial effluent from this beneficiation process is periodically analyzed according to the standards defined by federal resolution COPAM/CERH 08/22 (see also Chapter 4.2).

updated when risks assessments are revised (as per 4.1.4.1.c).

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. Once in operation, the facilities' risks are evaluated with tools such as the ORM (Mining Operational Risk Worksheet, issued on May 2020) and assessed monthly during the life of the facilities.

c. Updating of risk assessments at a frequency commensurate with each facility's risk profile, during its life cycle. As described above in b, the risk assessment is updated on a regular basis at a frequency commensurate with each facility's risk profile. Updates are made monthly as indicated by meeting records provided (e.g., ERM E GRO, January - March 2023). Risks are updated on a regular basis as evidenced in the site's ESIA's (i.e., the ESIA/EIR for the Operational Continuity Project for the Várzea do Lopes Mine, August 2018), their operational risk matrix (Operational Risk Spreadsheet - Mining, May 2020) and records of monthly discussions on operational risks of the facilities (i.e., Risks, January to March 2023).

d. Documented risk assessment reports, updated when risks assessments are revised (as per 4.1.4.1.c). The company developed a matrix (Mining Operational Risks Worksheet, last updated May 2020), which compiles the risks identified in different assessments. The risk register is developed and signed off by the qualified technical team. As described above in requirement b., monthly meetings (the last one evidenced in March 2023) are held to discuss risks related to situations that tend to have a higher probability of materializing and that are linked to the operation.

The evidence does not present potential chemical risks for all mine waste facilities or allow for verification that all mine waste is considered due to differences in their identification (i.e., as tailings, waste piles, overburden, or sediment containment).

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 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; andf. 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).

The company has partially carried out and documented an alternatives assessment to inform mine waste facility siting and selection of waste management practices as in a. - c. as presented below. The evidence reviewed includes the Environmental Impact Assessment (EIA) for the Várzea do Lopes Leste-Norte Project (January 2017) and a Corrective Installation License for the Sterile Pile PDE-01 (September 2017). The EIA, which describes the proposed waste rock storage facility PDE-VLN East, indicates compliance with:a. Identification of the minimum specifications and performance objectives for facility performance throughout the mine life cycle, including mine closure objectives and post-closure land and water uses,b. Identification of possible alternatives for siting and managing mine wastes, avoiding a priori judgements about the alternatives andc. Screening or a “fatal flaw” analysis to eliminate alternatives that fail to meet minimum specifications.The evidence does not include details to confirm that the company conducted a multiple accounts analysis or similar (d), sensitivity analysis (e), and repeated as necessary (f) during the alternatives assessment of PDE-VLN East, or documentation to confirm that existing mine waste facilities including the waste rock storage facilities (PDE-01 Phase 2 and PDE-VLN) and the sediment containment pond PDE-01 North Dike have undergone alternative assessments during early planning phases.

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 evidence, Summary of mine waste facilities (May 2023), indicates that the mine has one operating (PDE-01 Phase 2), three inactive (PDE-01 Phase 1, and PDE-A North and South) and three planned (PDE-VLN, PDE-VLN East, and PDE-VLN West) waste rock storage facilities. Each of the waste rock storage facilities has a sediment containment structure, including PDE-01 North Dike, which is the only structure with an engineered dike to contain sediments. The evidence, a design report for PDE-01 Phase 2 and its sediment containment structure PDE-01 North Dike (Executive Project - Stack 1 - 2nd Construction Stage, 2018) indicates that the mine's current mine waste facilities are supported by best available practices. A design report for the planned facility PDE-VLN West (VLN Descriptive Memorial and Calculation Memos, 2022) indicates the company used best available practices for the design of a future mine waste facility.



While Chapter 4.1. criteria show BAPs/BATs are at various stages of implementation across all waste rock facilities, the evidence does not include details to confirm:

- best available practices are in place for PDE A or were considered for the design of PDE-VLN (currently in its implementation stage).
- The methodology the company uses to demonstrate mine waste facility design and mitigation of identified risks consistent with the best available technologies (BAT) or best available practices (BAP).
- OMS's have been developed for each type of mine waste facility (waste rock storage, sedimentation pond) as per BAP defined in the IRMA Standard (see also: Reference Document on Best Available Techniques for the Management of Tailings and Waste-Rock in Mining Activities by the European Commission, 2009, and requirement 4.1.5.3.).
- alternative assessment for all MWFs (see 4.1.4.2.)

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



The evidence, including analytical test results from samples collected from the tailings from the ore treatment plant UTMII sludge in October, 2019 to February 2020 (2020) and Water Resources Monitoring Report for Surface Water Quality (June 2022) indicates that the company has evaluated toxicity, reactivity and corrosivity

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.

associated with releases from UTMII in accordance with Brazilian regulation (ABNT NBR 10004:2004) to determine if the material is hazardous. The results indicate that the tailings are not corrosive, toxic, or reactive (see 4.1.3.2). The evidence includes a report on the surface water quality monitoring at the Várzea do Lopes site, where the results are compared against the legal limits for several parameters (Surface Water Quality Monitoring Program for the 2nd Semester, 2022) indicating exceedances for aluminum, iron, and manganese. The report related to water quality from the discharges into the environment for the same period (Water Quality of the Discharges, 2022) indicates some exceedances for aluminum, manganese, and suspended solids. The water monitoring reports indicate that aluminum, manganese, and iron naturally occur at elevated levels in the soils and therefore waters around the site because of the geochemical composition of the rocks in the area. The evidence indicates that the water quality around the site is not significantly impacted by the operation.

The Conceptual Mine Closure Plan (April 2022) indicates that the company has implemented some mitigation measures that include the prevention and minimization of MIW through stormwater management infrastructure such as sediment containment ponds for each waste storage rock facility, for the site in general, and a wheel-washing bay to mitigate possible risks related to contamination (a, b), and treatment of MIW before discharge (c).

The evidence does not include details to confirm the company:

- a. prioritizes source control (e.g. addition of neutralizing agents to MIW, geosynthetic liners, and covers).
- b. has assessed the need for mitigation actions for all mine waste facilities or MIW.

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

IRMA defines “high-risk facilities” as those where a breach could result in inundation of residence(s) and loss of life (on or off property). In the absence of waste rock dump runoff analyses (see 4.1.3.3.), the auditors assume that the waste rock facilities are high-risk facilities, as inundation of residence(s) or loss of life in the event of

outlined in Mining Association of Canada's Tailings Management Guide.

collapse/liquefaction cannot be ruled out.



Waste rock storage facilities:

The evidence includes emergency action plans for waste rock facilities PDE-01 Phase 1 and 2, PDE-A North and South, and PDE-VLN East and West (January 2023), that outline preventative and reactive actions taken in case of signs of or actual failures of waste rock storage facilities. Monthly a specialized team reviews the performance of its waste rock storage facilities to develop, assign, and track mitigation controls commensurate with the risk level as evidenced by the meeting records (e.g., January to March 2023). The evidence indicates that the company assesses the risks of its waste rock storage facilities at least monthly and has implemented a critical control framework that aligns with generally accepted industry frameworks.

Sediment containment ponds:

The engineered sediment containment pond PDE-01 North Dike has been characterized as low risk and medium potential damage, by the company and the independent auditor in a sample of declarations sent to the national mining agency (Declaration of stability condition, September 2022 and March 2023) presented in the safety inspection report (Regular safety inspection report, April 2022, Table 4.2 & Ch. 12). The emergency action plan for PDE-01 North Dike (March 2022) and monthly meetings (e.g., January to March 2023) in which risks related to the sedimentation pond are discussed indicate that the company has implemented a critical control framework for the pond commensurate with generally accepted industry frameworks. The Conceptual Mine Closure Plan (WSP Golder, April 2022) includes a risk rating for all other sediment containment ponds at the mine, indicating that they are classified as low-risk facilities according to Brazilian Norm COPAM 87/2005.

The evidence does not include detailed information on the waste rock storage facility PDE-VLN to confirm that its critical control framework is aligned with accepted industry frameworks.

<p>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.</p>		<p>The evidence, a sample of ERM Governance Self-Assessment and Minutes regarding risk management (October 2022, and January-March 2023) indicate the company's mine waste management strategies have been developed in an interdisciplinary and interdepartmental manner and are informed by site-specific characteristics, modeling, and other relevant information. Interviews with company personnel indicate that mine waste strategies are generated by the technical services team, implemented by engineering, and operationalized by the geotechnical and mine operation department with input by environmental risk and water resource managers.</p>
<p>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:</p> <p>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;</p> <p>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</p>		<p>The evidence includes the OMS Manual for the engineered sediment containment pond PDE-01 North Dike (2019) indicating the company has developed an OMS manual for the sediment containment pond PDE-01 North Dike that is substantially aligned with the performance objectives, risk management strategies, critical controls, and closure plan for the facility and includes following items:</p> <p>a. The engineered sediment containment pond is a structure designed to collect water and sediments passing through the PDE-01 waste rock storage facility. This structure does not hold effluents or process waters and it is not intended for recycling.</p> <p>b. The OMS manual describes in Chapter 8 the maintenance planning, preventive maintenance, monitoring and instrumentation plan, and safety inspections.</p> <p>c. Chapter 8.3 presents the monitoring and instrumentation plan, and 8.4 the safety inspections.</p> <p>The evidence does not include documentation of requirement d. facility-specific performance measures as indicators of effectiveness of mine waste management actions; and e. risk controls and critical controls, associated performance criteria and indicators, or descriptions of pre-defined actions to be taken if performance criteria are not met or control is lost. The evidence does not include OMS manuals or equivalent documentation for its waste rock storage facilities.</p>

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

e. Documentation of risk controls and critical controls (see also 4.1.5.3), associated performance criteria and indicators, and descriptions of pre-defined actions to be taken if performance criteria are not met or control is lost.

- 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

This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.

Initial Audit Findings:

The evidence, including minutes of monthly meetings on the risk management system (Risks, October 2022, and January, February, and March 2023) documenting that risks are assessed periodically

process (see 4.1.4.1.c) and the OMS (see 4.1.5.7); andd. Inform the management review to facilitate continual improvement (see 4.1.5.8).

and actions to reduce the level of risk developed, a sample of monthly inspection reports (January - March 2023) for each mine waste facility, monthly surveys (2018-2023) of water level indicators PDE-01 Phase 2, a sample of monthly performance reports (January - March 2023), and a self-assessment of the Risk Governance (Self-evaluation and Governance minutes ERM, 2023), indicates the company: b. Assesses the effectiveness of its risk management measures, including critical controls, for its existing mine waste facilities, andc. Uses its risk assessments of its existing mine waste facilities to inform updates to the risk management process.

The evidence does not include information to confirm:

- a. performance objectives are identified and the company assesses whether they are being met,
- c. risk assessments inform updates to the OMS Manual (2019),
- d. risk assessments are provided to company management (i.e., CEO) to facilitate continuous improvement.

CAP Finding:

Following the IRMA Initial Audit, the company developed several operations manuals to enhance performance evaluations of mine waste facilities, and auditors' review of these manuals and supporting documentation indicates that the company has expanded its evaluation practices as described below.

- a. The company has defined performance objectives and indicators for each structure in the Operations Manuals and Performance Indicator documents for PDE-01 North Dike (Gerdau and Itacu, Version 6, May 2024) and for the waste rock storage facilities PDE 1 Phase 1 and 2 and PDE A North and South (Gerdau and Geoestrutural, May 2024) as well as corresponding Risk Letters for PDE VLN East and West (Gerdau and BVP, May and June 2024), and regularly evaluates whether these objectives are being met. Semi-annual external audits for the PDE-01 North Dike (Geoconsultoria, March and September 2024 and March 2025) and annual external

audits of waste rock storage facilities (Geoestrutural, July 2024 and June 2025) include reviews of potential failure modes (for PDE-01 North Dike only), slope stability analyses, analysis of monitoring data, and inspection of stormwater and drainage infrastructure, with recommendations provided as needed. Internally, the company conducts bi-weekly inspections of the PDE-01 North Dike and waste rock storage facilities, including associated water infrastructure, as evidenced by inspection records from January 2024 through July 2025. Performance is further evaluated through review of monitoring data for piezometers, water level indicators, and surface markers, which is consolidated in monitoring databases (Gerdau, last updated July 2025) and summarized in monthly performance reports for waste rock storage facilities (February 2024 to May 2025) and engineered dikes (July to December 2024 and April to July 2025). Monthly drone surveys (January 2024 to July 2025) provide updated topography for PDE Phase 1 and 2 and PDE VLN East and West. Additionally, the company uses an integrated platform, GeoInspector, to consolidate inspection observations, monitoring data, and regulatory inputs, generating performance summaries (samples reviewed for April to July 2025).

b. The company assesses the effectiveness of its risk management measures by comparison of monitoring data against defined displacement thresholds documented in its monitoring databases, trend analysis of inspection and instrumentation data, and follow-up on corrective measures tracked in monthly performance reviews. Critical controls are also described in the Emergency Response Procedures (GeoPrime, January 2023), which assign responsibilities and outline predefined actions for emergency scenarios. Control Action Plans (2024 and 2025) demonstrate that the company establishes and monitors corrective actions from initiation to close-out to mitigate identified risks and anomalies.

c. The first OMS Manuals for waste rock storage facilities were finalized in May 2024 for PDE 1 Phase 1 and 2, PDE A North and South (Gerdau and Geoestrutural), and PDE VLN East and West (Gerdau and BVP) with no updates to these manuals yet. The OMS Manual for Dike 1 was originally issued in December 2019 and has been updated

several times, most recently in May 2024 (Version 6, Gerdau and Itaacu). A sample of monthly Operational Risk Meeting Presentations (Gerdau, April and September 2024) indicate the company reviews regularly the risks associated with its mine waste facilities and adjusts risk management procedures to reduce risks.

d. Evidence includes a presentation on waste rock run-out analyses for PDE Phase 1 and 2 delivered to the management team (Potamos, April 2024) and monthly performance summaries of waste rock storage facilities and engineered dikes based on monitoring results, inspection findings, and stability assessments, sent via e-mail to executive directors (samples from April to December 2024).

Additional evidence includes a sample of monthly Operational Risk Meeting Presentations (Gerdau, April and September 2024), based on an annually defined agenda, during which monitoring results, risk mitigation actions, and improvements to mine waste management (e.g., implementation of automated monitoring systems at waste rock facilities) are discussed with site management and the mining director.




The evidence indicates that the company regularly evaluates the performance of its mine waste facilities (a), reviews the effectiveness of risk management measures (b), updates components of its OMS and risk management processes as needed (c), and informs management reviews to support continual improvement in mine waste facility management (d).

The evidence does not include details to confirm that the OMS Manuals issued in May 2024 have been subject to a formal review to determine whether updates were required since their issuance, such as management updates discussed during monthly meetings on operational risks.

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

Not relevant. The evidence, a sample of monthly committee meetings on mine waste facilities (Monthly Assessment of Risk Management Governance ERM, October 2022, January, February and March 2023), which are informed by the results inspections, indicate that the mine waste facilities are being effectively operated.

in a manner that protects human health and safety, and prevents or otherwise minimizes harm to the environment and communities.

<p>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:</p> <p>a. Align with the steps outlined in the Mining Association of Canada's Tailings Management Protocol or a similar framework; and</p> <p>b. Be documented, and the results reported to an accountable executive officer.</p>		<p>Does not meet. The evidence, a Declaration of Stability (March 2023) sent to the National Mining Agency (ANM) presented in the safety inspection report (Regular safety inspection report, April 2022, Table 4.2 & Ch. 12), indicates the company and independent auditors have classified the engineered sediment containment pond PDE-01 North Dike as low risk and medium potential damage. The evidence, Declarations of stability condition for the engineered sediment containment pond PDE-01 North Dike (ANM, September 2022 and March 2023), indicates that the director president of Gerdau reviewed and signed, indicating that management is involved in reviewing the stability reports.</p> <p>The information does not provide details to confirm the company has implemented and documented an annual management review of all mine waste facilities, including waste rock storage facilities, 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.</p>
<p>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.</p>		<p>Does not meet. The evidence does not indicate whether independent reviews as listed in 4.1.6.2. are taken into account for the selection and modification of strategies to manage chemical and physical risks and prior to the siting of TSF or other relevant mine waste facility.</p>
<p>4.1.6.2. Reviews shall be carried out by independent review bodies, which may be composed of a single reviewer or</p>		<p>The engineered sediment containment pond PDE-01 North Dike is not considered a high-risk facility according to its risk (low) and potential damage (medium) classification. The evidence, Declarations</p>

<p>several individuals. At high-risk mine waste facilities, a panel of three or more subject matter experts shall comprise the independent review body.</p>		<p>of stability condition (ANM, September 2022 and March 2023), and two regular safety inspection reports (Geohydrotech, April and September 2022) for the sediment containment pond, indicate that an independent review of the sediment containment pond is conducted.</p> <p>The evidence does not include documentation, such as policies, procedures, or terms of reference regarding independent reviews or letters of engagement identifying independent review body members, to confirm that independent reviews of its waste rock storage facilities are conducted.</p>
<p>4.1.6.3. Independent reviewers shall be objective, third-party, competent professionals.</p>		<p>The evidence, Declarations of stability condition for the engineered sediment containment pond PDE-01 North Dike (ANM, September 2022 and March 2023), and two regular safety inspection reports for the sediment containment pond (Geohydrotech, April and September 2022), indicates that the independent reviewer is registered with the Regional Engineering and Agronomy Council of Minas Gerais indicating that the reviewer is a competent professional to perform that job.</p> <p>The evidence that the independent and professional reviewers do not have a conflict of interest was not presented.</p>
<p>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.</p>		<p>The evidence indicates that the third-party Report on Compliance and Operability of the PAEBM for the PDE-01 North Dike (H&P, June 2022) was reviewed by the company's Geotechnical and Hydrogeological Manager, and the two regular safety inspection reports for the sediment containment pond (Geohydrotech, April and September 2022) were reviewed by the Geotechnical Manager. The Declarations of stability condition for the sediment containment pond (ANM, September 2022 and March 2023), which are results of the independent safety inspection reports, were signed off by the director president of Gerdau.</p> <p>The evidence does not include a policy or procedure for reporting to</p>

		the operation's senior manager and an accountable executive officer of the operating company or its corporate owner.
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.	<p>The evidence, including interviews with mine site personnel and the engineer of record (BVP), as well as safety inspections done for the engineered sediment containment pond PDE-01 North Dike (Geoconsultoria, April and September 2022), and the third-party Report on Compliance and Operability of the PAEBM for the PDE-01 North Dike (H&P, June 2022), indicates the company enlists the aid of independent consultants conducting regular safety inspections.</p> <p>The evidence does not include detail to confirm all recommendations are considered or documented rationale for any advice or recommendations not taken.</p>
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.	<p>Does not meet.</p> <p>The evidence reviewed includes Environmental Impact Assessments for the Várzea do Lopes Leste-Norte Project (January 2017), the Corrective Installation License for the Sterile Pile PDE-01 (September 2017), and for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018).</p> <p>The evidence does not include details or documents to confirm that stakeholders were consulted during the screening and assessment of mine waste facility siting and management alternatives and prior to the finalization of the design of the facilities.</p>
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	The evidence, a Emergency Response and Preparedness Plans for the general mining facilities at Várzea do Lopes and Várzea Leste Norte (October 2017 and January 2023), the engineered sediment pond PDE-01 North Dike (PAEBM-01 Dique Norte da PDE, March 2022), and for six waste rock storage facilities (PAE for PDE-01 Phase 1 and 2, and PDE-A Norte and Sul, and VLN Oeste and Leste – all documents from January 2023) developed by a competent third-party company. The evidence indicates that these emergency preparedness and action plans have been discussed with and prepared in collaboration with first responders and relevant government agencies and are approved

relevant government agencies. (See also IRMA Chapter 2.5)

by the Civil Defense, in addition to being disclosed to all competent bodies. The community is included in the process in the government orientation seminars and hypothetical rupture simulations. The company conducts periodic exposure exercises every 6 months for the five emergency response plans at once with participation of workers and contractors as indicated by a third-party Report on Compliance and Operability of the PAEBM (June 2022) listing emergency drills conducted in November 2021 and July 2022. A report from the civil defense on simulation exercises for the year 2021 (May 2021) and the Emergency Response and Preparedness Plan for the sediment pond PDE-01 North Dike (PAEBM-01 Dique Norte da PDE, March 2022) indicate that no communities were identified in the potentially affected area, which was confirmed through interviews.




Interviews with a sample of workers and contractors indicate the company regularly trains and includes workers participation (workers involved with emergency response activities) in planning activities and exercises. However, not all interviewees are aware of the emergency action plan and/or how the company has considered their inputs.

The evidence, including interviews with company managers and stakeholders do not provide details (i.e., meetings or workshop) to confirm the company consulted workers and/or workers' representatives in the preparation of emergency preparedness and response plans.



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, including interviews with workers and contractors as well as an external audit (Compliance and Operability Assessment of the Emergency Action Plan, June 2022), indicates that emergency and evacuation drills (desktop and live) related to catastrophic failure of the engineered sediment containment pond PDE-01 North Dike are held on a regular basis. The evidence does not include information to confirm whether emergency and evacuation drills are

		held for other mine waste facilities that pose a risk of catastrophic failure such as waste rock storage facilities.
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.	 <p>The evidence, including a review of https://app.anm.gov.br/Sigbm/publico, and interviews with the company, its stakeholders and the civil defense indicates that information on the company's mine waste facilities is available to stakeholders and is made available upon request.</p>
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.	 <p>The company does not dispose of mine waste materials in rivers, lakes, or oceans. At the time of the onsite audit, observations, interviews with personnel and stakeholders, and reviews of evidence including Conceptual Mine Closure Plan (April 2022), Figure 8 – location map, and inspection reports, confirmed that the company does not dispose of mine waste in lakes, rivers, or oceans.</p>
Chapter 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.	 <p>The evidence, a report on the Compilation and Synthesis of Hydrogeological and Hydrological Monitoring Data, Inventory of Springs and Register of Water Users in the Region of the Várzea do Lopes Mine (January 2017), an Environmental Impact Assessment for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018), a Technical Report of Compliance with Condition No. 7, Ordinance 308.790/2020 for 2021 (January 2022), and interviews with the company and a sample of its stakeholders indicates the company has identified existing water users and stakeholders who may potentially affect or be affected by mine water management practices (i.e., the site's water use and discharge). These consist of registered and some non-registered Moeda and Itabirito municipality</p>

		users, including three condominium complexes north of the Várzea de Lopes operation.
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.	<p>The evidence, a report on the Compilation and Synthesis of Hydrogeological and Hydrological Monitoring Data, Inventory of Springs and Register of Water Users in the Region of the Várzea do Lopes Mine (January 2017), a sample of letters documenting well water guarantees with stakeholders (2012), Gerdau water committee participation (includes national, regional, and local government, municipality, and industry representatives (https://cbhvelhas.org.br/rioitabirito/), as well as interviews with the company and a sample of stakeholders, indicates the company conducted research as a result of water stakeholder input and this collaboration is ongoing with topics discussed that cover current and potential future uses of water that may affect or be affected by the mine such as public/municipal water sources, mining, agriculture, fish farming and recreation (boating, fishing).</p> <p>The evidence does not include identification water-dependent natural resources (i.e., aquatic ecosystems and organisms, riparian ecosystems, wetlands, wildlife, etc.) and ecosystem services that could be affected if there are mining induced changes to water quality or quantity.</p>
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.	<p>The evidence, a Signed Community Water Commitment Agreement (August 2012), as well as interviews with a sample of key staff and stakeholders indicates the company collaborates with some stakeholders to identify water challenges and contribute positively to stewardship outcomes through participation in local/regional water planning (Mining Institute of Water Management of the River Paraopeba, see https://comites.igam.mg.gov.br/lista-de-conselheiros-sf5).</p> <p>The evidence does not provide specific information on company contributions or research that have helped to identify current and potential water challenges (i.e., promoting better water use and</p>

		management, cooperating to address water shortages, flooding, contamination, etc.), make a positive difference in the management of water, or improved outcomes (i.e., water security, sanitation).
<p>4.2.2.1. The operating company shall gather baseline or background data to reliably determine:</p> <p>a. The seasonal and temporal variability in:</p> <p>i. The physical, chemical and biological conditions of surface waters, natural seeps/springs and groundwaters that may be affected by the mining project;</p> <p>ii. Water quantity (i.e., flows and levels of surface waters, natural seeps/springs and groundwaters) that may be affected by the mining project; and</p> <p>b. Sources of contamination and changes in water quantity or quality that are unrelated to the mining project.</p>		<p>The evidence, an Environmental Impact Assessment for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018), in section 8.5.3 (Hydrogeology) and Appendix 3, indicates that the company has:</p> <p>a. i. and ii. collected baseline information on water quality and quantity regarding seasonal and temporal variability since 2009 (a. i. and ii.). The study identified 45 locations (44 springs and 1 surface stream). This data has since been supplemented with additional information on existing water conditions as presented in the evidence, Compilation and Synthesis of Hydrogeological and Hydrological Monitoring Data, Inventory of Springs and Register of Water Users in the Region of the Várzea do Lopes Mine (January 2017-2023), and indicates that water baseline information was collected before the mine expansion.</p> <p>b. considered other sources of contaminants such as host rock, as well as changes in water quality and quantity due to variabilities in rainfall.</p> <p>The evidence does not include information to confirm that flow measurements followed a consistent methodology (a. ii).</p>
<p>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:</p>		<p>The evidence, an assortment of baseline water monitoring studies and ongoing assessment (i.e., Hydrogeological Simulation Study of Groundwater Flow in the Area of Influence of the VDL Mine, Evaluation of Possible Impacts, Hidrovia, 2007; Environmental Impact Assessment Mina Várzea do Lopes Leste-Norte, Section 10.4 (Impact Assessment), January 2017; Environmental Impact Assessment for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018), Section 8.5.3 (Hydrogeology); Report on the Numerical Hydrogeological Model of the Várzea do Lopes Mine, Watergeo, 2018;</p>

- 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.

Conceptual Hydrogeological Characterization of Várzea Leste Norte, TLM, 2018; Conceptual Hydrogeological Characterization of Várzea East North, December 2018, Hydro MVL and VLN, a summary of monitoring locations and elevations, February 2022; et. al.), indicate the company has a system for scoping and assessing mining-related impacts, including potentially significant impacts, by competent professionals. Scoping and related studies are primarily focused on potential impacts to surface and groundwater water quantity such as dewatering, water use, water balance and maintaining pre-development water levels (surface and groundwater). To a lesser degree, impacts to water quality were considered based upon risk assessment (surface water and groundwater).



The evidence does not include details to confirm scoping fully considered potential impacts from the geochemical composition of ore and waste rock or effluents (see Chapter 4.1) to groundwater and surface water quality, as in (a), or that an assessment of potential impacts was undertaken in collaboration with stakeholders, as in (b).

- 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

The evidence, an Environmental Impact Assessment for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018), indicates mine-related impacts to water quantity and quality are expected to be of low or medium magnitude. Still, the company has conducted analyses to further predict and quantify the potential impacts to groundwater resources including those related to stream flow:

- a. The conceptual water model, Conceptual hydrogeological characterization of Várzea East North (December 2018), developed by third-party TLM, indicates that the company has a comprehensive understanding of groundwater in the area. The model includes information on rain, geology, and hydrogeology, and an impact analysis that focuses on water quantity.
- b. The numerical water models, Numerical Hydrogeological Modeling of the Várzea do Lopes Mine (9 hydrogeological numeric studies developed since 2007, with the most recent from 2022), considers

<p>(e.g., low, average and high flows/levels);</p> <p>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</p> <p>d. Prediction of whether water treatment will be required to mitigate impacts on water quality during operations and mine closure/post-closure.</p>		<p>potential impacts on surface and groundwater conditions and varying conditions.</p> <p>The evidence does not include:</p> <p>c. a quantitative water balance for the mine site; and</p> <p>d. predictions of whether water treatment will be required during operations and mine closure/post-closure.</p>
<p>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.</p>		<p>The company has developed nine models used as predictive tools which are consistent with current industry best practices (Hidrovia, 2007; MDGEO, 2022; Watergeo, 2012; MDGEO, 2013; Watergeo, 2014; Watergeo 2015; MDGEO 2016; Watergeo 2018; IGEO Hidrogeologia, 2022). The evidence indicates the company has an ongoing system of evaluation that includes hydrogeological studies and models, including for the project expansion (Technical Report Request for Hydrogeological Research Grant Várzea Leste-Norte Mine, April 2022). The models describe surface water and groundwater flow, and include data inputs for evaluation over time. The evidence does not confirm that models and predictive tools are updated when predictions diverge from observed results, nor does it include evaluations related to water quality.</p>
<p>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 water uses that may be affected by the mine's water</p>		<p>The evidence, including the site-level Preliminary Technical Report on the Water Resources Management Plan for the Várzea do Lopes Complex (January 2023), indicates the company has developed an adaptive management plan to mitigate predicted impacts, including an implementation schedule (Section 5.3.5). Ongoing monitoring of water quantity (elevation and flow), and signed well water guarantees with condominium complex owners (Condition No. 9,</p>

<p>management practices. Options shall be evaluated in a manner that aligns with the mitigation hierarchy.</p>		<p>Ordinance No. 0053/2012, August 2012) provide indication of water mitigation aspects with stakeholder involvement.</p> <p>Interviews with a sample of stakeholders and key staff do not provide information to confirm that the company has engaged in information sharing, dialogue or agreement from relevant stakeholders on the mitigation measures to be implemented to mitigate predicted significant impacts on water quantity and quality.</p>
<p>4.2.3.2 If a surface water or groundwater mixing zone is proposed as a mitigation strategy:</p> <p>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</p> <p>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:</p> <p>i. Surface water or groundwater mixing zones are as small as practicable;</p> <p>ii. Water in a surface water mixing zone is not lethal to aquatic life;</p> <p>iii. A surface water mixing zone does not</p>		<p>Not relevant. According to the company, it does not propose a mixing zone as a mitigation measure.</p>

interfere with the passage of migratory fish;

iv. Surface water or groundwater mixing zones do not interfere with a pre-mine use of water 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

The intent of this requirement is that mining-related releases (as controlled discharges of treated or untreated effluent, seepage, runoff, or unintended releases) to surface waters or groundwater do not significantly change the quality of affected waters from their baseline water quality/background water quality levels, or do not cause any contaminant to exceed levels deemed necessary for protection.



The evidence including background and ongoing water sampling, indicates the company measures waters affected by the mining project to:

a. Confirm that water quality is maintained at baseline or background levels. Evidence from the Water Monitoring Technical Report 1st Half 2022 (July 2022) for Várzea do Lopes and Várzea Leste-Norte, and the Water Management Program Summary (May 2023), demonstrates that the company monitors surface water quality and

by End Use Tables 4.2.a to 4.2.h, which correspond to particular end uses).

quantity at streams and rivers, groundwater quality at replacement wells, and groundwater levels at wells located on-site and both upstream and downstream of the mine. Groundwater abstraction for dewatering purposes is also monitored. The summary includes time-series graphs of water quantity from 2016 to 2022 and indicates that the company conducts trend analyses and establishes compliance with IRMA end-use water quality criteria for some, but not all, parameters at designated points of compliance. Additional trend analysis of surface water flows from 2011 to 2023 is documented in the Report on Compliance with SRNA Conditions (January 2022).

b. Demonstrate that contaminant levels are protective of identified water uses. A selection of relevant parameters (Al, Fe, Mn, and suspended solids) from 14 (fourteen) surface water stations downstream of the mine and sampled in January, 2022 were reviewed and confirmed to meet water quality criteria. Seven analyses for Mn at different locations had a concentration above IRMA criteria (being the highest of 6.59 mg/l). Although Mn is regularly high, the evidence indicates that Mn is a naturally-occurring, abundant metal in the area, with concentrations consistent with background levels.

The evidence does not include details to confirm that groundwater quality is monitored at springs, that all required water quality parameters are consistently monitored and assessed against IRMA criteria at all points of compliance, or that surface and groundwater quality results are routinely compared to baseline or background levels across all locations and over time.

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



The evidence, Water Resources Management Plan for the Várzea do Lopes Complex (January 2023) and a sample of monitoring data (Monthly Quantitative Monitoring Report, May 2022; Hydrogeology Monthly Quantitative Monitoring Report, January 2023; facility water monitoring programs and laboratory results) indicates the company is maintaining water resources at quantities that enable continued use. Water quantity monitoring is conducted monthly, as

identified in collaboration with relevant stakeholders (see 4.2.1.2).

summarized below:

Surface water

There are flow measurements at 23 surface water bodies. The information includes historical data, in some cases from 2011 to present, and no significant changes in flows are observed.

Groundwater

There are groundwater table level measurements taken at 10 locations (3 wells; 7 piezometers) located around the active pit and residential areas. The information includes data from 2016 to present, and no significant changes in flows are observed.

Groundwater abstraction to lower the - average flow rate and monthly water abstraction:

Since 2012 the company pumps groundwater to lower the water table to enable continued mining. Presently the company maintains 6 pumping wells and has documented the average flow rate and monthly abstraction volumes from 2013 to present. The evidence indicates the company's abstraction rates remain below permitted volumes, and while the groundwater table has been lowered to continue mining, surface water and groundwater quantity data do not indicate impacts on areas outside the immediate depression cone.

The company additionally has water quantity (well water) guarantees in place with the owners of condominiums Villa Bella and Aconchego (Condition No. 9, Ordinance No. 0053/2012, August 2012) to ensure the supply of water at the required quality and quantity levels.

While monitoring activities appear to be in place, the evidence does not include a clear identification of active versus inactive monitoring points, or aggregated monitoring results over time for relevant surface water points (e.g., user springs and streams). As such, it is not possible to assess to determine how effectively the company is tracking potential changes in water availability over time.

4.2.4.1. Critical. 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
- f. Use accredited laboratories capable of detecting contaminants at levels below

The company has developed a program to systematically monitor changes in water quantity and quality since 2011, as presented in the evidence, including a Water Resources Management Plan (January 2023), three monitoring reports (2022), and the information was confirmed through interviews with a sample of key staff and stakeholders:

a) Monitoring locations at appropriate sites to provide reliable information, as follows:

Water Quality – 15 stations (for Várzea do Lopes) and 11 (for Leste-Norte) in surface water, some stations (three) are shared between them. Besides, there are four groundwater quality monitoring stations (replacement water to rivers - in Várzea do Lopes). Samples are collected and analyzed for a variety of physical, biological, and chemical parameters. The number of analyzed parameters is around 37.

Water Quantity – 23 in surface water, and 10 in groundwater (piezometers and wells – levels measurements). In addition a Water Management Program Summary (May 2023) indicates water quantity monitoring campaigns have been conducted in 2016 and 2021 at streams in and around the mine site, including communities. Besides surface water and groundwater, the company maintains information on precipitation.

b) Sample on a frequent enough basis to account for seasonal fluctuations. According to the evidence, the frequency of quality is monthly for Leste-Norte and quarterly for Várzea do Lopes. The frequency of quantity is monthly.

c) Has trigger levels or indicators of negative impacts to align with permit requirements. Quantity: for the levels in piezometers and flows in rivers/springs there are tendency graphs to detect changes in time. Quality: the results are compared to the limits established by local regulation (COPAM/CERH no 01/2008 and COPAM/CERH no 08/2022).

d) Not relevant, mine affected water is not destined for reuse by non-

the values in the IRMA Water Quality Criteria by End-Use Tables.

mining entities.

e) Use of credible methods and appropriate equipment operated by competent professionals to measure water characteristics reliably. The company uses Standard Methods and as reference the normative NIT-DICLA 057 of the National Institute of Metrology, Quality and Technology – Inmetro, as well as ABNT NBF ISO/IEC 17025:2017. For flow measurements in surface water a micro-pinwheel (brand Rickly) is mainly used, or volumetric method and readings in spillways as necessary; water level in piezometers/wells measured using an electrical probe.

f) Analysis is conducted at external, accredited laboratories capable of detecting contaminants at levels below the values defined by Brazilian legislation. The water quality monitoring is conducted by Ecoar Monitoramento Ambiental, with its laboratory accredited by Coordenacao Geral de Acreditacao, according to ISO/IEC 17025 (<https://ecoarma.com.br/infraestrutura-e-qualidade/>).

The evidence does not include:

- groundwater quality monitoring results from a selection of wells and springs as in requirement a.
- provisions for sampling during or after extreme weather events as in requirement b.
- water quality analysis detection limits (capable of detecting contaminants at levels below the values in the IRMA Water Quality Criteria - Tables 4.2a and 4.2.d (see section 4.2.3.3) as in f.

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

The evidence, a Water Resources Management Plan for the Várzea do Lopes Complex (January 2023), and a sample of surface water and effluent monitoring data (Monthly Quantitative Monitoring Report, May 2022, Water Monitoring Technical Report, 1st Half 2022, Hydrogeology Monthly Quantitative Monitoring Report January 2023, facility water monitoring programs and laboratory results), indicates parameters that may have a reasonable potential to adversely affect current and future water uses are analyzed. Approximately thirty-

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.

seven (37) parameters are analyzed on a regular basis including thermotolerant coliforms, oil and grease, DBO, DO, turbidity, color, pH, suspended solids, dissolved solids, soluble aluminum, chloride, soluble iron, fluoride, total manganese, nitrate, nitrite, ammoniacal nitrogen, sulphates, phenols, anionic surfactant, alkalinity (carbonates, bicarbonates), total aluminum, calcium, conductivity, total iron, phytoplankton, total magnesium, soluble manganese, potassium, silica, sodium, temperature, zoobenthos, DQO, and fecal enterococcus, streptococcus, and total coliform bacteria appropriate for the operation. A report on the Compilation and Synthesis of Hydrogeological and Hydrological Monitoring Data, Inventory of Springs and Register of Water Users in the Region of the Várzea do Lopes Mine (January 2017) indicates that a hydrochemical characterization of water was undertaken in 2016 indicating that bicarbonate, nitrite, dissolved cadmium, mercury, and silver, were below the quantification limit.

Monitoring profiles of the Leste-Norte operation considered an abbreviated constituents list specific to common effluents found in surface water discharges, i.e., pH, temperature, settled solids, hydrocarbons, oil and grease, DBO, anionic surfactants, phenols, thermotolerant coliforms, and turbidity (Water Monitoring Technical Report, Várzea do Lopes East-North Mine, 1st Half 2022).

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



Does not meet. The evidence, a presentation on the site's Water Management Program (May 2023), indicates that the company has solicited stakeholder's input on mapping of waterbodies around the mine site in 2022 and has informed stakeholders about its water management practices as part of the Environmental Education Program (PEA).

The evidence does not provide details to confirm that it has solicited stakeholder participation on water quality monitoring associated with the Várzea do Lopes operation.

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.

- 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.

This requirement was assessed for the IRMA Initial audit and subsequently reassessed for the IRMA CAP Verification. The initial audit findings are described first, followed by the CAP assessment. The rating reflects the new CAP assessment.

Initial Audit Findings:

An adaptive management plan (AMP) for water is a tool that provides a structured, iterative process to reduce uncertainty over time via system monitoring. The company has developed a water management plan (Water Resources Management Plan for the Várzea do Lopes Complex, January 2023) that seeks to detect groundwater and surface water quality and quantity changes around and downgradient of the Várzea do Lopes operation and sediment containment pond. The plan includes monitoring of surface water and groundwater (water chemistry, physical characteristics and biological monitoring), and seasonal variation in water table elevation and surface water flows. Gerdau's water management plan includes a general statement relating to predicted impacts (page 59), as well as an implementation schedule (Section 5.3.5).

Interviews with company personnel responsible for water management and monitoring provided examples of AMP implementation in which mitigations took place to address predicted impacts from intense rain such as reducing sediment in surface water runoff such as revegetation, containment, treatment, and drainage structures (for the project Várzea do Lopes Leste-Norte).

The information provided by the company does not include evidence of AMP implementation or the effectiveness of the management

system to inform decision making and improve outcomes such as:

- a. a list of planned actions in place to mitigate predicted impacts to surface and groundwater including significant predicted risks to water resources (surface, potable, groundwater) related to the mining project or discussed with stakeholders (i.e., related to water quality or quantity for current and future uses); and
- b. trigger levels or thresholds; specific actions to be taken if proposed mitigation measures are not effective or predefined thresholds or trigger levels are exceeded; and responsibilities and timelines for mitigation completion.

CAP Findings:

After the IRMA Initial Audit, the company developed a comprehensive Adaptive Water Management Plan (AWMP) (Water Services and Technologies, July 2024), a guiding document for managing water resources, that outlines planned actions to prevent and mitigate both current and future impacts on water quality and quantity, and related management systems for the Mina Várzea do Lopes project. The AWMP, informed by hydrological, hydrogeological, hydrochemical studies, baseline water data, and flow directions, considers water sources and uses for the Do Silva Stream and the Pedra Vermelha Creek watersheds and includes water balance. This data enables the company to understand current water characteristics, predict future scenarios, and identify both natural and operational sources of potential impacts. The AWMP is supported by operational-level procedures and incorporates key policies and roles. The evidence provides information to confirm that the company has:

- a. developed specific preventative mitigation actions and monitoring programs for surface and groundwater impacts (AWMP, Chapter 15), supported by procedures that define mitigation strategies for:
 - Sediment Runoff: Monitoring of stormwater management effectiveness by drone (Drainage Inspection by Drone procedure, November 2022), preventative procedures for sediment control from roads (Procedure to Clear the Access Road to BR040, Laydown Yards and Settlement Basins, June 2024) and operational areas during the

rainy season (Preparation for Rainy Season at the Mine Guidance Plan, May 2024). The latter is implemented annually as indicated by action plan implementation trackers and photos of mitigation actions (P3C Control Plan, no date; P3C Presentations, 2023 and 2024).

- Aquifer (water table) lowering and groundwater use: The company utilizes a water flowchart and the software Visual Water Balance (VWB) to track all water inputs and outputs (Final Report: Operational Water Balance 642.R – VWB Implementation at Gerdau, August 2024), as well as total water use, consumption, and water recycling and reuse. Procedures for Water Balance Determination (Mine Water Balance, July 2024) and Water Meter Readings and Inspections (Hydrometer Readings, Monitoring, and Inspections of Groundwater Level Lowering System Replacements, June 2024) indicate appropriate monitoring of dewatering systems and compliance with permits.

- Interviews with key personnel indicated that the beneficiation process at the Várzea do Lopes Mine is carried out through dry processing, which eliminates the need for water in the ore processing circuit and reduces overall water use on site.

b. established trigger levels and updated its adaptive management plans with specific actions to be taken if proposed mitigation measures are not effective or predefined thresholds or trigger levels are exceeded along with responsibilities and timelines for their completion. The Management of Risks, Environmental Aspects and Impacts procedure (April 2024) outlines measures to respond to high-risk environmental incidents and defines actions such as developing and implementing corrective measures and reporting to stakeholders. Supporting procedures include the Incident Procedure (September 2024) and PSIF-E Procedure (August 2024), which detail timelines for investigation, reporting, correction, and preventive measures.

The company conducts regular water quality and quantity monitoring of surface water bodies and springs upstream and downstream of the mine and effluents, in line with its Water and


Effluent Monitoring Action Plan (Table 16-1, AWMP). A review of the Technical Report, issued by Gerdau (January 2025), addressing Condition No. 5 of Corrective Operating License No. 109, confirms that the water quality monitoring program has been implemented. Water quality monitoring data is assessed against established baseline measurements and applicable regulatory standards (Environmental State Agency Joint Normative Deliberation No. 01/2008 for effluents and surface water, and Federal Environmental Agency Resolution No. 396/2008 for groundwater) (AWMP, Ch. 7).




Rainfall data, along with water quality and quantity monitoring results, is integrated into the Hydro GeoAnalyst (HGA) software, which the company utilizes to track and analyze temporal trends in water characteristics. Precipitation data is further used to contextualize observed short-term variations in water quality and quantity, supporting a comprehensive understanding of hydrological dynamics and water quality in the area, as confirmed through interviews with key staff.


Trigger levels for effluents, surface water bodies, and groundwater springs are defined in the Environmental Monitoring Procedure (July 2024) for both field measurements (e.g., pH, dissolved oxygen, turbidity) and laboratory parameters. Each trigger level is tied to specific response actions with timelines for immediate, post-corrective, or next-monitoring cycle interventions. For ponds and sumps, trigger levels and associated action plans are prescribed in the Inspection of Ponds and Sumps Procedure (November 2023). Operations resume only when water quality is within acceptable limits.

Corrective actions are also required if water quantity monitoring (Watercourse Flow Monitoring, March 2023; and Groundwater Level and Piezometer Monitoring, November 2022) indicates significant deviations.

A recent incident report (UNC-11820; June 28, 2024) and past incidents between 2022 and 2023, described in AWMP Ch. 9.1, indicate that these procedures are implemented, as identified anomalies in water characteristics triggered the immediate


	<p>implementation of mitigation actions.</p> <p>The company has established trigger levels and response actions for community water sources (e.g. supplemental water supply, pipe repairs or supply infrastructure, the use of water trucks and Integration into the operational unit's water network, in specific cases) as outlined in the General Management Procedure for Water Supply of the Community (March 2024).</p> <p>The evidence indicates the company has implemented an adaptive management plan to prevent impacts to water characteristics and address changes in water quality and quantity across surface water bodies, groundwater springs, effluents, and community drinking water supplies, as well as changes in groundwater quantity at piezometers.</p> <p>The adaptive management plan does not provide sufficient details on how groundwater quality changes will be detected without water quality monitoring from groundwater monitoring wells or piezometers, making it unclear if potential impacts (e.g., seepage) would be identified at surface springs around the mine, which may not fully represent groundwater quality due to potential mixing, surface influences, and complex flow dynamics.</p> <p>Onsite observations and interviews with stakeholders are needed during the surveillance audit to assess whether the company has implemented response actions in case trigger levels were reached.</p>
<p>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.</p>	<p> The company developed a water management plan (Water Resources Management Plan, January 2023) in early 2023. The last full water resources review was conducted in September 2019 as presented in the evidence (GMA-PGG-010-014, Section 4.10.1 - Analysis and Registration of Results, September 2019). Interviews with the company and a screenshot of its software (Portal da Rotina Gerdau (PRG), May 2023) indicates that mitigation actions to address identified impacts to surface water quality are reviewed continuously by following mitigation actions until resolution.</p>

		The evidence does not include information to confirm the company conducts a review of its adaptive management plan effectiveness specific to groundwater or aquatic ecosystems every 12 months.
4.2.4.6	Community stakeholders shall be provided with the opportunity to review adaptive management plans and participate in revising the plans.	 <p>Does not meet. The company has not provided stakeholders the opportunity to review and participate in revising the adaptive management plan.</p>
4.2.5.1.	<p>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:</p> <p>a. Monitoring data for surface water and groundwater points of compliance; and</p> <p>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.</p>	 <p>The company has published baseline data for its new project (Environmental Impact Assessment - Várzea do Lopes Mine Continuity of Operations Project, August 2018; and Environmental Impact Assessment - Várzea do Lopes Leste-Norte, January 2017) and has made it accessible on the website of the local environmental government authority. The company has also published monitoring data for surface water quality at points of compliance (Water Monitoring Technical Report Mina Várzea do Lopes Leste-Norte 2nd Half, 2020) on the website of the local environmental authority. This website, including the baseline and monitoring data, is accessible for public.</p> <p>The evidence, as well as interviews with a sample of potentially affected stakeholders (i.e., living closest to the mine or in affected areas), does not include monitoring data of groundwater quality, water quantity, or volume of water extracted/pumped or discharged for mining operations, or details to confirm that the published monitoring reports are updated annually.</p>
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	 <p>The company has a written procedure to report environmental emergencies including water-related emergencies (External Handling of Environmental Events, October 2021). This evidence includes a flowchart of the communication chain that is initiated when an emergency has happened. The company also provided its Emergency Response Plans for Várzea do Lopes and Várzea Leste Norte (October 2017 and January 2023) that cover any emergency on</p>

<p>health or safety, or commercial or natural resources.</p>		<p>site including general impacts on the environment such as caused by chemical spills, which may alter water quality and put people's physical health at risk (Ch. 5.21 and 5.13).</p> <p>The evidence does not include technical descriptions of potential emergencies related to water quality or quantity, actions taken when trigger levels are exceeded, or details to confirm that procedures are shared with relevant stakeholders (e.g., public safety agencies, first responders, etc.).</p>
<p>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.</p>		<p>Does not meet. The evidence, Environmental Education Program (2020), indicates the company has presented water quality management strategies (e.g. operational water flowchart, water abstraction sources, water reuse, water use, and environmental controls such as monitoring and stormwater management) as outlined in a presentation (Presentation used to talk about Water Management in Mining, no date, 13 pages) to relevant stakeholders. The evidence indicates that there were 15 participants, including inhabitants of Ouro Branco, Congonhas, Lafaiete, Itabirito and Ouro Preto.</p> <p>The evidence, as well as interviews with a sample of potentially affected stakeholders (i.e., living closest to the mine or in affected areas), does not include a log of participants in this meeting (i.e., names, locations, contacts) or topics covered to indicate that the company discusses water topics (quality, performance) specific to the Várzea do Lopes Mine with stakeholders on an annual basis (including communities, authorities, other stakeholders).</p>

Chapter 4.3—Air Quality

Basis for rating

<p>4.3.1.1. The operating company shall carry out air quality screening to determine if</p>		<p>The company carried out air quality screening to determine if there may be significant air quality impacts associated with mining-related</p>
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there may be significant air quality impacts associated with its operations.

emissions such as ore processing, dust from roads and other mining-related activities (i.e., detonation, transfer points, waste rock dumping), as evidenced in the pollutant transport and atmospheric dispersion study (July 2021, p.62 - 63) and the Environmental Impact Assessment (EIA) for the Operational Continuity Project of the Várzea do Lopes Mine (August 2018). The atmospheric screening exercise identified the main wind direction (from the east blowing to the west) and the presence of other sources of air pollution such as traffic on highways and dirt roads, or other iron ore mine operations near the Várzea do Lopes Mine. The EIA presents air quality impacts to the environment and communities from construction within the direct and indirect area of influence to be of medium magnitude due to its temporary and reversible nature. The atmospheric dispersion study and the EIA (Item 8, p. 43 to 49) presents the calculated Particulate Matter (PM10) and Suspended Particulates (PTS) results to be below maximum allowable air quality limits as defined by national legislation CONAMA Resolution No. 491 of November 2018. The models and calculations used for the dispersion model are approved by the U.S. EPA.

Observations of airborne dust reported by community members in records of filed complaints and in onsite interviews from a sample of stakeholders to the west of the operation suggest that impacts to downwind receptors have not been fully considered.

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, the ESIA for the Várzea do Lopes Mine Leste-Norte Project (January 2017, page 217) and the ESIA for the Várzea do Lopes Mine Continuity of Operations Project (August 2018, page 207), indicates that the company has established a baseline for air quality in the mine's area since 2017, and that the company has implemented continuous monitoring as part of the site's operational control of its daily air quality impacts.

The mining operation at Várzea do Lopes commenced in 2017. No evidence has been provided for baseline air quality prior to mine construction, such as previous studies of air quality in the region or

		estimates of what the air quality would have been prior to mine development through air quality modeling.
4.3.1.3.	<p>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.</p>	<p>The evidence, a pollutant transport and air dispersion study (July 2021), and air quality testing results (Monitoring of TSP and Respirable Particulate PM 10 and PM 2.5, July - December 2021, and January , 2022) indicates that the company continues to take steps to assess the significance of potential impacts from mining-related air emissions to comply with legislation. The study considered 961 model points across an area of 506.25 km² capturing the mine area as well as data from two monitoring points at Condomínio Aconchego (P01) da Serra and one at a local's house near the company (P02) to simulate air pollution concentrations. The simulations predicted that 24-hour and annual means of air pollution will remain below legal thresholds as defined in CONAMA Resolution No. 491 of November 2018.</p> <p>Dispersion modeling predictions are complemented by 24-hour air quality sampling for particulate matter, total suspended particulate (TSP) and PM₁₀, at three locations: one monitoring station at the Condominium Complex Aconchego da Serra (P01), one at the business service Restaurante Mirante da Serra (P03), and one at the Condominium Complex Vila Bella (P04). Information gathered from the air samplers (climate conditions, flow rate, duration) and lab analysis is reported and used by the company to assess the maximum daily concentration of TSP and respirable particulate matter (PM₁₀). The predictions and sample of monitoring results reviewed indicate compliance with local legislation.</p> <p>The placement of air samplers, analysis, and supplemental meteorological information in the evidence sample does not allow for estimates on the operation's contribution to down-wind receptors as determined by the difference in upwind (background) concentration and downwind concentration of particulate matter to assess potential adverse impacts significance as reported in interviews with a sample of interested stakeholders.</p>

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 evidence, an atmospheric dispersion study (July 2021), indicates that the assessment was prepared using the AERMOD pollutant dispersion model, which is a widely accepted (e.g. by the U.S. EPA) and documented methodology. The AERMOD model considers concentrations, transport and dispersion of air contaminants and the underlying mathematical model tends to produce conservative estimation results.

As indicated in the air quality monitoring report (Air Quality Monitoring Technical Report, July 2022), air quality is monitored using three monitoring stations in the surrounding communities, each equipped with a high-volume air sampler coupled with a fine particle separator to detect particulate matter PM10 and PM2.5. . Two monitoring stations (24-hour air samplers) are located north of the Várzea do Lopes operation and one monitoring station is located to the south.

The evidence does not include parallel measurements up-wind and down-wind of the active operation and analysis of particulate matter concentration to confirm the site's contribution to local air quality considering topography, prevailing wind direction (to the west), seasonality and moisture content of the land surface (wet, humid, dry), and receiving bodies (i.e., communities, habits, biodiversity, ecological services). Interviews with a sample of stakeholders, including those located west and south of the mine, indicate dust is an ongoing concern.


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 measures to avoid, and where that is not possible, minimize adverse impacts on air quality.

The evidence, Dry Period Preparedness Plan (2023), is an action item tracker, indicating that the company has developed, maintained and implemented an air quality management plan that documents measures to avoid, and where that is not possible, minimize adverse impacts on air quality.

The evidence a. to d. as listed below, supports this finding as follows:

- a. Air Quality Monitoring Program (January 2023) determines the frequency of air quality measurements;
- b. Air Quality Monitoring Technical Report (January 2022) lists the air

		<p>quality measurements taken July -December 2022, with none of them exceeding national legislation CONAMA Resolution No. 491 of November 2018;</p> <p>c. observations of management systems in practice during the site visit and management team and worker (water truck operator) interviews;</p> <p>d. Dry Period Plan 2021 shows pictures of the implemented measures taken such as road irrigation and vegetation of slopes.</p> <p>The evidence indicates air quality management strategies (i.e., avoidance, vegetation, roadway watering and maintenance, processing controls, visible emissions observations, etc.) outlined in the Dry Period Preparedness Plan are being implemented at the site-level. Dust is an ongoing concern by stakeholders (see 4.3.1.3). Although the air quality management plan includes dust control measures, gaps in monitoring (e.g., lack of parallel upwind and downwind measurements and particulate matter analysis, see 4.3.1.4) may not be adequately characterizing dust impacts in communities.</p>
4.3.2.2	Air quality management strategies and plans shall be implemented and updated, as necessary, over the mine life.	<p>Strategies outlined in the management plan are being implemented, as indicated in the action item tracker, the Dry Period Preparedness Plan - 2022 (January 2023), and photographs of the results shown in the Dry Period Preparedness Plan (P³S) – 2022 (2022).</p> <p>The ESIA's, which are conducted with each amendment of the mining project, include air quality studies to capture added or reduced sources of air emissions and offer suggestions on how to prevent and/or remedy these impacts as indicated in:</p> <ul style="list-style-type: none"> -Várzea do Lopes Leste-Norte Project (January 2017), p. 707 -Corrective Installation License for the Sterile Pile PDE-01 (September 2017), p. 553 -Operational Continuity Project of the Várzea do Lopes Mine (August 2018), p. 560.
4.3.3.1.	The operating company shall monitor and document ambient air quality and	<p>The evidence, Air Quality Monitoring Technical Report (January 2022), includes Annex A - Certificate of Accreditation (December 14, 2020)</p>

<p>dust associated with the mining project by using personnel trained in air quality monitoring.</p>		<p>and Annex D - Annotation of Responsibility Technique (July 2021). Both certificates, as well as interviews with key personnel, indicate that the company monitors and documents ambient air quality and dust from the mining project and that the monitoring is carried out by appropriately trained personnel.</p>
<p>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.</p>		<p>The evidence, Air Quality Monitoring Technical Report (January 2022), indicates that the company implemented monitoring points in surrounding communities (chapter 5.2, p. 8) including two (2) monitors to the north, and one (1) to the south. The placement is in accordance with the air quality model as informed by the pollutant transport and atmospheric dispersion study (ENGEAR Consultoria LTDA, July 2021, chapter 7.3.2., p. 45), and informed by the ESIA for the Várzea do Lopes Mine Continuity of Operations Project (August 2018). The results of air quality monitoring are submitted every six months to the environmental agency for review as indicated by a sample of a compliance report from January 2023. Documented stakeholder grievances and a sample of stakeholders interviewed report significant impacts to air quality west of the mine. The evidence, including interviews with the company and their stakeholders, does not include details to confirm the company has established monitoring points down-wind of the operation considering primary, unpaved transportation routes to assess their contribution to air quality impacts at communities west of the mine to determine compliance.</p>
<p>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:</p> <p>a. If a mine is located in an airshed where baseline air quality conditions</p>		<p>Not scored. Per IRMA guidance this requirement can be marked "not scored" if the company does not follow EU emissions standards. The company complies with host country air quality standards, established by the national law CONAMA Resolution No. 491 of November 2018 and by the values contained in federal regulation (COPAM Resolution No. 01, of May 26, 1981), without considering the standard values of the European Union.</p>

meet EU Standards, but emissions 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 airshed 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 airshed 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:


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;

b. Where compliance is met for host country standards but the mine experiences a residual risk related to its

Not scored. Per IRMA guidance this requirement can be marked "not scored" if the company does not follow EU emissions standards. The company complies with host country air quality standards, established by the national law CONAMA Resolution No. 491 of November 2018 and by the values contained in federal regulation (COPAM Resolution No. 01, of May 26, 1981), without considering the standard values of the European Union.

The air quality monitoring program includes the following parameters:

- Total Suspended Particles (TSP)
- Inhalable Particles (MP10)
- Breathable Particles (MP2.5)
- Smoke
- SO²

<p>air emissions, then more stringent international best practice standards shall apply;</p> <p>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</p> <p>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.</p>		<ul style="list-style-type: none"> - CO - O³ - NO² - Pb.
<p>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 the operating company shall utilize best available practices to minimize dust contamination.</p>		<p>Not scored. Per IRMA guidance this requirement can be marked "not scored" if the company does not follow EU emissions standards. The company complies with host country air quality standards, established by the national law CONAMA Resolution No. 491 of November 2018 and by the values contained in federal regulation (COPAM Resolution No. 01, of May 26, 1981), without considering the standard values of the European Union.</p>
<p>4.3.5.1. The operating company shall ensure that its air quality management plan and compliance information is up-to-date and publicly available, or made available to stakeholders upon request.</p>		<p>The environmental control plan for the Operational Continuity Project of the Várzea do Lopes mine (August 2018, p. 60), indicates that the mine's air quality management plan was last updated in August 2018. Interviews with personnel and review of documentation indicate that the document is publicly available on the environmental agency website and made available to</p>

stakeholders upon request. Note that no stakeholder requests have been made. The company would provide the following link if a stakeholder requested such information:
https://gerdaucldmy.sharepoint.com/:b/g/person/filipe_costa_gerda_u_com_br/ESTKKCjAomRIsirLuj2Asn4BucLF2Uh6U1HZznKVL-_AoA?e=9uPdr3.

The evidence includes a sample of semi-annual air quality monitoring reports (Air Quality Monitoring Technical Report, July and December 2022) indicating that the company maintains updated records of air quality measurements and compliance information.

The evidence describes the means available to stakeholders to access air management and air quality monitoring data or reports routinely provided to agencies (i.e., bi-annually).

Accessibility to stakeholders will be reassessed during the surveillance audit.

Chapter 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 also 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, Environmental Noise Measurement Report (November 2016), included in Annex 9 of the Environmental and Social Impact Assessment (ESIA) for the Corrective Installation License for the Sterile Pile PDE-01 (September 2017), indicates that the company has carried out screening to determine if offsite noise receptors, including wildlife, may be significantly impacted by the mine's noise and mining-induced vibrations. The screening parameters included are in accordance with the maximum allowable noise limits, as defined by national legislation (Law No. 10,100, of January 17, 1990 of the Minas Gerais State).

The evidence, Vibration Characterization Report (March 2015), a sample of Technical Reports (multiple versions issued since June 2015

	<p>until March 2016), and a sample of Seismographic Monitoring Reports (multiple versions issued since July 2016 until February 2017) included in Annex 10 of the ESIA for the Várzea do Lopes Mine (August 2018), indicate that the company has carried out screening to determine if offsite vibration receptors may be significantly impacted from mine-related vibrations. The screening parameters included are in accordance with the maximum allowable vibration limits, as defined by Brazilian Technical Standard ABNT NBR 9653:2018.</p>
<p>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.</p>	<p>The evidence, a screening done in conjunction with the most recent ESIA for the Várzea do Lopes Mine (August 2018), identified potential human receptors for mining noise, as follows: Condominium complex - Monitoring Point 01 (Condomínio Aconchego da Serra), Business Service - Monitoring Point 02, Condominium complex - Monitoring Point 03 (Condomínio Vila Bella), Private Property - Monitoring Point 06 and Business services - Monitoring Point 07 (Restaurante Mirante da Serra). These are condominium complexes and business services along highways and roads, and do not include hospitals and schools, as the mine is not located in an urban residential area.</p> <p>The evidence, samples from the Sound Pressure Levels Monitoring Technical Report (dated January 2023 and July 2023), indicate that baseline ambient noise levels at both the nearest and relevant offsite noise receptors were measured at appropriate locations. These measurements were documented in compliance with the maximum allowable noise limits defined by national legislation (CONAMA Resolution No. 001 - March 8, 1990 and Brazilian Technical Standard ABNT NBR 10151: 2019).</p> <p>The evidence, a sample of Seismographic Monitoring Report (multiple versions issued from January to August 2022), indicates that operating company's screening identified potential human receptors and the mine documented baseline ambient vibration levels at both the nearest and relevant offsite vibration receptors. The parameters included are in accordance with the maximum allowable vibration limits, as defined by Brazilian Technical Standard ABNT NBR 9653:2018.</p>



<p>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 that alternative hours are necessary and/or appropriate because of local, cultural or social norms.</p>		<p>The company measures noise levels associated with the mine on a regular basis at five nearby receptors (4 in a residential area and 1 in a commercial area; the monitoring takes place during the day and night under varying operating conditions). The evidence, a sample of Sound Pressure Levels Monitoring Technical Reports (multiple versions, reflecting data from July 2021 to December 2022) indicates that mining-related noise levels are within allowable limits in accordance to the thresholds established in the Standard IFC Environmental, Health and Safety General Guidelines (IFC, 2007, p. 53), the IRMA Standard and legal requirements defined by national legislation (CONAMA Resolution No. 001 of March 8th, 1990, and Brazilian Technical Standard ABNT NBR 10151: 2019). Instantaneous readings can trigger readings above thresholds due to high winds, a car driving by, and this occurred three times in the evidence (July 2021-December 2022).</p>
<p>4.4.2.2 The following exceptions to 4.4.2.1 apply:</p> <p>a. If baseline ambient noise levels exceed 55 dBA (day) and/or 45 dBA (night), then noise levels shall not exceed 3 dB above baseline as measured at relevant offsite noise receptors; and/or</p> <p>b. During periods of blasting, the dBA levels may be exceeded, as long as the other requirements in 4.4.2.4 are met.</p>		<p>Not relevant. The evidence, a sample of Sound Pressure Levels Monitoring Technical Reports (multiple versions, reflecting data from July 2021 to December 2022), indicates that baseline ambient noise levels do not exceed 55 dBA (day) and/or 45 dBA (night).</p>
<p>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</p>		<p>Not relevant. Screening has identified more sensitive noise receptors than industrial or commercial noise receptors that may be affected by the mining-related noise (see requirement 4.4.1.2). The evidence, a sample of Sound Pressure Levels Monitoring Technical Report (multiple versions, issued from January 2022 to January 2023),</p>




	industrial or commercial receptor shall not exceed 70 dBA.		indicates that the noise from mining-related activities does not exceed 70dBA at the mine boundary.
4.4.2.4	<p>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:</p> <p>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;</p> <p>b. Blasting shall only occur during the hours of 09:00 to 17:00, on traditionally normal working days; and</p> <p>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.</p>	●	<p>The evidence, a sample of Seismographic Monitoring Reports (multiple versions, issued from January until August 2022), indicates that air blast overpressure, blasting hours, and ground vibration fulfill the following conditions:</p> <p>a. maximum level for air blast overpressure between 115.4 dB and 120 dB (Lin Peak), and did not exceeded on more than 5% of blasts over a 12-month period;</p> <p>b. blasting occurring between 3:20 pm and 4:20 pm on traditionally normal working days; and</p> <p>c. ground vibration (peak particle velocity) between 1.73 mm/second and 3.37 mm/second, which is also in compliance with federal legislation (Brazilian Technical Standard ABNT NBR 9653:2018).</p>
4.4.2.5	<p>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:</p> <p>a. There are no nearby human noise receptors that will be impacted by blasting noise or vibration;</p> <p>b. Alternative hours are necessary and/or appropriate because of local,</p>	—	Not relevant. The operating company complies with item 4.4.2.4.b.



	cultural or social norms; and/or	
	c. Potentially affected human receptors have given voluntary approval for the expanded blasting hours.	
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 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.	Not relevant. The evidence, the company's grievance log (Manifestations Gerdau 2022-2023), indicates that the company has not yet received any noise or vibration related complaint through their grievance mechanism.
4.4.2.7	All noise- and vibration-related complaints and their outcomes shall be documented.	Not relevant. The evidence, the company's grievance log (Manifestations Gerdau 2022-2023), indicates that the company has not yet received any noise or vibration related complaint through their grievance mechanism.
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.	Not relevant. See (4.4.2.6). The evidence, the company's grievance log (Manifestations Gerdau 2022-2023), indicates that the company has not yet received any noise or vibration related complaint through their grievance mechanism. Interviews with a sample of potentially affected stakeholders (i.e., living closest to the mine or in affected areas), does not indicate noise or vibration are an issue to them.

Chapter 4.5—Greenhouse Gas Emissions

Basis for rating


<p>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:</p> <ul style="list-style-type: none"> 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. 		<p>The evidence, Gerdau Sustainability Policy (February 2022), indicates that the company has a greenhouse gas policy that meets the sub-requirements a through d, as follows:</p> <ul style="list-style-type: none"> a. Identified and measured greenhouse gas emissions from the mining project through an annual GHG inventory, information management is carried out through the Climas software available on the internet; b. Identified energy efficiency increase and greenhouse gas reduction opportunities and prepared proposals for reducing greenhouse gas emissions based on studies of the MACC curve - Roadmap for Reducing Energy Consumption and CO2 Emission for Gerdau Brazil Plants (Rev. 1, May 2022) and includes some of the opportunities in the Gerdau Sustainability Policy (February 2022, Ch. 5.1.5, p. 2); c. Has set significant and achievable targets for reductions in absolute greenhouse gas emissions across the company, with the assumed targets to reduce greenhouse gas emissions by 2031, in accordance with the Gerdau Sustainability Policy (February 2022, Ch. 5.1.4, p. 2); d. Reviewing the procedures every two years or whenever necessary, according to the Normative Document for Policies and Guidelines (Rev. 8, February 2021, p. 2).
<p>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</p>		<p>The company's accounting of GHG emissions for the Várzea do Lopes site complies with internationally accepted reporting standards such as the Greenhouse Gas Protocol Corporate Standard and the Global Reporting Initiative's standard as indicated by evidence GHG Inventory Verification Report (December 2022). The evidence</p>

Global Reporting Initiative's GRI 305 emissions reporting standard.		includes screenshots of the Climas software in evidence Summary of Evidence (August 2023), as well as interviews with key personnel, indicating that GHG emission data for the site is updated monthly and that a detailed inventory of greenhouse gases such as carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, etc. is maintained for scope 1 and scope 2 emissions.
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.		<p>The evidence, Gerdau Sustainability Policy (February 2022, Ch. 5.1.3, p. 2), indicates that the company has set a reduction target in carbon intensity from 0.93 t CO₂e/t steel (base year 2020) to 0.83 t CO₂e/t steel (target year 2031), regarding Scope 1 and Scope 2 emissions. The public report Gerdau Annual Report 2021 (July 2022) indicates that the company implements actions to reduce its emissions (pp. 93, and 120-129).</p> <p>The evidence did not include a GHG emissions reduction plan specific to the site to achieve its targets.</p>
4.5.3.2 The operating company shall demonstrate progress toward its greenhouse gas reduction targets.		<p>The evidence, Gerdau Annual Report 2021 (July 2022, p. 123), indicates progress toward its greenhouse gas reduction targets for scope 1 and scope 2 emissions with a reduction of 0.03 tCO₂e/t of steel produced from year 2020 to 2021. The evidence lists current emissions and GHG reduction measures on pp. 120 - 129 and indicates on p. 93 that Gerdau has agreed with the Gas Company of Minas Gerais (Gasmig) to use gas-powered trucks at the mine. According to this report they already have one test vehicle on site, which produced favorable results in reducing GHG emissions.</p>
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.		<p>The evidence, MACC curve study - Roadmap for Reducing Energy Consumption and CO₂ Emission for Gerdau Brazil Plants (Rev. 1, May 2022 by Hatch Ltd., pp. 29 - 30), indicates that the company has documented strategies to reduce greenhouse gas emissions from the mining project such as reducing energy and diesel consumption.</p>

4.5.4.1. The greenhouse gas policy shall be publicly available.		The company's greenhouse gas policy is publicly available on their website: https://ri.gerdau.com/governanca-corporativa/estatuto-codigos-e-politicas/
4.5.4.2 On an annual basis, the operating company or its corporate owner shall:a. 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; and efforts taken to reduce emissions from the mining project and mining-related activities; and(Note: sub-requirement 4.5.4.2.a is not included in the self-assessment rating).b. Publicly report on mine-site-level or corporate-level greenhouse gas emissions, progress towards greenhouse gas reduction targets and efforts taken to reduce emissions.		The company produces annual public sustainability reports, that:a. are publicly available at: https://www2.gerdau.com.br/sustentabilidade/#sust-Anual-Report ; b. include Gerdau's progress towards corporate-level greenhouse gas reduction targets, showing a reduction of 0.03 tCO ₂ e/t of steel produced, comparing the emissions of the year 2020 with 2021 as indicated in the evidence, Gerdau Annual Report 2021 (July 2022, p. 123). The evidence also includes efforts taken to reduce emissions throughout the corporation (p.93 and pp.120 - 129).

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, ESIA for the Várzea do Lopes Leste-Norte Project (January 2017), prepared by a team of external specialists and qualified in the screening, assessment and responsible management of biodiversity and ecosystem services; CVS with qualifications of company representatives responsible for operational-level monitoring, biodiversity plan implementation and mitigation; and interviews with key personnel, indicates the company has in place the appropriate education, experience, skills and training for the
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		<p>project, and their assessment, monitoring, and management methodology are consistent with best practice. The ESIA report lists names, specialties, license number (credentials) and project accountabilities of the multidisciplinary team, including archeologists, agronomists, biologists, environmental, civil, chemical and forest engineers, geologists, geographers, and sociologists.</p> <p>The evidence does not include the CVs of the environmental team to confirm that the team has relevant education, knowledge, proven experience, necessary skills and training.</p>
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.	<p>The evidence, a presentation from a public hearing in Moeda (April 2019), indicates that the company shared information of collective interest with stakeholders, including the mining project's production area, preserved areas, certain aspects of the company's environmental compensation measures, and some data on investments and preservation efforts near the affected area.</p> <p>⊗ The evidence does not include a participant log or documentation that identifies the stakeholder group or records their feedback. It is not possible to confirm that biodiversity, ecosystem services, and protected areas screening, assessment, and management planning, including mitigation and monitoring, were developed in consultation with stakeholders. Interviews with a sample of people living in the area of the mine indicate that this topic is considered important.</p>
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.	<p>⊕ The evidence, environmental authority licensing website link and interviews with stakeholders and company representatives, including those at the Germinar Biodiversity Center, indicates the company prioritizes community education for biodiversity management. Outreach occurs through events at the Germinar Biodiversity Center such as training local teachers in important biodiversity values and including students in research.</p> <p>The evidence does not indicate that information on ecosystem</p>

		services, protected areas, and management plans is publicly available to project stakeholders.
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.	<p>Várzea do Lopes is an existing mine. The company carried out a screening process which included a formal biodiversity assessment to establish a preliminary understanding of the impacts and risks to biodiversity for projects planned or underway. The evidence includes several recent environmental impact assessments (EIAs):</p> <ul style="list-style-type: none"> • Várzea do Lopes Mine East-North Project (January, 2017) • Corrective Installation License for the Sterile Pile PDE-01 (September, 2017) • Várzea do Lopes Mine continuity of operations project (August, 2018) <p>These EIA reports assess stages of planning, implementation and operation for potential impacts on biodiversity for native plant and animal species, ecosystem services and protected areas, including ecological corridors.</p> <p>The permitting of the Várzea do Lopes Leste-Norte Project EIA included participation of stakeholders such as the Itabirito River Basin Subcommittee. Public hearing was held on March 2019 to the Community of Ribeirão do Eixo. During this hearing, the project results, analyses, and characteristics were presented to the community, and a synthesis report was generated, incorporating the community's contributions into the EIA.</p> <p>The evidence and interviews with a sample of stakeholders indicate that not all communities near the mine were consulted during the Várzea do Lopes Leste-Norte Project permitting process (see 2.1.9.2). The evidence does not include details to confirm that the company's screening process is comprehensive enough to assess the impacts or risks to biodiversity, ecosystem services, and protected areas (e.g. community consultation, use of standardized methodologies to evaluate cultural and provisional ecological services).</p>
4.6.2.2	Screening shall include identification and documentation of:	<p>The Várzea do Lopes Mine occupies an area between two ecologically important and protected areas: the Arêdes Ecological Station to the</p>

<p>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;</p> <p>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;</p> <p>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</p> <p>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.</p>	<p>east, and the Serra da Moeda State Natural Monument to the west. The project is also located in the southern buffer zone of the UNESCO Serra do Espinhaço Biosphere Reserve. The company conducted a screening process as part of its EIAs (2017 and 2018) for its direct and indirect area of influence. The evidence, including the Partial Annual Report - Fauna Monitoring Program with Emphasis on Threatened Species and Species of Conservation Interest (March 2022), indicates that the project:</p> <p>a. is adjacent to national conservation areas, outside of legally protected areas, near sites of cultural significance (see 3.7);</p> <p>b. has considered its boundaries related to key biodiversity areas, including the presence of protected, threatened or endangered species</p> <p>c. has considered areas of natural and modified habitat and critical habitat, and</p> <p>d. natural ecosystems or processes within the mine operation such as streams that provide provisioning, regulating, and ecosystem services support.</p> <p>The evidence does not include details to confirm the company screened for:</p> <p>a. cultural significance sites within conservation areas; and</p> <p>d. Identification of provisioning, regulating, and supporting ecosystem services beyond the mine concession boundary within the area of influence.</p>
<p>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</p>	<p>The evidence, EIA for the Várzea do Lopes Mine continuity of operations project (August 2018) and EIA for the Várzea do Lopes Mine East-North Project (January 2017), as well as interviews with key personnel, indicates that the company has developed a process for identifying protected and priority areas related to the project, including:</p>

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

a. Baseline conditions of biodiversity, ecosystem services, biological conservation values;

b. Identification of biodiversity impacts derived from the interaction of the mining complex on biodiversity, ecosystem services, biological conservation values within its area of influence. The EIA for the waste rock storage facility PDE-01 (September 2017) has an analysis of indirect and cumulative impacts.

c. Evaluation of options to avoid potentially significant adverse impacts on biodiversity and conservation values in the area of influence;

d. The partnership plan includes conservation actions through environmental education aimed at improving the management of local and regional biodiversity. Gerdau's "Germinar" Project, initiated in 1990 as an environmental education program in Minas Gerais, has reached over 465,000 people and operates in the municipalities of Ouro Branco, Congonhas, Conselheiro Lafaiete, Ouro Preto (Miguel Burnier and Mota districts), Moeda, and Itabirito. Its objective is to promote knowledge dissemination and use education as a tool to support environmental awareness and conservation, as outlined in the "Gerdau Annual Report 2021 - People who shape the future."

The evidence does not indicate:

a. baseline for the conditions of ecosystem services were established in the area of influence; and

c. that the company has evaluated options to avoid potentially significant adverse impacts on ecosystem services.

areas and/or biodiversity and ecosystem services.

4.6.4.1. Critical. Mitigation measures for new mines shall: a. Follow the mitigation hierarchy of: i. Prioritizing the avoidance of impacts on important biodiversity values and priority ecosystem services and the ecological processes and habitats necessary to support them; 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.

Várzea do Lopes is an existing mine with an expansion in progress. For the expansion, the company has developed mitigation measures as part of the EIA approval process. These measures follow the mitigation hierarchy, requirement a., including activities to avoid impacts on key values of biodiversity and habitats listed in its EIA's for the projects:

- EIA Várzea do Lopes Leste-Norte Project (January 2017, p. 655)
- EIA Corrective Installation License for the Sterile Pile PDE-01 (September 2017, p. 520)
- EIA Operational Continuity Project of the Várzea do Lopes Mine (August 2018, p. 686)


The company provided as evidence a summary report on Várzea do Lopes' environmental performance (February 2022) indicating implementation of avoidance and mitigation measures is underway and linked to ecosystem services within the expansion's area of influence (p. 142).

b. Mitigation measures prioritize, avoidance of impacts on important biodiversity values, including a study of locational alternatives developed early in the project (EIA Operational Continuity Project of the Várzea do Lopes Mine, p. 37).

Interviews with a sample of workers (drillers, exploration and development logistics contractors, and biologists) indicate the company has a commitment to biodiversity protection and restoration (i.e., revegetation; flora recovery planning), and this is communicated at operational levels. According to interviews with the company's biologist at the Germinar Center, research is underway to understand alternatives in planting for increased biodiversity value (i.e., through proliferation of native species) including the rescue of resilient and endangered plants.

The evidence does not include observations to confirm onsite restoration is underway at the mine at the time of the audit as in (a. iii.) or documentation that mitigation is designed and implemented

		to deliver no net loss (preferably a net gain in important biodiversity values, self-sustaining after mine closure).
<p>4.6.4.2 At existing mines:</p> <p>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</p> <p>b. If there is the potential for new impacts on important biodiversity values or priority ecosystem 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 apply offsets commensurate to the scale of the additional (new) impacts.</p>	<p>⊕</p>	<p>The evidence, two agreements with the State Environment and Sustainable Development Department (2019 and 2020), an Environmental Control Program (2023), and the Gerdau Annual Report (2021), as well as interviews with key personnel, indicate that the company has considered:</p> <p>a. implemented onsite restoration strategies as documented in the two agreements with the State Environment and Sustainable Development Department to compensate for 109.57 ha and 11 ha of Atlantic forest. The company also developed a partnership to improve the management of local and regional biodiversity as described in the Annual Report (Gerdau's Germinar Project started in 1990 as an environmental education program and benefits more than 465,000 people and is active in the municipalities of Ouro Branco, Congonhas, Conselheiro Lafaiete, Ouro Preto (Miguel Burnier and Mota districts), Moeda and Itabirito).</p> <p>b. maintained compliance reports, that summarize the company's adherence to its Environmental Control Program (2023), indicating that the company will continue to apply the mitigation hierarchy through actions, plans, control programs, mitigation, monitoring and environmental compensation.</p> <p>The evidence does not indicate that the company has designed and implemented restoration strategies as a result of stakeholder consultation related to restoration development, conservation actions, and mitigation options to support enhancement of important biodiversity values and ecosystem services.</p>
<p>4.6.4.3 Offsetting, if required, shall be done in a manner that aligns with international best practice.</p>	<p>⊕</p>	<p>The evidence, an Environmental Control Program within the EIA Operational Continuity Project of the Várzea do Lopes Mine (2018), indicate the company has following offsetting project:</p> <ul style="list-style-type: none"> - Compensation for intervention in the Atlantic Forest.

		<p>In addition, the document, Summary Report on Compliance with the Environmental Control Program (January 2023), describes the Forest Reconstruction Program.</p> <p>The evidence does not indicate that the development of environmental compensation plans was informed by stakeholder participation and consultation as outlined in international best practice standards, such as the Standard on Biodiversity Offsets (2019).</p>
<p>4.6.4.4 The operating company shall develop and implement a biodiversity management plan or equivalent that:</p> <p>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;</p> <p>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;</p> <p>c. Provides a budget and financing plan to ensure that funding is available for effective mitigation.</p>		<p>The company has a Biodiversity Conservation Program as indicated in the evidence (EIA Operational Continuity Project of the Várzea do Lopes Mine, 2018), which follows a specific conservation and monitoring strategy for flora and fauna. The company has a Biodiversity Research Center, implemented in the Germinar Biocenter, Municipality of Ouro Branco/MG with a total area of 1.3 ha. It has a greenhouse and infrastructure for the development of techniques and research for the production of biodiversity and recovery of degraded areas.</p> <p>The Flora Conservation Program consists of a set of measures aimed at the conservation and maintenance of local plant biodiversity, with the following objectives:</p> <ul style="list-style-type: none"> • Contribute to the preservation of the genetic patrimony of the local flora; • Contribute to the conservation and acquisition of knowledge about endangered species; • Acquire knowledge about rescue practices and propagation of different species. the local flora; • Use of knowledge acquired in rehabilitation practices of degraded areas; • Contribute to the Degraded Areas Recovery Plan - PRAD of the project <p>The Fauna Monitoring Program, with emphasis on Threatened Species and Species of Conservation Interest, aims to:</p> <ul style="list-style-type: none"> • Confirm the occurrence of species of amphibians, reptiles, birds and

	<p>terrestrial mammals already registered for the region where the project is located,</p> <ul style="list-style-type: none"> • Evaluate the richness, composition and abundance, when possible, of the local fauna species. • Compare the occurrence of fauna species in portions of the territory with and without the influence of mining, using adequate delimitation and control areas, • Evaluate the influence of landscape variables, including mining as a source of variation, on the frequency of occurrence of fauna species, with emphasis on those that are threatened and of interest for conservation. • Propose more effective environmental strategies for the management, territorial ordering, and conservation of biodiversity, with emphasis on threatened species and species of interest for conservation. <p>This program partially covers sub-requirements a, b, and c, however the evidence does not include stakeholder participation in consultations related to the development of environmental compensation plans, budgets, and/or a financing plan for mitigation development.</p>
<p>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.</p>	<p>The company has a process for updating its biodiversity management plan when new information relating to biodiversity or ecosystem services becomes available during the mine lifecycle. The evidence includes compliance reports that summarize the company's adherence to its environmental control program (ECP) (2023). Compliance checks are conducted biannually. The ECP encompasses fauna rescue and monitoring, flora rescue, and forest recomposition programs.</p> <p>The monitoring program is validated by the Fauna Management Authorization No. 01776/2004/029/2018. The company's biodiversity management system includes:</p> <ul style="list-style-type: none"> • Fauna Monitoring Program with emphasis on Threatened Species and Species of Conservation Interest, 2022. This monitoring considers

	<p>2 campaigns in the rainy season and 2 campaigns in the dry season.</p> <ul style="list-style-type: none"> •Fauna monitoring program (herpetofauna, avifauna & mastofauna) •EIA Operational Continuity Project of the Várzea do Lopes Mine (2018), including the following programs: <ul style="list-style-type: none"> - Water quality monitoring program. - Flora conservation program. - Follow-up program for vegetation suppression activities and eventual fauna rescue. - Terrestrial fauna monitoring program. - Ichthyofauna monitoring program. - Biological communities monitoring program. - Plan for the recovery of degraded areas (PRAD). - Environmental compensation program.
<p>4.6.5.1. 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:</p> <p>a. Demonstrates that the proposed development in such areas is legally permitted;</p> <p>b. Consults with protected area sponsors, managers and relevant stakeholders on the proposed project;</p> <p>c. Conducts mining-related activities in a manner consistent with protected area management plans for such areas; and</p> <p>d. Implements additional conservation actions or programs to promote and</p>	<p>The project is located in the buffer zone of the legally protected area Moeda Rupestrian Fields North, as well as in the southern buffer zone of the UNESCO Serra do Espinhaço Biosphere Reserve. The Várzea do Lopes Mine is an existing mine since 2007 with recent expansions. The following evidence includes analyses and descriptions of the protected areas in the region in which the mining project is developed:</p> <ul style="list-style-type: none"> - EIA Várzea do Lopes Leste-Norte Project (2017); - EIA Corrective Installation License for the Sterile Pile PDE-01 (2017); - EIA Operational Continuity Project of the Várzea do Lopes Mine (2018); - Summary Report on Compliance with the Environmental Control Program (PCA) (January 2023). <p>These documents, as well as interviews with key personnel, identify the legislation in force at the federal, state and municipal level and the pertinent legal norms for the operation of the mine, indicating:</p> <p>a. Mining activities are legally permitted. These EIAs identify legislation in force at the federal, state and municipal level and the pertinent legal norms for the operation of the mine, indicating that the Moeda's government granted the approval, according to the Moeda City Council approval - Official Letter No. 117/2020 of June 26, 2020. For the Waste rock storage facility PDE-01 and for the Várzea</p>

enhance the conservation aims and/or effective management of the area.

Leste-Norte Mine, the company has the joint Authorization of the Arêdes State Ecological Station and the Serra da Moeda State Natural Monument, since they are located in the buffer zone of these mining areas (Consolidated Environmental Licensing Decision, October 2020).

b. The company has consulted with its stakeholders on the proposed projects, including sponsors and administrators of protected areas (such as the Arêdes Ecological Station).

c. Mining activities are not carried out in protected areas, and management plans for biodiversity are implemented in the areas where the Mine operates (Fauna Monitoring Program with emphasis on Threatened Species and Species of Conservation Interest, 2022).

d. The company has implemented conservation and environmental education programs in addition to the monitoring established as a result of the EIAs, including annual audits of legal requirements for environmental compliance (Annual Report 2021, Gerdau).

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.

The project is located in the buffer zone of the Moeda Rupestrian Fields North, as well as in the southern buffer zone of the UNESCO Serra do Espinhaço Biosphere Reserve. The Várzea do Lopes Mine is an existing mine, operating since 2007, with recent expansions in accordance with 4.6.5.1.a through d. The evidence, including ESIA's (2017, 2018) and the Summary Report on Compliance with the Environmental Control Program (ECP) (January, 2023), besides some relevant stakeholders interviews, indicate that assessments, including the ESIA's and the ECP, were peer-reviewed by a reputable conservation organization, including the Arêdes Ecological Station management, which concluded that mining-related activities at the site will not damage the integrity of the special values for which the area was designated.

<p>4.6.5.3 Critical. IRMA will not certify new mines that are developed in or that adversely affect the following protected areas:</p> <ul style="list-style-type: none"> • 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. 	<p>—</p>	<p>Not relevant. Várzea do Lopes is an existing mine operating within the southern buffer zone of the UNESCO Serra do Espinhaço Biosphere Reserve, and not developed or operating in a World Heritage, IUCN protected area, or core areas of UNESCO biosphere reserves as confirmed in the following reference sources:</p> <ul style="list-style-type: none"> - EIA Várzea do Lopes Leste-Norte Project (2017); EIA Corrective Installation License for the Sterile Pile PDE-01 (2017); EIA Operational Continuity Project of the Várzea do Lopes Mine (2018); - Fauna Monitoring Program with emphasis on Threatened Species and Species of Conservation Interest (2022); - Várzea do Lopes Environmental Control Program (2022); and - Network of Biosphere Reserves Map (https://www.unesco.org/en/articles/new-map-world-network-biosphere-reserves-2017-2018?hub=701)
<p>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:</p> <ol style="list-style-type: none"> 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 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. 	<p>—</p>	<p>Not relevant. There are no mining-related activities in indicated areas (refer to 4.6.5.3).</p>

<p>4.6.6.1. 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.</p>		<p>The company has developed monitoring plans for each relevant component of biodiversity:</p> <ul style="list-style-type: none"> • Environmental Control Program (2023): <ul style="list-style-type: none"> - Program control erosion processes and recovery of degraded areas - Program for the control and monitoring of liquid effluents and surface water - Fauna rescue program - Fauna monitoring program - Flora rescue program - Forest recomposition program • Fauna monitoring program with emphasis on threatened species and species of conservation interest (2022); • Fauna monitoring program (herpetofauna, avifauna and mastofauna) with quarterly campaigns from 2018 to 2022; • EIA Operational Continuity Project of the Várzea do Lopes Mine, 2018: <ul style="list-style-type: none"> - Water quality monitoring program - Flora conservation program - Follow-up program for vegetation suppression activities and eventual fauna rescue - Terrestrial fauna monitoring program - Ichthyofauna monitoring program - Biological communities monitoring program - Plan for the recovery of degraded areas (PRAD).
<p>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.</p>		<p>The company monitors key biodiversity indicators periodically to allow evaluation of the effectiveness of mitigation strategies over time as indicated in:</p> <ul style="list-style-type: none"> • Fauna monitoring program with emphasis on threatened species and species of conservation interest (2022). • Fauna monitoring program (herpetofauna, avifauna and mammalian fauna) (quarterly campaigns from 2016 to 2022). • Environmental Control Program (2023) <ul style="list-style-type: none"> -fauna rescue program, -fauna monitoring program,

		<ul style="list-style-type: none"> -flora rescue program, -forest restoration program.
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.	<p>—</p> <p>Not relevant. The evidence, Fauna monitoring program with emphasis on threatened species and species of conservation interest (2022) and Fauna monitoring program (herpetofauna, avifauna and mammalian fauna) with quarterly campaigns from 2016 to 2022), indicates that biodiversity and ecosystem services objectives are on track to being achieved as expected.</p>
4.6.6.4	The findings of monitoring programs shall be subject to independent review.	<p>⊗</p> <p>Does not meet. The evidence reviewed includes a sample of a semiannual Activity Report on its Fauna Monitoring program (March 2022) sent to the Regional Superintendence for Environment and Sustainable Development. The evidence does not include independent reviews of the findings of its monitoring programs to verify the implementation of the programs and control measures.</p>

Chapter 4.7—Cyanide Management

Basis for rating

This chapter is not relevant for Várzea do Lopes as the site does not use or produce cyanide. The mining project is not a gold or silver mine. The company exclusively extracts iron ore; therefore, mercury and cyanide are not part of any process related to the extraction or processing of its products. The most recent analytical report of the mine tailings (April 1, 2023) demonstrates that, based on the analysis of a series of parameters contained in the NBR 10004 standard, the mine waste was classified as Class II B, which is an inert and non-hazardous material. The provided documental evidence the analytical results for mercury and cyanide, both with concentrations in agreement with the reference values (Cyanide: < 0.062 mg/kg and Mercury: < 0.00020 mg/L).

Chapter 4.8—Mercury Management

Basis for rating

This chapter is not relevant for Várzea do Lopes. The mining project does not have any thermal processes that may contain mercury. The company exclusively extracts iron ore; therefore, mercury and cyanide are not part of any process related to the extraction or processing of its products. The most recent analytical report of the mine tailings (April 1, 2023) demonstrates that, based on the analysis of a series of parameters contained in the NBR 10004 standard, the mine waste was classified as Class II B, which is an inert and non-hazardous material. The provided documental evidence the analytical results for mercury and cyanide, both with concentrations in agreement with the reference values (Cyanide: < 0.062 mg/kg and Mercury: < 0.00020 mg/L).