

Comparison of the Equator Principles EP4 with the IRMA Standard V1.0

Prepared by the IRMA Secretariat
June 2025

This document offers a comprehensive comparison of:

- the <u>Equator Principles EP4</u> (July 2020) with
- the <u>IRMA Standard (for Responsible Mining) V1.0</u> (June 2018), together with its normative <u>Guidance Document V1.3</u> (November 2024)

Disclaimer

This comparison was prepared by IRMA's Secretariat for informational purposes only to support transparency and informed dialogue among stakeholders in the mining sector. The findings, conclusions and interpretations within this document do not necessarily represent the views of members of the IRMA's Board of Directors, IRMA members, or funders of the Initiative for Responsible Mining Assurance (IRMA).

This document outlines areas of alignment and differences between IRMA's standard which sets comprehensive requirements for environmental, operational and safety performance at mine sites electing to participate in its program, and Equator Principals 4 which provides mining standards and adopts guidelines for financing projects in the mining industry. These standards are designed for different but complementary purposes, one guiding responsible mining operations, the other informing lending decisions. This comparison is not intended as an endorsement, validation, or promotional material in any respect. It is also not intended to provide accounting, legal, tax or investment advice or recommendations, or as an offer or solicitation for the purchase or sale of any financial instrument. Each standard evaluated herein remains the intellectual property of its respective organization.

In order to fully understand the IRMA Standard, readers should refer to the IRMA Standard V1.0 (June 2018), together with its normative Guidance Document V1.3 (November 2024), available on our website.



Content

Overview	3
Detailed Comparison	7



Overview

Observation
EP4 provides a high-level framework for managing environmental and social risks in project financing, across industries, while the IRMA Standard is a voluntary standard for responsible mining practices.
EPA4 applies to financial institutions involved in project financing, while the IRMA Standard applies to mine sites of industrial- or large-scale.
IRMA exceeds expectations of EP4.
In the IRMA system, sites are expected to aim for full conformance with the IRMA Standard, regardless of the potential risks and impacts anticipated.
However, the Chapters that cover issues where lower levels of risks and impacts are identified – and confirmed by potentially affected stakeholders and rights holders – will require less effort and evidence to demonstrate conformance with.
IRMA exceeds expectations of EP4.
The IRMA Standard provides detailed requirements and verification metrics on a comprehensive set of issues. Risk and Impact assessment is covered both site-wide in Chapter 2.1 and for individual topics across the scoping and risk and impact assessment sections of specific social and environmental chapters, as well as the human rights due diligence chapter.
This offers a stronger and more robust approach than the generic EP4 "principle-like" approach.
Regarding climate change risk in the IRMA Standard (which was published in 2018), Chapter 2.1 mentions environmental impacts including "greenhouse gas emissions and contributions to climate change" in the list of issues/impacts that may be included (but are not limited to) in the ESIA process, "depending on the scale, nature, duration and location of the particular project".
IRMA exceeds expectations of EP4.
In the IRMA Standard, compliance with all applicable laws and regulations is covered in the first Chapter, representing the very basic minimum that a site must demonstrate on its journey to operational excellence and harm prevention. Chapter 3.1 offers a complement regarding human rights procedures and workers management.



Aspect	Observation
•	Then, the rest of the Standard represent more than 400 individual requirements that are all built on and/or aligned with international laws, conventions, norms, guidance, and recommendations that are applicable to the minerals sector. A list of the international or multilateral frameworks, conventions, and guidance that are used in the IRMA Standard for reference and/or alignment is available separately.
EP4 Principle 4:	IRMA exceeds expectations of EP4.
Environmental and Social Management System and Equator Principles Action Plan	Similarly, the IRMA Standard provides detailed requirements and verification metrics on a comprehensive set of topics which require management systems, especially to prevent, and where prevention is not possible or not immediately possible, to mitigate all the identified risks and impacts identified as part of the scoping and risk
	and impact assessment sections. Management systems are also covered both site-wide in Chapter 2.1 (overall ESMS) and for individual topics across the planning, management, specific measures, and M&E sections of specific social and environmental chapters, as well as the human rights due diligence chapter. This offers a stronger and more robust approach than the generic EP4 "principle-like" approach.
EP4 Principle 5: Stakeholder Engagement	IRMA exceeds expectations of EP4. In a similar fashion, in the IRMA Standard best practice in terms of stakeholder engagement is covered both at the side-wide level in Chapter 1.2, and as a cross-cutting theme that can be found in most social and environmental chapters. The specific rights and protections accorded to Indigenous Peoples,
	including their right to giver or withhold they Free, Prior, and Informed Consent (FPIC) is covered mainly in a dedicated Chapter (2.2), but also in the Chapters related to Cultural Heritage (3.7) and Resettlement (2.4).
EP4 Principle 6: Grievance Mechanism	IRMA exceeds expectations of EP4.
	Rights-based grievance mechanisms, aligned with international best practice including the UNGPs, are required in the IRMA Standard, both for affected communities, and workers at the workplace. Noted that additional requirements also explicitly require demonstration that grievance on certain topics can be made (human rights, resettlement, exploration activities, security forces, ASM).



Aspect	Observation	
EP4 Principle 7: Independent	IRMA exceeds expectations of EPA.	
Review	Independent third-party IRMA audits are conducted by multi- disciplinary teams of auditors, selected by audit firms that all must be trained and accredited by IRMA.	
EP Principle 8: Covenants	Approaches differ between EP4 and IRMA.	
	Unlike the institutions using the EP4, IRMA does not have a commercial relationship with sites being audited, to avoid conflict of interest. Accredited audit firms are selected and hired by the sites, and these auditors will undertake the independent third-party audit/s.	
	The IRMA Standard does not specifically address cases where operating companies knowingly contribute to serious human rights abuses or violations of other fundamental rights. However, IRMA has created a Policy on Association to provide a means for IRMA to exclude companies from IRMA participation if those companies are directly or indirectly involved in activities that violate IRMA's core principles and values. According to the Policy of Association approved by the IRMA Board of Directors in October 2023, knowingly or intentionally causing or contributing to serious human rights abuses can represent grounds for IRMA to exclude an operating company or its corporate owner from participating, or terminate a relationship with a company that has a participating IRMA mine. In the current version of the policy, the decision of whether or not to deny or withdraw IRMA achievement recognition, and any terms and conditions that might allow a company to reassociate with IRMA, has to be made by the IRMA Board.	
EP Principle 9: Independent	IRMA exceeds expectations of EP4.	
Monitoring and Reporting	The independent third-party IRMA audits are conducted by multi- disciplinary teams of auditors, selected by audit firms that all must be trained and accredited by IRMA. Additionally, multiple requirements in the IRMA Standard require independent monitoring and review, in addition to, and regardless of, an IRMA audit being undertaken.	
EP Principle 10: Reporting and	IRMA exceeds expectations of EP4.	
Transparency	In the IRMA Standard reporting and transparency is required across most social and environmental chapters, besides the general ESIA reporting and information-sharing section in Chapter 2.1.	
	And unlike other voluntary mining standard, IRMA audit reports are published in their entirety, offering an unparallel level of transparency, at the level of 420+ individual requirements.	



Aspect	Observation
EP4 Annex A: Climate Change:	EP4 includes expectations that are not covered in IRMA
Alternatives Analysis,	Standard V1.0.
Quantification and Reporting	
of Greenhouse Gas Emissions	While the IRMA Standard V1.0 covers basic requirements about Greenhouse Gas Emissions quantification and reporting, and offers a much stronger and detailed set of auditable requirements than EP4 overall, it has not fully caught up with the most recent development regarding the issues of Alternatives Analysis, Quantification and Reporting, and Climate Change Risk Assessment, that are included in the EP4.
	These dimensions are proposed to be fully integrated in the next revision of the IRMA Standard (learn more about the revision process at: https://responsiblemining.net/irma-mining-standard/)
EP4 Annex B: Minimum	IRMA exceeds expectations of EP4.
Reporting Requirements	•
	Unlike other voluntary mining standard, IRMA audit reports are published in their entirety, offering an unparallel level of transparency, at the level of 420+ individual requirements.



Detailed Comparison

Aspect	Equator Principles 4	IRMA Standard V1.0	Observation
Purpose	Framework for managing environmental and social risks in project financing.	A standard for responsible mining practices.	EP4 provides a high- level framework for managing environmental and social risks in project financing, across industries, while the IRMA Standard is a voluntary standard for responsible mining practices.
Scope	Applies to financial institutions involved in project financing including project finance advisory services, project finance, project-related corporate loans, bridge loans, project-related refinance, and project-related acquisitions.	The IRMA Standard is intended to be applicable to all types of industrial or large-scale mining (including surface, sub-surface and solution mining), and all mined materials (e.g., minerals, metals) with the exception of energy fuels. IRMA will not independently audit oil and gas operations, and Board-level discussions so far have also excluded thermal coal and uranium from the independent third-party audit process. IRMA was not developed to assess the unique risks associated with deep-sea mining and cannot be used to describe or assess best practice for this type of extraction. There is no defined minimum cut-off point for the scale of mine to which the IRMA Standard may apply, but it is not designed to be applicable to artisanal or small-scale mining. The IRMA Standard and Assurance System covers mining and related activities, such as construction of infrastructure or preliminary ore processing that occur on the mine site, and includes requirements that pertain to different phases of the mine life cycle. In limited cases the Standard refers to infrastructure, such as transportation routes, or associated facilities located off of the mine site (e.g., resettlement requirements apply even if displacement occurs only in relation to a facility not located on the mining lease, if that facility would not have been built except for the development of the mine). The Standard does not apply to the manufacturing and assembly of products, or end-product use and disposal.	EPA4 applies to financial institutions involved in project financing, while the IRMA Standard applies to mine sites of industrial- or largescale.
Principle 1: Review and Categorization	When a Project is proposed for financing, the EPFI will, as part of its internal environmental and social review and due diligence, categorise the Project based on the magnitude of potential environmental and social risks and impacts, including those related to Human Rights, climate change, and biodiversity. Such categorisation is based on the International Finance Corporation's (IFC) environmental and social categorisation process. The categories are:	The IRMA Standard applies to all types of industrial or large-scale mines with the exception of uranium and thermal coal mines. IRMA was not developed to assess the unique risks associated with deep-sea mining and cannot be used to describe or assess best practice for this type of extraction. All IRMA-audited mine sites of whatever type and scale will be required to comply with all relevant requirements of the IRMA Standard. The requirements have therefore been drafted at a level of generality that allows different actions to be taken at mine sites of different types and scales, while still being able to demonstrate compliance.	IRMA exceeds expectations of EP4. In the IRMA system, sites are expected to aim for full conformance with the IRMA Standard, regardless of the potential risks and impacts anticipated.



Category A – Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented;

Category B – Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures2; and

Category C – Projects with minimal or no adverse environmental and social risks and/or impacts.

The EPFI's environmental and social due diligence is commensurate with the nature, scale and stage of the Project, and with the categorised level of environmental and social risks and impacts.

Some Chapters of the Standard may be excluded from the audit and the assessment, if and only if robust evidence demonstrate they do not apply to the context and nature of the operation (e.g. confirmation that no ASM activities is taking place within the site's area of influence; confirmation the site does not produce, store, use or transport cyanide).

However, the Chapters that cover issues where lower levels of risks and impacts are identified – and confirmed by potentially affected stakeholders and rights holders – will require less effort and evidence to demonstrate conformance with.

Principle 2: Environmental and Social Assessment

The EPFI will require the client to conduct an appropriate Assessment process to address, to the EPFI's satisfaction, the relevant environmental and social risks and scale of impacts of the proposed Project (which may include the illustrative list of issues found in Exhibit II). The Assessment Documentation should propose measures to minimise, mitigate, and where residual impacts remain, to compensate/offset/remedy for risks and impacts to Workers, affected communities and the environment. in a manner relevant and appropriate to the nature and scale of the proposed Project.

The Assessment Documentation will be an adequate, accurate and objective evaluation and presentation of the environmental and social risks and impacts, whether prepared by the client, consultants or external experts. For Category A and, as appropriate, Category B Projects, the Assessment Documentation includes an Environmental and Social Impact Assessment (ESIA). One or more specialised studies may also need to be undertaken. For other Category B and potentially C Projects, a limited or focused environmental or social assessment may be appropriate, applying applicable risk management standards relevant to the risks or impacts identified during the categorisation process.

CHAPTER 2.1: Environmental and Social Impact Assessment and Management 2.1.1. General Requirements

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.

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.

2.1.1.3. The ESIA shall be carried out in accordance with publicly available, documented procedures.

2.1.2. Provision of Preliminary Information

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 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;

IRMA exceeds expectations of EP4.

The IRMA Standard provides detailed requirements and verification metrics on a comprehensive set of issues. Risk and Impact assessment is covered both site-wide in Chapter 2.1 and for individual topics across the scoping and risk and impact assessment sections of specific social and environmental chapters, as well as the human rights due diligence chapter.

This offers a stronger and more robust approach than the generic EP4 "principlelike" approach.



The client is expected to include assessments of potential adverse Human Rights impacts and climate change risks as part of the ESIA or other Assessment, with these included in the Assessment Documentation. The client should refer to the UNGPs when assessing Human Rights risks and impacts, and the Climate Change Risk Assessment should be aligned with Climate Physical Risk and Climate Transition Risk categories of the TCFD.

A Climate Change Risk Assessment is required:

- For all Category A and, as appropriate, Category B Projects and will include consideration of relevant physical risks as defined by the TCFD.
- For all Projects, in all locations, when combined Scope 1 and Scope 2 Emissions are expected to be more than 100,000 tonnes of CO2 equivalent annually. Consideration must be given to relevant Climate Transition Risks (as defined by the TCFD) and an alternatives analysis completed which evaluates lower Greenhouse Gas (GHG) intensive alternatives. The depth and nature of the Climate Change Risk Assessment will depend on the type of Project as well as the nature of risks, including their materiality and severity. Refer to Annex A for an overview of a Climate Change Risk Assessment, including alternatives analysis requirements.

- c. A description of the main steps of the ESIA process that will be carried out, the estimated timeline and the range of opportunities for stakeholder participation in the process; and
- d. Contact details for the person or team responsible for management of the ESIA.

2.1.3. Scoping

- 2.1.3.1. 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.37
- 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.
- 2.1.3.3. Scoping shall include the consideration of:
- a. Social impacts (including potential impacts on communities and workers) and environmental impacts (including potential impacts on wildlife, air, water, vegetation and soils) during all stages of the project life cycle, from pre-construction through post-closure;38
- b. Direct, indirect and cumulative impacts; and
- c. Potential impacts of extreme events.
- 2.1.3.4. Scoping shall result in the identification of:
- a. Potentially significant environmental and social impacts of the proposed project;
- b. Alternative project designs to avoid significant adverse impacts;
- c. Other actions to mitigate identified adverse impacts; and
- d. Additional information and data needed to understand and assess the potential impacts.

2.1.4. ESIA Data Collection

- 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.
- 2.1.4.2. Additional studies shall be carried out as necessary to fulfill the information needs of the ESIA.

2.1.5. ESIA Impact Analysis

- 2.1.5.1. The operating company shall:
- a. Predict in greater detail the characteristics of the potentially significant environmental and social impacts identified during scoping;39
- b. Determine the significance of the predicted impacts;
- c. Evaluate options to mitigate predicted significant adverse impacts in line with the mitigation hierarchy, prioritizing the avoidance of impacts through consideration of alternative project designs; and

Regarding climate change risk in the **IRMA Standard (which** was published in 2018), **Chapter 2.1 mentions** environmental impacts including "greenhouse gas emissions and contributions to climate change" in the list of issues/impacts that may be included (but are not limited to) in the ESIA process, depending on the scale, nature, duration and location of the particular project".



d. Determine the relative importance of residual impacts (i.e., impacts that cannot be mitigated) and whether significant residual adverse impacts can be addressed to the satisfaction of affected or relevant stakeholders.

2.1.6. ESIA Report

- 2.1.6.1. The operating company shall prepare an ESIA report that includes, at minimum:
- a. A description of the proposed mining project;
- b. Detailed description of the direct, indirect and cumulative impacts likely to result from the 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.

2.1.9. Stakeholder Consultation and Participation in ESIA and Environmental and Social Monitoring

- 2.1.9.1. As part of the ESIA process, the operating company shall provide for timely and effective stakeholder and rights holder (hereafter collectively referred to as stakeholder) consultation, review and comment on:
- a. The issues and impacts to be considered in the 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).
- 2.1.9.2. 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.41
- 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.
- 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.42
- 2.1.9.5. The operating company shall record all stakeholder comments received in relation to ESIA scoping; implementation; ESIA findings, conclusions and recommendations; and the environmental and social monitoring program. The company shall record how it responded to stakeholder comments.



2.1.10. Environmental and Social Disclosures and Reporting43

- 2.1.10.1. 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.
- 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.
- 2.1.10.3. The environmental and social management plan shall be made available to stakeholders upon request.
- 2.1.10.4. Summary reports of the findings of the environmental and social monitoring program shall be made publicly available at least annually, and all data and methodologies related to the monitoring program shall be publicly available.
- 2.1.10.5. The existence of publicly available ESIA and ESMS information, and the means of accessing it, shall be publicized by appropriate means.

CHAPTER 1.3: Human Rights Due Diligence

1.3.2. Assessment of Human Rights Risks and Impacts

- 1.3.2.1. 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.
- 1.3.2.2. Assessments, which may be scaled to the size of the company and severity of human rights risks and impacts, shall:
- a. Follow a credible process/methodology;
- b. Be carried out by competent professionals; and
- c. Draw on internal and/or external human rights expertise, and consultations with potentially affected rights holders, including men, women, children (or their representatives) and other vulnerable groups, and other relevant stakeholders.
- 1.3.2.3. As part of its assessment, the operating company shall document, at minimum:
- a. The assessment methodology;
- b. The current human rights context in the country and mining project area;
- 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.
- 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.
- 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.

CHAPTER 2.2: Free, Prior, and Informed Consent (FPIC)

2.2.3. Free, Prior and Informed Consent (FPIC) Scoping

- 2.2.3.1. The operating company shall:
- a. Consult with indigenous peoples and others, and review other relevant date to identify indigenous peoples that own, occupy or otherwise use land, territories or resources that may be affected by the mining project;
- b. Disclose to indigenous peoples, in a culturally appropriate manner, the preliminary project concepts and/or proposed activities, and the indigenous peoples' right to FPIC.
- 2.2.3.2. The operating company shall collaborate with indigenous peoples' representatives and other relevant members of affected communities of indigenous peoples to:
- a. Identify the appropriate means of engagement for each group of indigenous peoples (e.g., tribe, nation, population);
- b. Identify indigenous peoples' rights and interests that may be affected by the proposed activities;
- c. Identify additional studies or assessments needed to determine the range and degree of potential impacts on indigenous peoples' rights or interests; and
- d. Identify if there are capacity issues that may prevent full and informed participation of indigenous peoples. If issues are identified, the operating company shall provide funding or facilitate other means to enable indigenous peoples to address capacity issues in their preferred manner; and
- e. Ensure that the community as a whole/collective has meaningful opportunities to be involved in these processes.
- 2.2.3.3. The operating company shall collaborate with the indigenous peoples' representatives to design and implement plans to address the information gaps and needs identified through the scoping process.

CHAPTER 2.4: Resettlement

2.4.1. Risk and Impact Assessment



2.4.1.1. If there is the potential that a new mine (including associated facilities) or the expansion of an existing mine or associated facilities may require land acquisition that could result in the involuntary resettlement (for the remainder of this chapter, referred to as resettlement) of people, the operating company shall undertake an assessment process to evaluate the potential direct and indirect risks and impacts related to the physical and/or economic displacement of people.

2.4.1.2. The assessment shall:

- Be undertaken during the early stages of mining project planning;
- b. Include identification of alternative mining project designs to avoid, and if that is not possible, minimize the displacement of people;
- c. Identify and analyze the social, cultural, human rights, conflict, environmental and economic risks and impacts to displaced persons and host communities for each project design alternative, paying particular attention to potential impacts on women, children, the poor and vulnerable groups; and
- d. Identify measures to prevent and mitigate risks and impacts, and estimate the costs of implementing the measures.
- 2.4.1.3. The assessment shall be undertaken by competent professionals with experience in resettlement related to large-scale development projects.
- 2.4.1.4. The operating company shall document decision-making regarding alternative mining project designs and efforts to minimize resettlement.
- 2.4.1.5. The assessment shall be made public, or, at minimum, be made available to potentially affected people and their advisors.

CHAPTER 3.2: Occupational Health and Safety

3.2.2. Health and Safety Risk Assessment and Management

- 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.
- 3.2.2.2. The assessment process shall identify and assess the significance/consequence of the full range of potential hazards associated with the mining project, including those related to:
- a. The design, construction and operation of the workplace, mining-related activities and processes, the physical stability of working areas, the organization of work, use of equipment and machinery, and waste and chemical management;
- b. All personnel, contractors, business partners, suppliers and visitors;
- c. Unwanted events;
- 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.



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.

CHAPTER 3.3: Community Health and Safety

3.3.1. Health and Safety Risk and Impact Scoping

- 3.3.1.1. The operating company shall carry out a scoping exercise to identify significant potential risks and impacts to community health and safety from mining-related activities. At minimum, the following sources of potential risks and impacts to community health and/or safety shall be considered:
- a. General mining operations;
- b. Operation of mine-related equipment or vehicles on public roads;
- c. Operational accidents;
- d. Failure of structural elements such as tailings dams, impoundments, waste rock dumps (see also IRMA Chapter 4.1);
- e. Mining-related impacts on priority ecosystem services;
- 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; 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 or others) that could occur as a result of the mining project.
- 3.3.1.2. Scoping shall include an examination of risks and impacts that may occur throughout the mine life cycle (e.g., construction, operation, reclamation, mine closure and post-closure).
- 3.3.1.3. Scoping shall include consideration of the differential impacts of mining activities on vulnerable groups or susceptible members of affected communities.

3.3.2. Risk and Impact Assessment

- 3.3.2.1. The operating company shall carry out an assessment of risks and impacts to:
- a. Predict the nature, magnitude, extent and duration of the potential risks and impacts identified during scoping; and
- b. Evaluate the significance of each impact, to determine whether it is acceptable, requires mitigation, or is unacceptable.

CHAPTER 3.4: Conflict-Affected and High-Risk Area

3.4.1. Conflict-Affected and High-Risk Area Screening

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.



- 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 operating company shall undertake the additional due diligence steps outlined in the remainder of this chapter.
- 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 that 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.

3.4.3. Conflict Risk Assessment

- 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 factors in 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, mineral sourcing and/or processing; and
- 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.
- 3.4.3.2. Assessments shall follow a recognized risk assessment methodology, and be carried out and documented by competent professionals.
- 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.
- 3.4.3.4. Conflict risk assessments shall be updated at minimum, on an annual basis, and more often if necessitated by the situation.

CHAPTER 3.5: Security Arrangements

3.5.2. Security Risk Assessment and Management

- 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.
- 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:
- . Follow a credible process/methodology;



- D. Be carried out and documented by competent professionals; and
- 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.
- 3.5.2.3. The scope of the security risk assessment shall include, but need not be limited to:
- a. Identification of security risks to the company, workers and communities, paying particular attention to risks to women, children and other vulnerable groups;
- b. Analysis of the political and security context in the host country context (e.g., the human rights records of the government and public and private security forces; adherence to the rule of law; corruption);
- c. Analysis of current and potential conflicts or violence in the host country and affected communities; and
- d. Risks associated with equipment transfers.

CHAPTER 3.6: Artisanal and Small-Scale Mining

3.6.1. Understand the ASM Context

3.6.1.1. When a large-scale mining (LSM) operating company has identified the presence of artisanal and small-scale mining (ASM) entities on the LSM concession or in close proximity to LSM operations, the operating company shall carry out a scoping process to understand the legal, social and environmental context in which ASM activities are occurring.

CHAPTER 3.7: Cultural Heritage

3.7.1. General Stipulations

- 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.
- 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.
- 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.

3.7.2. Cultural Heritage Screening and Assessment

- 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.
- 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.

CHAPTER 4.1: Waste and Materials Management

4.1.2. Safe Management of Materials Other Than Mine Wastes

- 4.1.2.1. The operating company shall:
- a. Identify all materials, substances and wastes (other than mine wastes) associated with the mining project that have the potential to cause impacts on human health, safety, the environment or communities; and
- b. Document and implement procedures for the safe transport, handling, storage and disposal of those materials, substances and wastes.

4.1.3. Mine Waste Source Characterization and Impact Prediction

- 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.
- 4.1.3.2. The operating company shall perform a detailed characterization for each mine waste facility that has associated chemical risks. Characterization shall include:
- a. A detailed description of the facility that includes geology, hydrogeology and hydrology, climate 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;
- ii. 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;
- e. Identification of contaminants of concern for the facility/source materials, and the potential resources at risk from those contaminants.
- 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;
- o. Independent technical review (see 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 schedules for tailings and waste rock or other facilities that are 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;
- i. Facility water balances (see 4.1.3.2.d); and
- j. Dam breach inundation (if applicable) and waste rock dump runout analyses.
- 4.1.3.4. Facility characterizations shall be updated periodically to inform waste management and reclamation decisions throughout the mine life cycle.
- 4.1.3.5. Use of predictive tools and models for mine waste facility characterization shall be consistent with current industry best practice, and shall be continually revised and updated over the life of the mine as site characterization data and operational monitoring data are collected.

4.1.4. Waste Facility Assessment

- 4.1.4.1. 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) and physical risks (see 4.1.3.3) during the project conception and planning phase of the mine life cycle;
- b. A rigorous risk assessment to evaluate the potential impacts of mine waste facilities on health, safety, environment and communities early in the life cycle;
- c. Updating of risk assessments at a frequency commensurate with each facility's risk profile, over the course of the facility's life cycle; and
- d. Documented risk assessment reports, updated when risks assessments are revised (as per 4.1.4.1.c).
- 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, that takes into account environmental, technical, socio-economic and project economics considerations, inclusive of risk levels and hazard evaluations, associated with each alternative;



- e. Include a sensitivity analysis to reduce potential that biases will influence the selection of final site locations and waste management practices; and
- f. Be repeated, as necessary, throughout the mine life cycle (e.g., if there is a mine expansion or a lease extension that will affect mine waste management).

CHAPTER 4.2: Water Management

4.2.1. Water Management Context and Collaboration at the Local and Regional Level

- 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.
- 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.
- 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.

4.2.2. Site Characterization and Prediction of Potential Impacts

- 4.2.2.1. The operating company shall gather baseline or background data to reliably determine:
- a. The seasonal and temporal variability in:
- i. The physical, chemical and biological conditions of surface waters, natural seeps/springs and groundwaters that may be affected by the mining project;
- 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
- b. Sources of contamination and changes in water quantity or quality that are unrelated to the mining project.
- 4.2.2.2. The operating company shall carry out a scoping process that includes collaboration with relevant stakeholders to identify potentially significant impacts that the mining project may have on water quantity and quality, and current and potential future water uses. The scoping process shall include evaluation of:
- a. The mining-related chemicals, wastes, facilities and activities that may pose a risk to water quality; and
- D. The mine's use of water, and any mining activities that may affect water quantity.
- 4.2.2.3. Where potential significant impacts on water quantity or quality, or current and future water uses have been identified, the operating company shall carry out the following additional analyses to further predict and quantify the potential impacts:
- a. Development of a conceptual site model (CSM) to estimate the potential for mine-related contamination to affect water resources;



- b. Development of a numeric mine site water balance model to predict impacts that might occur at different surface water flow/groundwater level conditions (e.g., low, average and high flows/levels);
- c. If relevant, development of other numerical models (e.g., hydrogeochemical/hydrogeological) to further predict or quantify potential mining-related impacts on water resources; and
- d. Prediction of whether water treatment will be required to mitigate impacts on water quality during operations and mine closure/post-closure.
- 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.

CHAPTER 4.3: Air Quality

4.3.1. Air Quality Screening and Impact Assessment

- 4.3.1.1. The operating company shall carry out air quality screening to determine if there may be significant air quality impacts associated with the mining project and its operations.
- 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.
- 4.3.1.3. If screening or other credible information indicates that air emissions from mining-related activities may adversely impact human health, quality of life or the environment, the operating company shall undertake an assessment to predict and evaluate the significance of the potential impacts.
- 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.

CHAPTER 4.4: Noise and Vibration

4.4.1. Noise and Vibration Screening

- 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 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.
- 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.

CHAPTER 4.5: Greenhouse Gas Emissions



4.5.1. Greenhouse Gas Policy

- 4.5.1.1. The operating company or its corporate owner shall develop and maintain a greenhouse gas or equivalent policy that commits the company to:
- a. Identifying and measuring greenhouse gas emissions from the mining project;
- b. Identifying energy efficiency and greenhouse gas reduction opportunities across the mining project;
- c. Setting meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and
- d. Reviewing the policy at least every five years and revising as needed, such as if there are significant changes to mining-related activities, new technologies become available, or there are newly identified opportunities for reductions.

4.5.2. Emissions Quantification

4.5.2.1. The operating company shall comply with emissions quantification methods described in a widely accepted reporting standard, such as the Greenhouse Gas Protocol Corporate Standard or the Global Reporting Initiative's GRI 305 emissions reporting standard.

CHAPTER 4.6: Biodiversity, Ecosystem Services and Protected Areas Requirements 4.6.2. Biodiversity, Ecosystem Services and Protected Areas Screening

4.6.2.1. New mines 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.

4.6.2.2. Screening shall include identification and documentation of:

- a. Boundaries of legally protected areas in the mine's actual or proposed area of influence, and the conservation values being protected in those areas;
- b. Boundaries of Key Biodiversity Areas (KBA) in the mine's actual or proposed area of influence, the important biodiversity values within those areas and the ecological processes and habitats supporting those values;
- c. Areas of modified habitat, natural habitat and critical habitat within the mine's proposed or actual area of influence, and the important biodiversity values (e.g., threatened and endangered species) present in the critical habitat areas; and
- d. 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.

4.6.3. Impact Assessment

- 4.6.3.1. When screening identifies protected areas or areas of potentially important global, national or local biodiversity or ecosystems services that have been or may be affected by mining-related activities (e.g., KBAs, critical habitat, threatened or endangered species), the operating company shall carry out an impact assessment that includes:
- a. Establishment of baseline conditions of biodiversity, ecosystem services and, if relevant, conservation values (i.e., in protected areas) within the mine's proposed or actual area of influence;



Principle 3: Applicable Environmental and Social Standards

The Assessment process should, in the first instance, address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues.

EPFIs operate in diverse markets: some with robust environmental and social governance, legislation systems and institutional capacity designed to protect their people and the environment; and some with evolving technical and institutional capacity to manage environmental and social issues.

The EPFI's due diligence will include, for all Category A and Category B Projects globally, review and confirmation by the EPFI of how the Project and transaction meet each of the Principles.

The EPFI will, with supporting advice from the Independent Environmental and Social Consultant where applicable, evaluate the Project's compliance with the applicable standards as follows:

- 1. For Projects located in Non-Designated Countries, compliance with the applicable IFC Performance Standards on Environmental and Social Sustainability (Performance Standards) and the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines) (Exhibit III).
- 2. For Projects located in Designated Countries, compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues.

The review of the Assessment process will establish, to the EPFI's satisfaction, the Project's overall compliance with, or

- 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 life cycle;
- c. Evaluation of options to avoid potentially significant adverse impacts on biodiversity, ecosystem services and conservation values of protected areas, prioritizing avoidance of impacts on important biodiversity values and priority ecosystem services; evaluation of options to minimize potential impacts; evaluation of options to provide restoration for potential and actual impacts; and evaluation of options to offset significant residual impacts (see 4.6.4.1 and 4.6.4.2); and
- d. Identification and evaluation of opportunities for partnerships and additional conservation actions that could enhance the long-term sustainable management of protected areas and/or biodiversity and ecosystem services.

CHAPTER 1.1: Legal Compliance

1.1.1. Compliance with Host Country Laws

1.1.1.1. The operating company shall comply with all applicable host country laws in relation to the mining project.

1.1.2. Compliance with Most Protective Requirements

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.

1.1.3. Response to Non-Compliance

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.

1.1.4. Contractor Compliance

1.1.4.1. The operating company shall demonstrate that it takes appropriate steps to ensure compliance with the IRMA Standard by contractors engaged in activities relevant to the mining project.

CHAPTER 3.1: Fair Labor and Terms of Work

3.1.1. Human Resources Policy

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.

IRMA exceeds expectations of EP4.

In the IRMA Standard. compliance with all applicable laws and regulations is covered in the first Chapter, representing the very basic minimum that a site must demonstrate on its journey to operational excellence and harm prevention. Chapter 3.1 offers a complement regarding human rights procedures and workers management.

Then, the rest of the Standard represent more than 400 individual requirements that are all built on and/or aligned with international laws, conventions, norms, guidance, and recommendations that are applicable to the



	justified deviation from, the applicable standards. The applicable standards (as described above) represent the minimum standards required by the EPFI. In addition, for Projects located in Designated Countries, the EPFI5 will evaluate the specific risks of the Project to determine whether one or more of the IFC Performance Standards could be used as guidance to address those risks, in addition to host country laws. The EPFI may, at its sole discretion, undertake additional due diligence against additional standards relevant to specific risks of the Project and apply additional requirements.		minerals sector. A list of the international or multilateral frameworks, conventions, and guidance that are used in the IRMA Standard for reference and/or alignment is available separately.
Principle 4: Environmental and Social Management System and Equator Principles Action Plan	For all Category A and Category B Projects6 the EPFI will require the client to develop and / or maintain an Environmental and Social Management System (ESMS). Further, an Environmental and Social Management Plan (ESMP) will be prepared by the client to address issues raised in the Assessment process and incorporate actions required to comply with the applicable standards. Where the applicable standards are not met to the EPFI's satisfaction, the client and the EPFI will agree to an Equator Principles Action Plan (EPAP). The EPAP is intended to outline gaps and commitments to meet EPFI requirements in line with the applicable standards.	CHAPTER 2.1: Environmental and Social Impact Assessment and Management 2.1.7. Environmental and Social Management System (ESMS) 2.1.7.1. The operating company shall develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 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. 2.1.7.3. The environmental and social management plan shall be implemented, and revised or updated as necessary based on monitoring results or other information. 2.1.8. Environmental and Social Impact Monitoring 2.1.8.1. As part of the ESMS, the operating company shall establish a program to monitor: a. The significant environmental and social impacts identified during or after the ESIA process; and b. The effectiveness of mitigation measures implemented to address environmental and social impacts. 2.1.8.2. The monitoring program shall be designed and carried out by competent professionals. 2.1.8.3. If requested by relevant stakeholders, the operating company shall facilitate the independent monitoring of key impact indicators where this would not interfere with the safe operation of the project. 2.1.9. Stakeholder Consultation and Participation in ESIA and Environmental and Social Monitoring	IRMA exceeds expectations of EP4. Similarly, the IRMA Standard provides detailed requirements and verification metrics on a comprehensive set of topics which require management systems, especially to prevent, and where prevention is not possible or not immediately possible, to mitigate all the identified risks and impacts identified as part of the scoping and risk and impact assessment sections. Management systems are also covered both site-wide in Chapter 2.1 (overall ESMS) and for individual topics across the planning, management, specific measures, and M&E sections of specific



- 2.1.9.1. As part of the ESIA process, the operating company shall provide for timely and effective stakeholder and rights holder (hereafter collectively referred to as stakeholder) consultation, review and comment on:
- a. The issues and impacts to be considered in the 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).
- 2.1.9.2. 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.
- 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.
- 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.
- 2.1.9.5. The operating company shall record all stakeholder comments received in relation to ESIA scoping; implementation; ESIA findings, conclusions and recommendations; and the environmental and social monitoring program. The company shall record how it responded to stakeholder comments.

CHAPTER 1.3: Human Rights Due Diligence

1.3.3. Prevention, Mitigation and Remediation of Human Rights Impacts

- 1.3.3.1. Mining project stakeholders shall have access to and be informed about a rights-compatible grievance mechanism and other mechanisms through which they can raise concerns and seek recourse for grievances related to human rights.
- 1.3.3.2. Responding to human rights risks related to the mining project:
- a. If the operating company determines that it is at risk of causing adverse human rights impacts through its mining-related activities, it shall prioritize preventing impacts from occurring, and if this is not possible, design strategies to mitigate the human rights risks. Mitigation plans shall be developed in consultation with potentially affected rights holder(s).
- b. If the operating company determines that it is at risk of contributing to adverse human rights impacts through its mining-related activities, it shall take action to prevent or mitigate its contribution, and use its leverage to influence other contributing parties to prevent or mitigate their contributions to the human rights risks.

social and environmental chapters, as well as the human rights due diligence chapter.

This offers a stronger and more robust approach than the generic EP4 "principlelike" approach.



- 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.
- 1.3.3.3. Responding to actual human rights impacts related to the mining project:
- a. If the operating company determines that it has caused an actual human rights impact, the company shall:
- . Cease or change the activity responsible for the impact; and
- 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. Monitoring

- 1.3.4.1. The operating company shall monitor whether salient 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.
- 1.3.4.2. External monitoring of an operating company's human rights due diligence shall occur if the company's due diligence efforts repeatedly fail to prevent, mitigate or remediate actual human rights impacts; or if its due diligence activities failed to prevent the company from unknowingly or unintentionally causing, contributing to or being linked to any serious human rights abuse. Additionally:
- a. The company shall fund the external monitoring; and
- b. The form of such monitoring, and selection of external monitors, shall be determined in collaboration with affected rights holders.

CHAPTER 2.4: Resettlement

2.4.3. Resettlement and Livelihood Restoration Planning and Preparation

2.4.3.1. When project-related displacement is deemed unavoidable, a census shall be carried out to collect appropriate socio-economic baseline data to identify the people who will be physically or



economically displaced by the project and determine who will be eligible for compensation and assistance.

- 2.4.3.2. In the absence of host government procedures, the operating company shall establish compensation eligibility criteria and a cut-off date for eligibility. Information regarding the cut-off date shall be well documented, and disseminated along with eligibility information throughout the mining project area.
- 2.4.3.3. In the case of physical displacement, the operating company shall develop a Resettlement Action Plan. If the project involves economic displacement only, a Livelihood Restoration Plan shall be developed. In either case, these plans shall, at a minimum:
- a. Describe how affected people will be involved in an ongoing process of consultation throughout the resettlement/livelihood restoration planning, implementation and monitoring phases;
- b. Describe the strategies to be undertaken to mitigate the negative impacts of displacement and improve or restore livelihoods and standards of living of displaced people, paying particular attention to the needs of women, the poor and vulnerable groups;
- c. Describe development-related opportunities and benefits for affected people and communities;
- d. Describe the methods used for valuing land and other assets;
- e. Establish the compensation framework (i.e., entitlements and rates of compensation for all categories of affected people, including host communities) in a transparent, consistent, and equitable manner;
- f. Include a budget and implementation schedule; and
- g. Be publicly available.

2.4.4. Mitigation Measures Related to Physical Displacement

- 2.4.4.1. In all cases, when people are physically displaced as a result of the development or expansion of a mine or its associated facilities:
- a. The operating company shall provide relocation assistance that is suited to the needs of each group of displaced peoples and is sufficient for them to improve or at least restore their standard of living at an alternative site;
- o. New resettlement sites built for displaced people shall offer improved living conditions; and
- c. Displaced people's preferences with respect to relocating in pre-existing communities and groups shall be taken into consideration and existing social and cultural institutions of displaced peoples and any host communities shall be respected.
- 2.4.4.2. In cases where physically displaced people have formal legal rights to the land or assets they occupy or use, or do not have formal legal rights but have a claim to land that is recognized or recognizable under national (host country) law:
- a. The operating company shall offer the choice of replacement property (land and assets) of at least equal value and characteristics, security of tenure, and advantages of location; and



- b. If cash compensation is appropriate and preferred by the affected people, compensation shall be sufficient to replace lost land and other assets at full replacement cost in local markets.

 2.4.4.3. In cases where physically displaced people have no recognizable legal right or claim to the land or assets they occupy or use, the operating company shall:
- Offer options for adequate housing with security of tenure; and
- b. Compensate for the loss of assets other than land at full replacement cost, provided that the people had been occupying the project area prior to the cut-off date for eligibility.

2.4.5. Mitigation Measures Related to Economic Displacement

- 2.4.5.1. If project-related land acquisition or restrictions on land use result in economic displacement, regardless of whether or not the affected people are physically displaced, the operating company shall apply the following measures:
- a. When commercial structures are affected, the business owners shall be compensated for the cost of re-establishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery or other equipment, and the employees shall be compensated for lost income;
- b. When affected people have legal rights or claims to land that are recognized or recognizable under national law, replacement property of equal or greater value shall be provided, or, where appropriate, cash compensation at full replacement cost; and
- c. Economically displaced people who are without legally recognizable claims to land shall be compensated for lost assets other than land at full replacement cost.
- 2.4.5.2. All economically displaced people whose livelihoods or income levels are adversely affected shall be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living, and transitional support shall be provided based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living. Additionally:
- a. For people whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost shall be offered as a matter of priority;
- b. For people whose livelihoods are natural resource-based and where project-related restrictions on access apply, continued access to affected resources or access to alternative resources with at least equivalent livelihood-earning potential and accessibility shall be provided; and
- c. If circumstances prevent the operating company from providing land or similar resources as described above, alternative income earning opportunities shall be provided to restore livelihoods.

2.4.6. Resettlement and Livelihood Restoration Agreements and Implementation

2.4.6.1. In order to be certified by IRMA, if a new project will require the displacement of indigenous peoples the operating company shall obtain the free, prior and informed consent (FPIC) of affected indigenous communities before proceeding with the resettlement and mine development (as per IRMA Chapter 2.2).



- 2.4.6.2. If a new mine will require the displacement of non-indigenous peoples, the operating company shall make a good faith effort to negotiate agreements with all households that will be physically or economically displaced by the mining project before proceeding with the resettlement, even if the company has the legal means to acquire land or restrict land use without their consent.
- 2.4.6.3. Prior to negotiating with affected people, the operating company shall provide or facilitate access to resources necessary to participate in an informed manner. This shall include, at minimum:
- Copies of RAP and/or LRP;
- b. Details on what to expect at various stages of the resettlement or livelihood restoration process (e.g., when an offer will be made to them, how long they will have to respond, how to access the grievance mechanism if they wish to appeal property or asset valuations, legal procedures to be followed if negotiations fail); and
- c. Independent legal experts or others to ensure that affected people understand the content of any proposed agreement and associated information.
- 2.4.6.4. In cases where affected people reject compensation offers that meet the requirements of this chapter and, as a result, expropriation or other legal procedures are initiated, the operating company shall explore opportunities to collaborate with the responsible government agency, and, if permitted by the agency, play an active role in resettlement planning, implementation, and monitoring to mitigate the risk of impoverishment of those affected people.
- 2.4.6.5. Forced evictions shall not be carried except in accordance with law and international best practice, and the requirements of this chapter.
- 2.4.6.6. The operating company shall take possession of acquired land and related assets only after compensation has been made available, and, where applicable, resettlement sites and moving allowances have been provided to the displaced people.
- 2.4.6.7. The operating company shall document all transactions to acquire land rights, and all compensation measures and relocation activities.

2.4.7. Resettlement and Livelihood Restoration Monitoring and Evaluation

- 2.4.7.1. The operating company shall establish and implement procedures to monitor and evaluate the implementation of a Resettlement Action Plan (RAP) or Livelihood Restoration Plan (LRP), and take corrective action as necessary until the provisions of the RAP/LRP and the objectives of this chapter have been met.
- 2.4.7.2. Periodically, the operating company shall report to affected people and other relevant stakeholders on progress made toward full implementation of the RAP or LRP.
- 2.4.7.3. Where resettlement is deemed to pose a risk of significant adverse social impacts the operating company:



- a. Shall retain competent professionals to verify the operating company's monitoring information and provide advice on additional steps needed to achieve compliance with the requirements of this chapter; and
- b. Shall commission a completion audit that:
- i. Occurs after the company deems that its RAP/LRP has been fully and successfully implemented;
- Is carried out by external resettlement experts;
- ii. Includes, at a minimum, a review of the mitigation measures implemented by the operating company, a comparison of implementation outcomes against the requirements of this chapter, and a determination as to whether the commitments made in the RAP/LRP have been delivered and the monitoring process can therefore be terminated; and
- iii. Is made available to affected people and their advisors.

2.4.8. Private Sector Responsibilities Under Government-Managed Resettlement

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

CHAPTER 3.1: Fair Labor and Terms of Work

3.1.2. Workers' Organizations and Agreements

- 3.1.2.1. The operating company shall respect the rights of workers to freedom of association and collective bargaining.
- 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.



- 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.
- 3.1.2.4. Workers' representatives shall have access to facilities needed to carry out their functions in the workplace. This includes access to designated non-work areas during organizing efforts for the purposes of communicating with workers, as well as accommodations for workers' representatives at fly-in/fly-out or other remotely located mine sites, where relevant.
- 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.
- 3.1.2.6. Upon employment, the operating company shall:
- a. Inform workers of their rights under national labor and employment law;
- b. Inform workers that they are free to join a workers' organization of their choosing without any negative consequences or retaliation from the operating company;
- c. If relevant, inform workers of their rights under any applicable collective agreement; and
- d. If relevant, provide workers with a copy of the collective agreement and the contact information for the appropriate trade union (or workers' organization) representative.
- 3.1.2.7. The operating company shall not discriminate or retaliate against workers who participate, or seek to participate, in legitimate workers' organizations or in a legal strike.
- 3.1.2.8. Where the operating company is a party to a collective bargaining agreement with a workers' organization, the terms of the agreement shall be respected. Where such an agreement does not exist, or an agreement does not address specific requirements in this chapter, the operating company shall meet the relevant IRMA requirements.
- 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.
- 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.
- 3.1.3. Non-Discrimination and Equal Opportunity



- 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.
- 3.1.3.2. Exceptions to 3.1.3.1 may be made with respect to hiring and recruitment in the case of:
- a. Targets or quotas mandated by law;
- b. Targets developed through local agreements for the employment of local residents, indigenous peoples, or individuals who have been historically disadvantaged; or
- c. Operating company targets for the employment of local residents, indigenous peoples, or individuals who have been historically disadvantaged that are expressed in publicly accessible policies with explicit goals and justification for such targets.
- 3.1.3.3. The operating company shall take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to female workers.

3.1.4. Retrenchment

- 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.
- 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.

3.1.6. Disciplinary Procedures

- 3.1.6.1. The operating company shall have documented disciplinary procedures (or their equivalent) that are made available to all workers.
- 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.
- 3.1.6.3. The operating company shall keep records of all disciplinary actions taken.

3.1.7. Child Labor

3.1.7.1. The operating company shall document the ages of all workers.



- 3.1.7.2. Children (i.e., persons under the age of 18) shall not be hired to do hazardous work (e.g., working underground or where there may be exposure to hazardous substances).
- 3.1.7.3. The minimum age for non-hazardous work shall be 15, or the minimum age outlined in national law, whichever is higher.
- 3.1.7.4. When a child is legally performing non-hazardous work, the company shall assess and minimize the risks to their physical and 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.
- 3.1.7.5. If the operating company discovers that a child under the minimum ages outlined in 3.1.7.2 or 3.1.7.3 is performing hazardous or non-hazardous work:
- 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.

3.1.8. Forced Labor

- 3.1.8.1. The operating company shall 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.

3.1.9. Wages

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.



- 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.
- 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.
- 3.1.9.4. The operating company shall pay wages in a manner that is reasonable for workers (e.g., bank transfer, cash or check).
- 3.1.9.5. The operating company shall ensure that deductions from wages are not made for disciplinary purposes unless one of the following conditions exist:
- a. Deductions from wages for disciplinary purposes are permitted by national law, and the law guarantees the procedural fairness of the disciplinary action; or
- b. Deductions from wages for disciplinary purposes are permitted in a freely negotiated collective bargaining agreement or arbitration award.

3.1.10. Working Hours and Leave

- 3.1.10.1. The operating company shall ensure that:
- a. Regular working hours do not exceed eight hours per day, or 48 hours per week. Where workers are employed in shifts the 8-hour day and 48-hour week may be exceeded provided that the average number of regular hours worked over a 3-week period does not exceed eight hours per day and 48 hours per week;
- b. Workers are provided with at least 24 consecutive hours off in every 7-day period; and
- c. Overtime is consensual and limited to 12 hours a week.
- d. Exceptions to 3.1.10.1.b and c shall be allowed at mines in remote locations if:
- i. A freely negotiated collective bargaining agreement is in force that allows variances to the rest and/or overtime hours above; and
- 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.
- 3.1.10.2. Where neither national law nor a collective bargaining agreement includes provisions for worker leave, the operating company shall, at minimum, provide:
- a. An annual paid holiday of at least three working weeks per year, after the worker reaches one year of service; and
- A maternity leave period of no less than 14 weeks.

CHAPTER 3.2: Occupational Health and Safety

3.2.1. Health and Safety Management System

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.



3.2.2. Health and Safety Risk Assessment and Management

- 3.2.2.4. The operating company shall develop, implement and systematically update a risk management plan that prioritizes measures to eliminate significant hazards, and outlines additional controls to effectively minimize negative consequences and protect workers and others from remaining hazards.
- 3.2.2.5. 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 own safety and health or that of other persons;
- c. Maintain the stability of the ground in areas where persons may have access in the context of their work;
- d. If relevant, whenever practicable provide two exits from every underground workplace, each connected to separate means of egress to the surface;
- e. If relevant, ensure adequate ventilation for all underground workings to which access is permitted;
- f. Ensure a safe system of work and the protection of workers in zones susceptible to particular hazards;
- g. Prevent, detect and combat accumulations of hazardous gases and dusts, and the start and spread of fires and explosions; and
- h. Ensure that when there is potential high risk of harm to workers, operations are stopped and workers are evacuated to a safe location.

3.2.4. Measures to Protect Workers

- 3.2.4.1. 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, education and training/retraining programs and comprehensible instructions on the work assigned and on safety and health matters;
- e. Providing adequate supervision and control on each shift; and
- f. If relevant, establishing a system to identify and track at any time the probable locations of all persons who are underground.



- 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.
- 3.2.4.3. The operating company shall provide workers with clean toilet, washing and locker facilities (commensurate with the number and gender of staff employed), potable drinking water, and where applicable, sanitary facilities for food storage and preparation. Any accommodations provided by the operating company shall be clean, safe, and meet the basic needs of the workers.
- 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 a 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. If an occupational illness manifests after a worker has retired, the operating company or its corporate owner shall, at minimum, compensate the worker for medical expenses, unless the operating company or its corporate owner can establish that the occupational illness was not connected to the worker's employment at the mining project.
- 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. Inspections, Monitoring and Investigations

- 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 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 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.
- 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.
- 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 and investigated, and that appropriate remedial action is taken.

3.2.6. Health and Safety Data Management and Access to Information

- 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 shall be 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.
- 3.2.6.2. The operating company shall establish a data management system that enables worker health data to be readily located and retrieved, and data protected by medical confidentiality to be securely stored. Data shall be retained for a minimum of 30 years, and responsible custodians shall be assigned to oversee the heath data management system.
- 3.2.6.3. The operating company shall allow workers access to their personal information regarding accidents, dangerous occurrences, inspections, investigations, remedial actions, health surveillance and medical examinations.

CHAPTER 3.3: Community Health and Safety

3.3.3. Risk and Impact Management and Mitigation

- 3.3.3.1. The operating company shall document and implement a community health and safety risk management plan that includes:
- a. Actions to be taken to mitigate the significant risks and impacts identified during its risk and impact assessment; and
- b. Monitoring that will be conducted to ensure that measures to prevent or mitigate impacts remain effective.



- 3.3.3.2. Mitigation measures shall prioritize the avoidance of risks and impacts over minimization and compensation.
- 3.3.3.3. The community health and safety risk management plan shall be updated as necessary based on the results of risk and impact monitoring.

3.3.4. Specific Provisions Related to HIV/AIDS, Tuberculosis, Malaria and Emerging Infectious Diseases

- 3.3.4.1. If the operating company's risk and impact assessment or other information indicates that there is a significant risk of community exposure to HIV/AIDS, tuberculosis, malaria or another emerging infectious disease related to mining activities, the operating company shall develop, adopt and implement policies, business practices, and targeted initiatives to address identified risks, and shall:
- a. In partnership with public health agencies, workers' organizations and other relevant stakeholders, create and fund initiatives to educate affected and vulnerable communities about these infections and modes of prevention of them, commensurate with the risks posed by mining;
- b. Operate in an open and transparent manner and be willing to share best practices for the prevention and treatment of these diseases with workers' organizations, other companies, civil society organizations and policymakers; and
- c. Make information publicly available on its infectious disease mitigation program.
- 3.3.4.2. If the assessment demonstrates a significant risk of community exposure to HIV/AIDS, tuberculosis or malaria from mining-related activities, the following prevention and mitigation strategies shall be applied, as appropriate:
- a. In relation to HIV/AIDS, the operating company shall, at minimum:
- i. Provide free, voluntary and confidential HIV testing and counseling for all mine workers and employees;
- ii. Provide HIV/AIDS treatment for workers and employees where it cannot reasonably be assumed that this will be provided in an effective manner by public or private insurance schemes at an affordable rate;
- iii. Provide access for contractors to education and other preventative programs, and 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; and
- c. In relation to malaria, the operating company shall, at minimum:
- i. Develop a vector control plan;
- ii. Ensure that company facilities are not breeding environments for malaria-carrying mosquitoes; and



iii. Provide protection from infection by malaria-carrying mosquitoes in company facilities and any company-provided housing.

CHAPTER 3.4: Conflict-Affected and High-Risk Area

3.4.2. Company Management Systems

- 3.4.2.1. 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:
- a. Illegally control mine sites, transportation routes and upstream 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 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.

3.4.4. Conflict Risk Management

- 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.
- 3.4.4.2. The operating company shall collaborate with relevant stakeholders to develop culturally appropriate strategies to 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.
- 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.



3.4.5. Monitoring

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 indictors developed with stakeholders.

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 conflict-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.

CHAPTER 3.5: Security Arrangements

3.5.2. Security Risk Assessment and Management

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.

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.

3.5.3. Due Diligence Prior to Hiring Security Personnel

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.

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.

3.5.4. Training

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 have not received equivalent training from their employers.

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.

3.5.5. Management of Security Incidents

3.5.5.1. The operating company shall:

- a. Develop and implement systems for documenting and investigating security incidents, including those involving impacts on human rights or the use of force;
- b. Take appropriate actions, including disciplinary measures, to prevent and deter abusive or unlawful acts by security personnel and acts that contravene the company's policies on rules of engagement, the use of force and firearms, human rights, and other relevant policies;
- c. Take appropriate actions to mitigate and provide remediation for human rights impacts (as per IRMA Chapter 1.3), injuries or fatalities caused by security providers;
- d. Report security incidents, including any credible allegations of human rights abuses by private or public security providers, to competent authorities and national human rights institutions, and cooperate in any investigations or proceedings;
- e. Provide medical assistance to all injured persons, including offenders; and
- f. Ensure the safety of victims and those filing security-related allegations.
- 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.

CHAPTER 3.6: Artisanal and Small-Scale Mining

3.6.2. Engage with ASM Entities and Communities

- 3.6.2.1. When an operating company has identified the presence of ASM on or in close proximity to its mining project, and where there is no material risk to company personnel, it shall:
- a. Make a good faith effort to engage with ASM entities including, where relevant, informal ASM operators and formal ASM associations, as part of ongoing stakeholder engagement efforts (See IRMA Chapter 1.2);
- b. Make a good faith effort to consult with informal and formal ASM entities during relevant risk and impact assessments and closure planning;
- c. Engage with communities that are or may be affected by ASM operations and/or interactions between LSM and ASM entities; and
- d. Inform ASM entities and communities that there is an operational-level grievance mechanism available to raise concerns and resolve conflicts related to the LSM operation.



3.6.3. Foster Positive Relationships and Opportunities for ASM and Communities

- 3.6.3.1. The operating company shall ensure that mine security personnel are trained in respecting the human rights of individuals engaged in ASM activities and members of affected communities.
- 3.6.3.2. The operating company shall demonstrate that it has considered opportunities to enhance positive safety, environmental and social impacts of ASM activities for the benefit of ASM entities and host communities.

3.6.4. Perform Due Diligence in Commercial Relationships with ASM

- 3.6.4.1. When a large-scale mine sources minerals from or has other commercial relationships with ASM entities, the operating company shall:
- a. Regularly assess the social and environmental risks and impacts related to the ASM entities with whom it has a commercial relationship;
- b. Collaborate with those ASM entities with whom it can legally and legitimately engage to develop and implement a plan to eliminate or mitigate the most significant risks, and over time, address other social and environmental risks related to those ASM operations; and
- c. Periodically monitor the effectiveness of mitigation strategies, and adapt plans as necessary to facilitate continued minimization of risks.
- 3.6.4.2. When a large-scale mine has commercial relationships with ASM entities that are located in conflict-affected or high-risk areas, the operating company shall carry out due diligence related to those ASM entities as required in IRMA Chapter 3.4.

CHAPTER 3.7: Cultural Heritage

3.7.3. Replicable Cultural Heritage

- 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.
- 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.

3.7.4. Non-Replicable Cultural Heritage



- 3.7.4.1. The operating company shall not remove any tangible nonreplicable cultural heritage, unless all of the following conditions are met:
- a. There are no technically or financially feasible alternatives to removal;
- b. The overall benefits of the mining project conclusively outweigh the anticipated cultural heritage loss from removal; and
- c. Any removal of cultural heritage is conducted using the best available technique.
- 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.

3.7.5. Critical Cultural Heritage

- 3.7.5.1. Except under exceptional circumstances, the operating company shall not remove, significantly alter or damage critical cultural heritage. In exceptional circumstances when impacts on critical cultural heritage are unavoidable, the operating company shall:
- a. Retain external experts to assist in the assessment and protection of critical cultural heritage, and use internationally recognized practices for the protection of cultural heritage; and
- b. Collaborate with affected communities to negotiate measures to protect critical cultural heritage and provide equitable outcomes for affected communities, and document the mutually accepted negotiation process and outcomes. Where impacts may occur to the critical cultural heritage of indigenous peoples 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. 3.7.5.2. When a new mine is proposed within a legally protected cultural heritage area, including areas proposed by host governments for such designation, or a legally defined protected area buffer zone, the operating company shall:
- a. Comply with requirement 3.7.5.1;
- Comply with the protected area's management plan;
- c. Consult with agencies or bodies responsible for protected area governance and management, affected communities and other key stakeholders on the proposed mining project; and
- d. Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area.
- 3.7.5.3. IRMA will not certify new mines that are developed in or that adversely affect the following protected areas if those areas were designated to protect cultural values (see also Chapter 4.6):
- World Heritage Sites, and areas on a State Party's official Tentative List for World Heritage Site Inscription;
- International Union for Conservation of Nature (IUCN) protected area management categories I-III; and
- Core areas of UNESCO biosphere reserves.
- 3.7.5.4. An existing mine located entirely or partially in a protected area listed in 3.7.5.3 shall demonstrate that:
- 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 life cycle will not permanently and materially damage the integrity of the cultural values for which the area was designated or recognized; and
- c. The operating company collaborates with relevant management authorities to integrate the mine's management strategies into the protected area's management plan.
- 3.7.5.5. 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.

3.7.6. Commercial Use of Cultural Heritage

- 3.7.6.1. Where the operating company proposes to use the intangible cultural heritage, including knowledge, innovations or practices of local communities for commercial purposes, the company shall inform these communities of their rights under national and international law, of the scope and nature of the proposed commercial development, and of the potential consequences of such development.
- 3.7.6.2. The operating company shall not proceed with such commercialization unless it:
- a. Collaborates with affected communities using a good faith negotiation process that results in a documented outcome; and
- b. Provides for fair and equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with local customs and traditions.
- 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.

3.7.7. Cultural Heritage Management

- 3.7.7.1. A cultural heritage management plan or its equivalent shall be developed that outlines the actions and mitigation measures to be implemented to protect cultural heritage.
- 3.7.7.2. If a new or existing mines 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
- 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.

CHAPTER 4.1: Waste and Materials Management

4.1.2. Safe Management of Materials Other Than Mine Wastes

- 4.1.2.1. The operating company shall:
- a. Identify all materials, substances and wastes (other than mine wastes) associated with the mining project that have the potential to cause impacts on human health, safety, the environment or communities; and
- b. Document and implement procedures for the safe transport, handling, storage and disposal of those materials, substances and wastes.

4.1.5. Mitigation of Risks and Management of Mine Waste Management Facilities

- 4.1.5.1. Mine waste facility design and mitigation of identified risks shall be consistent with best available technologies (BAT) and best available/applicable practices (BAP).
- 4.1.5.2. Mitigation of chemical risks related to mine waste facilities shall align with the mitigation hierarchy as follows:
- a. Priority shall be given to source control measures to prevent generation of contaminants;
- b. Where source control measures are not practicable or effective, migration control measures shall be implemented to prevent or minimize the movement of contaminants to where they can cause harm; and
- c. If necessary, MIW shall be captured and treated to remove contaminants before water is returned to the environment or used for other purposes.
- 4.1.5.3. For high-consequence-rated mine waste facilities, a critical controls framework shall be developed that aligns with a generally accepted industry framework, such as, for example, the process outlined in Mining Association of Canada's Tailings Management Guide.
- 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.
- 4.1.5.5. The operating company shall develop an Operation, Maintenance and Surveillance (OMS) manual (or its equivalent) aligned with the performance objectives, risk management strategies, critical controls and closure plan for the facility, that includes:
- a. An operations plan that documents practices that will be used to transport and contain wastes, and, if applicable, effluents, residues and process waters, including the recycling of process waters;
- b. A documented maintenance program that includes routine, predictive and event-driven maintenance to ensure that all relevant parameters (e.g., all civil, mechanical, electrical and



instrumentation components of a mine waste facility) are maintained in accordance with performance criteria, company standards, host country law and sound operating practices;

- c. A surveillance program that addresses surveillance needs associated with the risk management plan and critical controls management, and includes inspection and monitoring of the operation, physical and chemical integrity and stability, and safety of mine waste facilities, and a qualitative and quantitative comparison of actual to expected behavior of each facility;
- d. Documentation of facility-specific performance measures as indicators of effectiveness of mine waste management actions; and
- 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. On a regular basis, the operating company shall evaluate the performance of mine waste facilities to:
- Assess whether performance objectives are being met (see 4.1.4.2.a and 4.1.5.5);
- b. Assess the effectiveness of risk management measures, including critical controls (see 4.1.5.3);
- c. Inform updates to the risk management process (see 4.1.4.1.c) and the OMS manual (see 4.1.5.7); and
- d. Inform the management review to facilitate continual improvement (see 4.1.5.8).
- 4.1.5.7. The OMS manual shall be updated and new or revised risk and critical control strategies implemented if information reveals that mine waste facilities are not being effectively operated or maintained in a manner that protects human health and safety and prevents or otherwise minimizes harm to the environment and communities.
- 4.1.5.8. The operating company shall implement an annual management review to facilitate continual improvement of tailings storage facilities and all other mine waste facilities where the potential exists for contamination or catastrophic failure that could impact human health, safety, the environment or communities. The review shall:
- a. Align with the steps outlined in the Mining Association of Canada's Tailings Management Protocol or a similar framework; and
- b. Be documented, and the results reported to an accountable executive officer.

CHAPTER 4.2: Water Management

4.2.3. Prevention and Mitigation of Impacts to Water

- 4.2.3.1. The operating company, in collaboration with relevant stakeholders, shall evaluate options to mitigate predicted significant adverse impacts on water quantity, water quality and current and potential future water uses that may be affected by the mine's water management practices. Options shall be evaluated in a manner that aligns with the mitigation hierarchy.
- 4.2.3.2. If a surface water or groundwater mixing zone is proposed as a mitigation strategy:
- a. A risk assessment shall be carried out to identify, evaluate and document risks to human health, local economies and aquatic life from use of the proposed mixing zone, including, for surface



water mixing zones, an evaluation of whether there are specific contaminants in point source discharges, such as certain metals, that could accumulate in sediment and affect aquatic life; and

- b. If any significant risks are identified, the operating company shall develop mitigation measures to protect human health, aquatic life and local economies including, at minimum:
- i. Surface water or groundwater mixing zones are as small as practicable;
- i. Water in a surface water mixing zone is not lethal to aquatic life;
- iii. A surface water mixing zone does not interfere with the passage of migratory fish;
- iv. Surface water or groundwater mixing zones do not interfere with a pre-mine use of water 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 the substitution is agreed to by all potentially affected water users; and
- v. Point source discharges into a surface water mixing zone match the local hydrograph for surface water flows to the extent practicable.
- 4.2.3.3. Waters affected by the mining project shall be maintained at a quality that enables safe use for current purposes and for the potential future uses identified in collaboration with relevant stakeholders (see 4.2.1.2). In particular, the operating company shall demonstrate that contaminants measured at points of compliance are:
- a. Being maintained at baseline or background levels; or
- b. Being maintained at levels that are protective of the identified uses of those waters (see IRMA Water Quality Criteria by End Use Tables 4.2.a to 4.2.h, which correspond to particular end uses).
- 4.2.3.4. Unless agreed by potentially affected stakeholders, water resources affected by mining activities shall be maintained at quantities that enable continued use of those resources for current purposes and for the potential future uses identified in collaboration with relevant stakeholders (see 4.2.1.2).

4.2.4. Monitoring and Adaptive Management

- 4.2.4.1. The operating company shall develop and document a program to monitor changes in water quantity and quality. As part of the program the operating company shall:
- a. Establish a sufficient number of monitoring locations at appropriate sites to provide reliable data on changes to water quantity and the physical, chemical and biological conditions of surface waters, natural springs/seeps and groundwater (hereafter referred to as water characteristics);
- b. Sample on a frequent enough basis to account for seasonal fluctuations, storm events and extreme events that may cause changes in water characteristics;
- c. Establish trigger levels and/or other indicators to provide early warning of negative changes in water characteristics;
- d. Sample the quality and record the quantity of mine-affected waters destined for re-use by non-mining entities;
- e. Use credible methods and appropriate equipment to reliably detect changes in water characteristics; and
- f. Use accredited laboratories capable of detecting contaminants at levels below the values in the IRMA Water Quality Criteria by End-Use Tables.



- 4.2.4.2. Samples shall be analyzed for all parameters that have a reasonable potential to adversely affect identified current and future water uses. Where baseline or background monitoring, source characterization, modeling, and other site-specific information indicate no reasonable potential for a parameter to exceed the baseline/background values or numeric criteria in the IRMA Water Quality Criteria by End-Use Tables (depending on the approach used in 4.2.3.3), those parameters need not be measured on a regular basis.
- 4.2.4.3. The operating company shall actively solicit stakeholders from affected communities to participate in water monitoring and to review and provide feedback on the water monitoring program:
- a. Participation may involve the use of independent experts selected by the community; and
- b. If requested by community stakeholders, costs related to participation in monitoring and review of the monitoring program shall be covered in full or in part by the company, and a mutually acceptable agreement for covering costs shall be developed.
- 4.2.4.4. The operating company shall develop and implement an adaptive management plan for water that:
- a. Outlines planned actions to mitigate predicted impacts on current and future uses of water and natural resources from changes in surface water and groundwater quality and quantity related to the mining project; and
- b. Specifies adaptive management actions that will occur if certain outcomes (e.g., specific impacts), indicators, thresholds or trigger levels are reached, and timelines for their completion.
- 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.
- 4.2.4.6. Community stakeholders shall be provided with the opportunity to review adaptive management plans and participate in revising the plans.

CHAPTER 4.3: Air Quality

4.3.2. Air Quality Management Plan

- 4.3.2.1. 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.
- 4.3.2.2. Air quality management strategies and plans shall be implemented and updated as necessary over the mine life.

4.3.3. Air Quality Monitoring



- 4.3.3.1. The operating company shall monitor and document ambient air quality and dust associated with the mining project by using personnel trained in air quality monitoring.
- 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 to 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.

4.3.4. Protection of Air Quality

- 4.3.4.1. New mines and existing mines shall comply with the European Union's Air Quality Standards (EU Standards) as amended to their latest form (see Table 4.3, below) at the boundaries of the mine site and transportation routes, and/or mitigate exceedances as follows:
- a. If a mine is located in an airshed where baseline air quality conditions 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 air emissions, then more stringent international best practice standards shall apply;
- c. Where compliance is met for international best practice standards and a mine still experiences a residual risk from its air emissions, then the mine shall set more stringent self-designed limits, and implement additional mitigation measures to meet those limits; and
- d. For all air-emissions-related risks, the mine shall demonstrate that it is making incremental reductions in emissions, through a multi-year phased plan with defined timelines.
- 4.3.4.3. Dust deposition from mining-related activities shall not exceed 350 mg/m2/day, measured as an annual average. An exception to 4.3.4.3 may be made if demonstrating compliance is not reasonably possible through ordinary monitoring methods. In such cases the operating company shall utilize best available practices to minimize dust contamination.

CHAPTER 4.4: Noise and Vibration

4.4.2. Management and Mitigation of Impacts on Human Receptors



- 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.
- 4.4.2.2. The following exceptions to 4.4.2.1 apply:
- a. If baseline ambient noise levels exceed 55 dBA (day) and/or 45 dBA (night), then noise levels shall not exceed 3 dB above baseline as measured at relevant offsite noise receptors; and/or
- b. During periods of blasting the dBA levels may be exceeded as long as the other requirements in 4.4.2.4 are met.
- 4.4.2.3. If screening or other credible information indicates that there are only industrial or commercial receptors that may be affected by noise from mining-related activities, then noise measured at the mine boundary or nearest industrial or commercial receptor shall not exceed 70 dBA.
- 4.4.2.4. If screening or other credible information indicates that noise or vibration from blasting activities may impact human noise receptors, then blasting operations at mines shall be undertaken as follows:
- a. A maximum level for air blast overpressure of 115 dB (Lin Peak) shall be exceeded for no more than 5 % of blasts over a 12-month period;
- b. Blasting shall only occur during the hours of 09:00 to 17:00 on traditionally normal working days; and
- c. Ground vibration (peak particle velocity) shall neither exceed 5 mm/second on 9 out of 10 consecutive blasts, nor exceed 10 mm/second at any time.
- 4.4.2.5. Mines may undertake blasting outside of the time restraints in 4.4.2.4.b when the operating company can demonstrate one or more of the following:
- a. There are no nearby human noise receptors that will be impacted by blasting noise or vibration;
- b. Alternative hours are necessary and/or appropriate because of local, cultural or social norms; and/or
- c. Potentially affected human receptors have given voluntary approval for the expanded blasting hours.
- 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.



4.4.2.7. All noise- and vibration-related complaints and their outcomes shall be documented.

CHAPTER 4.5: Greenhouse Gas Emissions

4.5.3. Emissions Reduction Strategies

- 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.
- 4.5.3.2. The operating company shall demonstrate progress toward its greenhouse gas reduction targets.
- 4.5.3.3. The operating company shall demonstrate that it has investigated greenhouse gas reduction strategies, and shall document the results of its investigations.

CHAPTER 4.6: Biodiversity, Ecosystem Services and Protected Areas Requirements

4.6.4. Biodiversity and Ecosystem Services Impact Mitigation and Management

- 4.6.4.1. 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.

4.6.4.2. At existing mines:

- a. Where past adverse impacts on important biodiversity values and priority ecosystem services have been identified, the operating company shall design and implement onsite restoration strategies, and also, through consultation with stakeholders, design and implement additional conservation actions to support the enhancement of important biodiversity values and/or priority ecosystem services on an appropriate geographic scale; and
- b. If there is the potential for new impacts on important biodiversity values or priority ecosystem 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.
- 4.6.4.3. Offsetting, if required, shall be done in a manner that aligns with international best practice.



- 4.6.4.4. The operating company shall develop and implement a biodiversity management plan or equivalent that:
- a. Outlines specific objectives (e.g., no net loss/net gain, no additional loss) with measurable conservation outcomes, timelines, locations and activities that will be implemented to avoid, minimize, restore, enhance and, if necessary, offset adverse impacts on biodiversity and ecosystem services;
- b. Identifies key indicators, and ensures that there is an adequate baseline for the indicators to enable measurement of the effectiveness of mitigation activities over time;
- c. Provides a budget and financing plan to ensure that funding is available for effective mitigation.
- 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 life cycle.

4.6.5. Protected Areas Mitigation and Management

- 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:
- a. Demonstrates that the proposed development in such areas is legally permitted;
- b. Consults with protected area sponsors, managers and relevant stakeholders on the proposed project;
- c. Conducts mining-related activities in a manner consistent with protected area management plans for such areas; and
- d. Implements additional conservation actions or programs to promote and enhance the conservation aims and/or effective management of the area.
- 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 areas designated as protected area management category IV;
- Ramsar sites that are not IUCN protected area management categories I-III; and
- Buffer zones of UNESCO biosphere reserves.
- 4.6.5.3. IRMA will not certify new mines that are developed in or that adversely affect the following protected areas:
- World Heritage Sites, and areas on a State Party's official Tentative List for World Heritage Site Inscription;
- IUCN protected area management categories I-III;



		Core areas of UNESCO biosphere reserves.	
		 4.6.5.4. An existing mine located entirely or partially in a protected area listed in 4.6.5.3 shall demonstrate that: a. The mine was developed prior to the area's official designation; b. Management plans have been developed and are being implemented to ensure that activities during the remaining mine life cycle 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. 4.6.6. Monitoring 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 life cycle. 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. 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. See also entire Chapter 4.7-Cyanide Management and Chapter 4.8-Mercury Management for management measures related specifically to cyanide and mercury. 	
Principle 5:	For all Category A and Category B Projects the EPFI will	CHAPTER 1.2: Community and Stakeholder Engagement	IRMA exceeds
Stakeholder	require the client to demonstrate effective Stakeholder	1.2.1. Planning and Designing Stakeholder Engagement Processes	expectations of EP4.
Engagement	Engagement, as an ongoing process in a structured and culturally appropriate manner, with Affected Communities, Workers and, where relevant, Other Stakeholders. For Projects with potentially significant adverse impacts on Affected Communities, the client will conduct an Informed Consultation and Participation process. The client will tailor its consultation process to: the risks and impacts of the Project; the Project's phase of development; the language preferences of the Affected Communities; their decision-making processes; and the needs of disadvantaged and vulnerable groups. This	 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 collectively referred to as "stakeholders") who may be affected by or interested in the company's mining-related activities. 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. 1.2.1.3. The operating company shall consult with stakeholders to design engagement processes that are accessible, inclusive and culturally appropriate, and shall demonstrate that continuous efforts are taken to understand and remove barriers to engagement for affected stakeholders (especially women, marginalized and vulnerable groups). 	In a similar fashion, in the IRMA Standard best practice in terms of stakeholder engagement is covered both at the side-wide level in Chapter 1.2, and as a cross-cutting theme that can be found in most social and environmental chapters.



process should be free from external manipulation, interference, coercion and intimidation.

To facilitate Stakeholder Engagement, the client will, commensurate with the Project's risks and impacts, make the appropriate Assessment Documentation readily available to the Affected Communities, and where relevant Other Stakeholders, in the local language and in a culturally appropriate manner. The client will take account of, and document, the results of the Stakeholder Engagement process, including any actions agreed resulting from such process. Disclosure of environmental or social risks and adverse impacts should occur early in the Assessment process, in any event before the Project construction commences, and on an ongoing basis.

EPFIs recognise that Indigenous Peoples may represent vulnerable segments of Project- Affected Communities. All Projects affecting Indigenous Peoples will be subject to a process of Informed Consultation and Participation, and will need to comply with the rights and protections for Indigenous Peoples contained in relevant national law, including those laws implementing host country obligations under international law. IFC Performance Standard 7 paragraphs 13-17 detail the special circumstances that require the Free, Prior and Informed Consent (FPIC)7 of affected Indigenous Peoples, which include any of the following:

- Projects with impacts on lands and natural resources subject to traditional ownership or under the customary use of Indigenous Peoples,
- Projects requiring the relocation of Indigenous Peoples from lands and natural resources subject to traditional ownership or under customary use,
- Projects with significant impacts on critical cultural heritage essential to the identity of Indigenous Peoples, or
- Projects using their cultural heritage for commercial purposes.

Globally for Projects that meet these special circumstances, the EPFI will require a qualified independent consultant8 to evaluate the consultation process with Indigenous Peoples, and the outcomes of that process, against the requirements of host country laws and IFC Performance Standard 7.

1.2.1.4. The operating company shall demonstrate that efforts have been made to understand community dynamics in order to prevent or mitigate community conflicts that might otherwise occur as a result of company engagement processes.

1.2.2. Engagement Processes

- 1.2.2.1. Stakeholder engagement shall begin prior to or during mine planning, and be ongoing, throughout the life of the mine.
- 1.2.2.2. The operating company shall foster two-way dialogue and meaningful engagement with stakeholders by:
- a. Providing relevant information to stakeholders in a timely manner;
- b. Including participation by site management and subject-matter experts when addressing concerns of significance to stakeholders;
- c. Engaging in a manner that is respectful, and free from manipulation, interference, coercion or intimidation;
- d. Soliciting feedback from stakeholders on issues relevant to them; and
- e. Providing stakeholders with feedback on how the company has taken their input into account.
- 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.
- 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.
- 1.2.2.5. When stakeholder engagement processes depend substantially on community representatives, the operating company shall demonstrate that efforts have been made to confirm whether or not such persons represent the views and interests of affected community members and can be relied upon to faithfully communicate relevant information to them. If this is not the case, the operating company shall undertake additional engagement processes to enable more meaningful participation by and information sharing with the broader community.
- 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.
- 1.2.2.7. The operating company shall report back to affected communities and stakeholders on issues raised during engagement processes.

1.2.3. Strengthening Capacity

The specific rights and protections accorded to Indigenous Peoples, including their right to giver or withhold they Free, Prior, and Informed Consent (FPIC) is covered mainly in a dedicated Chapter (2.2), but also in the Chapters related to Cultural Heritage (3.7) and Resettlement (2.4).



Where Stakeholder Engagement, including with Indigenous Peoples, is the responsibility of the host government, EPFIs require the client to collaborate with the responsible government agency during the planning, implementation and monitoring of activities, to the extent permitted by the agency, to achieve outcomes that are consistent with IFC Performance Standard 7. If a process of good faith negotiations that meets the consultation requirements of IFC Performance Standard 7 has been followed and documented, but it is not clear if FPIC has been achieved, the EPFI will determine, with supporting advice from the consultant, if this qualifies as a justified deviation from the requirements of IFC Performance Standard 7, and whether the client should pursue additional corrective actions to meet IFC Performance Standard 7's objectives.

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.

1.2.4. Communications and Access to Information

- 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.
- 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.
- 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.
- 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.

CHAPTER 2.1: Environmental and Social Impact Assessment and Management 2.1.9. Stakeholder Consultation and Participation in ESIA and Environmental and Social Monitoring

- 2.1.9.1. As part of the ESIA process, the operating company shall provide for timely and effective stakeholder and rights holder (hereafter collectively referred to as stakeholder) consultation, review and comment on:
- a. The issues and impacts to be considered in the proposed scope of the ESIA (see 2.1.3);
- 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).
- 2.1.9.2. 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.



- 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.
- 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.
- 2.1.9.5. The operating company shall record all stakeholder comments received in relation to ESIA scoping; implementation; ESIA findings, conclusions and recommendations; and the environmental and social monitoring program. The company shall record how it responded to stakeholder comments.

CHAPTER 2.2: Free, Prior, and Informed Consent (FPIC)

2.2.1. Policy Commitment

- 2.2.1.1. The operating company shall have a publicly available policy that includes a statement of the company's respect for indigenous peoples' rights, as set out in the United Nations Declaration on the Rights of Indigenous peoples.
- 2.2.1.2. The operating company shall ensure that indigenous peoples potentially affected by the company's mining-related activities are aware of the policy.

2.2.2. General Requirements

- 2.2.2.1. The operating company shall conduct due diligence to determine if the host government conducted an adequate consultation process aimed at obtaining indigenous peoples' informed consent prior to granting access to mineral resources. The key findings of due diligence assessments shall be made publicly available and shall include the company's justification for proceeding with a project if the State failed to fulfill its consultation and/or consent duties.
- 2.2.2.2. New mines shall not be certified by IRMA unless they have obtained the free, prior and informed consent (FPIC) of potentially affected indigenous peoples. The circumstances for obtaining FPIC include situations where mining-related activities may affect indigenous peoples' rights or interests, including those that may: impact on lands, territories and resources; require the physical relocation of people; cause disruption to traditional livelihoods; impact on critical cultural heritage; or involve the use of cultural heritage for commercial purposes.
- 2.2.2.3. For new and existing mines, the operating company shall obtain FPIC from indigenous peoples for proposed changes to mining-related activities that may result in new or increased impacts on indigenous peoples' rights or interests.
- 2.2.2.4. If indigenous peoples' representatives clearly communicate, at any point during engagement with the operating company, that they do not wish to proceed with FPIC-related discussions, the company shall recognize that it does not have consent, and shall cease to pursue any proposed activities affecting the rights or interests of the indigenous peoples. The company may approach



indigenous peoples to renew discussions only if agreed to by the indigenous peoples' representatives.

2.2.3. Free, Prior and Informed Consent (FPIC) Scoping

- 2.2.3.1. The operating company shall:
- a. Consult with indigenous peoples and others, and review other relevant date to identify indigenous peoples that own, occupy or otherwise use land, territories or resources that may be affected by the mining project;
- b. Disclose to indigenous peoples, in a culturally appropriate manner, the preliminary project concepts and/or proposed activities, and the indigenous peoples' right to FPIC.
- 2.2.3.2. The operating company shall collaborate with indigenous peoples' representatives and other relevant members of affected communities of indigenous peoples to:
- a. Identify the appropriate means of engagement for each group of indigenous peoples (e.g., tribe, nation, population);
- b. Identify indigenous peoples' rights and interests that may be affected by the proposed activities;
- c. Identify additional studies or assessments needed to determine the range and degree of potential impacts on indigenous peoples' rights or interests; and
- d. Identify if there are capacity issues that may prevent full and informed participation of indigenous peoples. If issues are identified, the operating company shall provide funding or facilitate other means to enable indigenous peoples to address capacity issues in their preferred manner; and
- e. Ensure that the community as a whole/collective has meaningful opportunities to be involved in these processes.
- 2.2.3.3. The operating company shall collaborate with the indigenous peoples' representatives to design and implement plans to address the information gaps and needs identified through the scoping process.

2.2.4. Determine FPIC Processes

- 2.2.4.1. If there is more than one distinct indigenous peoples' group (e.g., tribe, nation, population) that may be affected by the operating company's mining-related activities, they may be included in a coordinated process or separate FPIC processes, as desired by the indigenous peoples.
- 2.2.4.2. If the potentially affected indigenous peoples have an FPIC protocol in place or under development, the operating company shall abide by it unless changes are agreed to by the indigenous peoples' group(s). Otherwise, the operating company shall jointly develop and document, in a manner agreed to by indigenous peoples' representatives, the FPIC process or processes to be followed.
- 2.2.4.3. The operating company shall make information on the mutually-agreed FPIC processes publicly available, unless the indigenous peoples' representatives have explicitly requested otherwise.



2.2.5. Implement FPIC Process

- 2.2.5.1. The operating company shall document, in a manner agreed to by the indigenous peoples, the FPIC process that was followed.
- 2.2.5.2. The operating company shall publicly report, in a manner agreed to by the indigenous peoples, on the FPIC process that was followed and its outcome.
- 2.2.5.3. If the process results in consent being given by indigenous peoples to certain mining-related activities, an agreement outlining the terms and conditions shall be signed or otherwise validated by the operating company and the representative(s) of the indigenous peoples. The agreement shall be binding and shall be made publicly available unless the indigenous peoples' representatives explicitly request otherwise.

2.2.6. Failure to Obtain Indigenous Peoples' Consent

2.2.6.1. For new mines, IRMA certification is not possible if a mining project does not obtain free, prior and informed consent from indigenous peoples.

2.2.7. Implementation and Ongoing Engagement

- 2.2.7.1. The operating company shall collaborate with indigenous peoples to monitor implementation of the FPIC agreement, and document the status of the commitments made in the agreement.
- 2.2.7.2. Engagement with indigenous peoples shall continue throughout all stages of the mining project.

CHAPTER 2.4: Resettlement

2.4.2. Community Engagement

- 2.4.2.1. The operating company shall disclose relevant information and consult with potentially affected people and communities, including host communities, during:
- a. The assessment of displacement and resettlement risks and impacts, including the consideration of alternative mining project designs to avoid or minimize resettlement;
- b. The development of resettlement and livelihood options; and
- c. The development, implementation, monitoring and evaluation of a Resettlement Action Plan (RAP) and/or Livelihood Restoration Plan (LRP).
- 2.4.2.2. The operating company shall facilitate access, if desired by potentially affected people and communities, including host communities, to independent legal or other expert advice from the earliest stages of project design and assessment, through monitoring and evaluation of the resettlement process.



2.4.2.3. People from affected communities, including host communities, shall have access to an effective mechanism to raise and seek recourse for concerns or grievances related to displacement and resettlement.

CHAPTER 2.5: Emergency Preparedness and Response

2.5.2. Community and Worker Consultation

2.5.2.1. The emergency response plan shall be developed in consultation with potentially affected communities and workers and/or workers' representatives, and the operating company shall incorporate their input into the emergency response plan, and include their participation in emergency response planning exercises.

CHAPTER 3.1: Fair Labor and Terms of Work

3.1.2. Workers' Organizations and Agreements

- 3.1.2.1. The operating company shall respect the rights of workers to freedom of association and collective bargaining.
- 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.
- 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.
- 3.1.2.4. Workers' representatives shall have access to facilities needed to carry out their functions in the workplace. This includes access to designated non-work areas during organizing efforts for the purposes of communicating with workers, as well as accommodations for workers' representatives at fly-in/fly-out or other remotely located mine sites, where relevant.
- 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.
- 3.1.2.6. Upon employment, the operating company shall:
- a. Inform workers of their rights under national labor and employment law;
- b. Inform workers that they are free to join a workers' organization of their choosing without any negative consequences or retaliation from the operating company;
- c. If relevant, inform workers of their rights under any applicable collective agreement; and



- d. If relevant, provide workers with a copy of the collective agreement and the contact information for the appropriate trade union (or workers' organization) representative.
- 3.1.2.7. The operating company shall not discriminate or retaliate against workers who participate, or seek to participate, in legitimate workers' organizations or in a legal strike.
- 3.1.2.8. Where the operating company is a party to a collective bargaining agreement with a workers' organization, the terms of the agreement shall be respected. Where such an agreement does not exist, or an agreement does not address specific requirements in this chapter, the operating company shall meet the relevant IRMA requirements.
- 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.
- 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.

CHAPTER 3.2: Fair Labor and Terms of Work

3.2.3. Communication and Engagement with Workers and Others

- 3.2.3.1. Workers shall be informed of their rights to:
- a. Report accidents, dangerous occurrences and hazards to the employer and to the competent authority;
- b. Request and obtain, where there is cause for concern on safety and health grounds, inspections and investigations to be conducted by the employer and the competent authority;
- c. Know and be informed of workplace hazards that may affect their safety or health;
- d. Obtain information held by the employer or the competent authority that is relevant to their safety or health;
- 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.
- 3.2.3.2. In all cases a worker attempting to exercise in good faith any of the rights referred to in 3.2.3.1 shall be protected from reprisals of any sort.
- 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.



- 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:
- Health and safety hazard identification and assessment;
- b. Design and implementation of workplace monitoring and worker health surveillance programs;
- c. Development of strategies to prevent or mitigate risks to workers through the health and safety risk assessments or workplace and workers' health surveillance; and
- d. Development of appropriate assistance and programs to support worker health and safety, including worker mental health.
- 3.2.3.5. The operating company shall provide workers' health and safety representatives with the opportunity to:
- a. Participate in inspections and investigations conducted at the workplace by the employer and by the competent authority;
- b. Monitor and investigate safety and health matters;
- c. Have recourse to advisers and independent experts; and
- d. Receive timely notice of accidents and dangerous occurrences.
- 3.2.3.6. Visitors and other third parties accessing the mining premises shall receive an occupational health and safety briefing, and be provided with relevant protective equipment for areas of the mine site that they will be entering.

CHAPTER 3.3: Community Health and Safety

3.3.5. Stakeholder Engagement

- 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;
- 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.

CHAPTER 3.5: Security Arrangements

3.5.6. Communication and Disclosure

- 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.
- 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.



CHAPTER 3.6: Artisanal and Small-Scale Mining

3.6.2. Engage with ASM Entities and Communities

- 3.6.2.1. When an operating company has identified the presence of ASM on or in close proximity to its mining project, and where there is no material risk to company personnel, it shall:
- a. Make a good faith effort to engage with ASM entities including, where relevant, informal ASM operators and formal ASM associations, as part of ongoing stakeholder engagement efforts (See IRMA Chapter 1.2);
- b. Make a good faith effort to consult with informal and formal ASM entities during relevant risk and impact assessments and closure planning;
- c. Engage with communities that are or may be affected by ASM operations and/or interactions between LSM and ASM entities; and
- d. Inform ASM entities and communities that there is an operational-level grievance mechanism available to raise concerns and resolve conflicts related to the LSM operation.

3.6.3. Foster Positive Relationships and Opportunities for ASM and Communities

- 3.6.3.1. The operating company shall ensure that mine security personnel are trained in respecting the human rights of individuals engaged in ASM activities and members of affected communities.
- 3.6.3.2. The operating company shall demonstrate that it has considered opportunities to enhance positive safety, environmental and social impacts of ASM activities for the benefit of ASM entities and host communities.

CHAPTER 4.1: Waste and Materials Management

4.1.7. Stakeholder Engagement in Mine Waste Management

- 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.
- 4.1.7.2. Emergency preparedness and response plans or emergency action plans related to catastrophic failure of mine waste facilities shall be discussed and prepared in consultation with potentially affected communities and workers and/or workers' representatives, and in collaboration with first responders and relevant government agencies.
- 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.
- 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.

CHAPTER 4.2: Water Management

4.2.5. Data Sharing, Communications and Reporting on Water Management Performance



		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.	
Principle 6: Grievance Mechanism	For all Category A and, as appropriate, Category B Projects, the EPFI will require the client, as part of the ESMS, to establish effective grievance mechanisms which are designed for use by Affected Communities and Workers, as appropriate, to receive and facilitate resolution of concerns and grievances about the Project's environmental and social performance. Grievance mechanisms are required to be scaled to the risks and impacts of the Project, and will seek to resolve concerns promptly, using an understandable and transparent consultative process that is culturally appropriate, readily accessible, at no cost, and without retribution to the party that originated the issue or concern. Grievance mechanisms should not impede access to judicial or administrative remedies. The client will inform Affected Communities and Workers about the grievance mechanisms in the course of the Stakeholder Engagement process	CHAPTER 1.4: Complaints, Grievances and Access to Remedy 1.4.1.1. Access to Operational-Level Complaints and Grievance Mechanism 1.4.1.1. The operating company shall ensure that stakeholders, including affected community members and rights holders (hereafter referred to collectively as "stakeholders") have access to an operational-level mechanism that allows them to raise and seek resolution or remedy for the range of complaints and grievances that may occur in relation to the company and its mining-related activities. 1.4.2. Development of Complaints and Grievance Procedures 1.4.2.1. The operating company shall consult with stakeholders on the design of culturally appropriate a. complaints and grievance procedures that address, at minimum: The effectiveness criteria outlined in Principle 31 of the United Nations Guiding Principles on Business and Human Rights, 28 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 b. (h) Based on engagement and dialogue; How complaints and grievances will be filed, acknowledged, investigated, and resolved, including general c. d. e. timeframes for each phase; How confidentiality of a complainant's identity will be respected, if requested; The ability to file anonymous complaints, if deemed necessary by stakeholders; The provision of assistance for those who may face barriers to using the operational-level grievance mechanism, including women, children, and marginalized or vulnerable groups; f. Options for recourse if an initial process does not result in satisfactory resolution or if the mechanism is inadequate or inappropriate for handling serious human rights grievances; and g. How complaints and grievances and their resolutions will be tracked and recorded. 1.4.2.1. The operating company shall ensure that all complaints and grievance procedures are documented and made publicly available. 1.4.3. Access to Other Remedy Mechanisms 1.4.3.	IRMA exceeds expectations of EP4. Rights-based grievance mechanisms, aligned with international best practice including the UNGPs, are required in the IRMA Standard, both for affected communities, and workers at the workplace. Noted that additional requirements also explicitly require demonstration that grievance on certain topics can be made (human rights, resettlement, exploration activities, security forces, ASM).



1.4.4. Monitoring and Evaluation

- 1.4.4.1. Complaints and grievances and their outcomes and remedies shall be documented.
- a. b. 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:

c. If changes need to be made to improve its effectiveness as per 1.4.2.1.a;

If changes in company activities can be implemented to prevent or mitigate similar grievances in the future; and

If outcomes and remedies provided through the mechanism accord with internationally recognized human rights.

1.4.4.3. Stakeholders shall be provided with clearly communicated opportunities to submit feedback on the

performance of the complaints and grievance mechanism.

- 1.4.5. Communications
- 1.4.5.1. The operating company shall take reasonable steps to inform all stakeholders of the existence of the

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

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.

1.4.5.3. The operating company shall inform relevant personnel who interact with stakeholders of the proper

procedures for handling stakeholder complaints and grievances, and ensure that personnel directly involved in

the operational-level mechanism receive instruction on the respectful handling of all complaints and grievances, including those that may appear frivolous.

1.4.6. Reporting

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.

CHAPTER 1.3: Human Rights Due Diligence

1.3.3. Prevention, Mitigation and Remediation of Human Rights Impacts

1.3.3.1. Mining project stakeholders shall have access to and be informed about a rights-compatible grievance mechanism and other mechanisms through which they can raise concerns and seek recourse for grievances related to human rights.

CHAPTER 2.4: Resettlement

2.4.2. Community Engagement



2.4.2.3. People from affected communities, including host communities, shall have access to an effective mechanism to raise and seek recourse for concerns or grievances related to displacement and resettlement.

CHAPTER 2.6: Planning and Financing Reclamation and Closure

2.6.1. Exploration 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).

CHAPTER 3.1: Fair Labor and Terms of Work

3.1.5. Grievance Mechanism

- 3.1.5.1. The operating company shall provide a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns. The mechanism, at minimum:
- a. Shall involve an appropriate level of management and address concerns promptly, without any retribution, using an understandable and transparent process that provides timely feedback to those concerned;
- 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.
- 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.
- 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.

CHAPTER 3.5: Security Arrangements

3.5.6. Communication and Disclosure

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.

CHAPTER 3.6: Artisanal and Small-Scale Mining

3.6.2. Engage with ASM Entities and Communities

- 3.6.2.1. When an operating company has identified the presence of ASM on or in close proximity to its mining project, and where there is no material risk to company personnel, it shall:
- [...] d. Inform ASM entities and communities that there is an operational-level grievance mechanism available to raise concerns and resolve conflicts related to the LSM operation.



Principle 7: Independent Review	Project Finance and Project-Related Corporate Loans For all Category A and, as appropriate, Category B Projects, an Independent Environmental and Social Consultant, will carry out an Independent Review of the Assessment process including the ESMPs, the ESMS, and the Stakeholder Engagement process documentation in order to assist the EPFI's due diligence and determination of Equator Principles compliance. The Independent Environmental and Social Consultant will also propose or opine on a suitable EPAP capable of bringing the Project into compliance with the Equator Principles, or indicate where there is a justified deviation from the applicable standards. The Independent Environmental and Social Consultant must be able to demonstrate expertise in evaluating the types of environmental and social risks and impacts relevant to the Project. For Category B projects, any due diligence performed by a multilateral or bilateral financial institution or an OECD Export Credit Agency may be taken into account to determine whether an Independent Review is required.	The independent third-party IRMA audits are conducted by multi-disciplinary teams of auditors, selected by audit firms that all must be trained and accredited by IRMA. For information on the assurance process at IRMA see: Assurance and Audit Process See also the IRMA Independent Assessment Manual at: https://responsiblemining.net/wp-content/uploads/2022/09/IRMA-Mine-Site-Assessment-Manual 09-2022-UPDATE.pdf	IRMA exceeds expectations of EP4. For information on the assurance process at IRMA see: Assurance and Audit Process
Principle 8: Covenants	An important strength of the Equator Principles is the incorporation of covenants linked to compliance. For all Projects, where a client is not in compliance with its environmental and social covenants, the EPFI will work with the client on remedial actions to bring the Project back into compliance. If the client fails to re-establish compliance within an agreed grace period, the EPFI reserves the right to exercise remedies, including calling an event of default, as considered appropriate. Project Finance and Project-Related Corporate Loans The client will covenant in the financing documentation to comply with all relevant host country environmental and social laws, regulations and permits in all material respects. Furthermore, for all Category A and Category B Projects, the client will covenant in the financial documentation: a) to comply with the ESMPs and EPAP (where applicable) during the construction and operation of the Project in all material respects; and	IRMA does not have a commercial relationship with sites being audited, to avoid conflict of interest. Accredited audit firms are selected and hired by the sites, and these auditors will undertake the independent third-party audit/s. The Standard does not specifically address cases where operating companies knowingly contribute to serious human rights abuses or violations of other fundamental rights. However, IRMA has created a Policy on Association to provide a means for IRMA to exclude companies from IRMA participation if those companies are directly or indirectly involved in activities that violate IRMA's core principles and values. According to the Policy of Association approved by the IRMA Board of Directors in October 2023, knowingly or intentionally causing or contributing to serious human rights abuses represent grounds for IRMA to exclude an operating company or its corporate owner from participating, or terminate a relationship with a company that has a participating IRMA mine. In the current version of the policy, the decision of whether or not to deny or withdraw IRMA achievement recognition, and any terms and conditions that might allow a company to re-associate with IRMA, has to be made by the IRMA Board. Policy available at: https://responsiblemining.net/wpcontent/uploads/2023/12/IRMA-Policy-on-Association-v2023-01.pdf	Approaches differ between EP4 and IRMA.



b) to provide periodic reports in a format agreed with the EPFI (with the frequency of these reports proportionate to the severity of impacts, or as required by law, but not less than annually), prepared by in-house staff or third party experts, that i) document compliance with the ESMPs and EPAP (where applicable), and ii) provide representation of compliance with relevant local, state and host country environmental and social laws, regulations and permits; and

c) to decommission the facilities, where applicable and appropriate, in accordance with an agreed decommissioning plan.

Project-Related Refinance and Project-Related Acquisition Finance EPFIs will take reasonable measures to ensure that all existing environmental and social obligations continue to be included in the new financing documentation.

Principle 9: Independent Monitoring and Reporting

For all Category A and, as appropriate, Category B
Projects10, in order to assess Project compliance with the
Equator Principles after Financial Close and over the life of
the loan, the EPFI will require independent monitoring
and reporting. Monitoring and reporting should be
provided by an Independent Environmental and Social
Consultant; alternatively, the EPFI will require that the
client retain qualified and experienced external experts to
verify its monitoring information, which will be shared
with the EPFI in accordance with the frequency required in
Principle 8b.

In line with the above, in the specific case of monitoring of Project-Related Corporate Loans to national, regional or local governments, governmental ministries and agencies, the EPFI may decide between requiring an Independent Environmental and Social Consultant or relying on internal monitoring by the EPFI.

Additionally, any monitoring performed by a multilateral or bilateral financial institution or an OECD Export Credit Agency may be taken into account.

The independent third-party IRMA audits are conducted by multi-disciplinary teams of auditors, selected by audit firms that all must be trained and accredited by IRMA. For information on the assurance process at IRMA see:

Assurance and Audit Process

See also the IRMA Independent Assessment Manual at:

https://responsiblemining.net/wp-content/uploads/2022/09/IRMA-Mine-Site-Assessment-Manual 09-2022-UPDATE.pdf

Additionally, the following requirements in the IRMA Standard require independent monitoring and review, in addition to, and regardless of, an IRMA audit being undertaken:

CHAPTER 1.3: Human Rights Due Diligence

1.3.4. Monitoring

- 1.3.4.2. External monitoring of an operating company's human rights due diligence shall occur if the company's due diligence efforts repeatedly fail to prevent, mitigate or remediate actual human rights impacts; or if its due diligence activities failed to prevent the company from unknowingly or unintentionally causing, contributing to or being linked to any serious human rights abuse. Additionally:
- a. The company shall fund the external monitoring; and
- b. The form of such monitoring, and selection of external monitors, shall be determined in collaboration with affected rights holders.

CHAPTER 2.1: Environmental and Social Impact Assessment and Management

IRMA exceeds expectations of EP4.

The independent thirdparty IRMA audits are conducted by multidisciplinary teams of auditors, selected by audit firms that all must be trained and accredited by IRMA. Additionally, multiple requirements in the **IRMA Standard require** independent monitoring and review, in addition to, and regardless of, an IRMA audit being undertaken.



2.1.8. Environmental and Social Impact Monitoring

2.1.8.3. If requested by relevant stakeholders, the operating company shall facilitate the independent monitoring of key impact indicators where this would not interfere with the safe operation of the project.

CHAPTER 2.4: Resettlement

2.4.2. Community Engagement

2.4.2.2. The operating company shall facilitate access, if desired by potentially affected people and communities, including host communities, to independent legal or other expert advice from the earliest stages of project design and assessment, through monitoring and evaluation of the resettlement process.

CHAPTER 2.6: Planning and Financing Reclamation and Closure

2.6.4. Financial Surety for Mine Closure

2.6.4.5. Prior to the commencement of the construction of the mine, prior to any renewal of the financial surety, and prior to final release of the financial surety the operating company shall provide the public with at least 60 days to comment on the adequacy of the financial surety. Additionally: [...] 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.

2.6.7. Post-Closure Financial Surety

2.6.7.3. The post-closure financial surety shall be recalculated and reviewed by an independent analyst at the same time as the reclamation financial surety.

CHAPTER 4.1: Waste and Materials Management

4.1.6. Independent Review of Mine Waste Management Facilities

- 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.
- 4.1.6.2. Reviews shall be carried out by independent review bodies, which may be composed of a single reviewer or several individuals. At high-risk mine waste facilities a panel of three or more subject matter experts shall comprise the independent review body.
- 4.1.6.3. Independent reviewers shall be objective, third-party, competent professionals.
- 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.
- 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. CHAPTER 4.2: Water Management 4.2.4. Monitoring and Adaptive Management 4.2.4.3. The operating company shall actively solicit stakeholders from affected communities to participate in water monitoring and to review and provide feedback on the water monitoring program: a. Participation may involve the use of independent experts selected by the community; and b. If requested by community stakeholders, costs related to participation in monitoring and review of the monitoring program shall be covered in full or in part by the company, and a mutually acceptable agreement for covering costs shall be developed. CHAPTER 4.6: Biodiversity, Ecosystem Services and Protected Areas 4.6.6. Monitoring 4.6.6.4. The findings of monitoring programs shall be subject to independent review.	
Principle 10: Reporting and Transparency	EPFI Reporting Requirements The EPFI will, at least annually, report publicly on transactions that have reached Financial Close and on its Equator Principles implementation processes and experience. The EPFI will report according to the minimum reporting requirements detailed in Annex B, taking into account appropriate confidentiality considerations. **** Client Reporting Requirements The following client reporting requirements are in addition to the disclosure requirements in Principle 5. For all Category A and, as appropriate, Category B Projects: • The client will ensure that, at a minimum, a summary of the ESIA is accessible and available online and that it includes a summary of Human Rights and climate change	Unlike other voluntary mining standard, IRMA audit reports are published in their entirety, offering an unparallel level of transparency, at the level of 420+ individual requirements. All audit reports published to date can be found online, for free, in relevant languages: https://connections.responsiblemining.net/independently-assessing-mines See for example: Gerdau Audit Report *** CHAPTER 1.3: Human Rights Due Diligence 1.3.5.1. The operating company or its corporate owner shall periodically report publicly on the effectiveness of its human rights due diligence activities. At minimum, reporting shall include the methods used to determine the salient human rights issues, a list of salient risks and impacts that were identified, and actions taken by the operating company to prevent, mitigate and/or remediate the human rights risks and impacts.	IRMA exceeds expectations of EP4. Again here, in the IRMA Standard reporting and transparency is required across most social and environmental chapters, besides the general ESIA reporting and information- sharing section in Chapter 2.1. And unlike other voluntary mining
	risks and impacts when relevant • The client will report publicly, on an annual basis, GHG emission levels (combined Scope 1 and Scope 2 Emissions, and, if appropriate, the GHG efficiency ratio) during the operational phase for Projects emitting over 100,000 tonnes of CO2 equivalent annually. Refer to	1.3.5.2. If relevant, the operating company shall publish a report on external monitoring findings and recommendations to improve the operating company's human rights due diligence, and the operating company shall report to relevant stakeholders and rights holders on its plans to improve its due diligence activities as a result of external monitoring recommendations.	standard, IRMA audit reports are published in their entirety, offering an unparallel level of transparency, at the level of 420+



Annex A for detailed requirements on GHG emissions reporting.

• The EPFI will encourage the client to share commercially non-sensitive Project-specific biodiversity data with the Global Biodiversity Information Facility13 (GBIF) and relevant national and global data repositories, using formats and conditions to enable such data to be accessed and re-used in future decisions and research applications.

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, is confidential business information, or that may compromise safety or place any individual at risk of further victimization.

individual requirements.

CHAPTER 1.4: Complaints and Grievance Mechanism and Access to Remedy

1.4.6. Reporting

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.

CHAPTER 1.5: Revenue and Payments Transparency

1.5.1. Disclosure of Country-Level Payments

- 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.
- 1.5.1.2. On a yearly basis, the operating company shall publish a report that discloses all material payments made by itself and its corporate owner to the government of the country in which the mining project is located. The report shall be made public within 12 months after the end of each financial year.
- 1.5.1.3. The types of payment disclosed shall include as a minimum, as applicable:
- a. The host government's production entitlement;
- b. National state-owned enterprise production entitlement;
- c. Profits taxes;
- d. Royalties;
- e. Dividends;
- f. Bonuses, such as signature, discovery and production bonuses;
- g. Licence fees, rental fees, entry fees and other considerations for licences and/or concessions;
- h. Payments for infrastructure improvements; and
- i. Any other significant payments and material benefits to government, including in kind payments.
- 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.

1.5.2. Disclosure of Project-Level Payments

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 1.5.3.2 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;
- 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.
- 1.5.2.3. The operating company shall publish annual accounts, following international accounting standards.

1.5.3. Support for the Extractive Industries Transparency Initiative (EITI)

- 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.
- 1.5.3.2. If the mining project is located in a country without a mandated transparency regime and the EITI is active in that country, the operating company shall:
- a. Commit to engage constructively with and support implementation of the EITI consistent with the multi-stakeholder process adopted in its country of operation; and
- b. Provide links on its external website to completed and up-to-date Company Forms for its operation, if the EITI implementing country has completed at least one validation.

1.5.4. Operating Company Transparency

- 1.5.4.1. The material terms for mineral exploration, development and production agreed between the operating company and government entities shall be freely and publicly accessible, with the exception of confidential business information, in the national language(s) of the country in which the mining project is located.
- a. Where these terms are negotiated, rather than governed by law, the company shall make the relevant agreements, licences or contracts freely and publicly accessible.
- b. Where these terms are governed by law, free, public access to the relevant statutory documentation is deemed sufficient to meet the IRMA requirement.
- 1.5.4.2. The beneficial ownership of the operating company shall be publicly accessible.

CHAPTER 2.1: Environmental and Social Impact Assessment and Management

2.1.10. Environmental and Social Disclosures and Reporting



- 2.1.10.1. 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.
- 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.
- 2.1.10.3. The environmental and social management plan shall be made available to stakeholders upon request.
- 2.1.10.4. Summary reports of the findings of the environmental and social monitoring program shall be made publicly available at least annually, and all data and methodologies related to the monitoring program shall be publicly available.
- 2.1.10.5. The existence of publicly available ESIA and ESMS information, and the means of accessing it, shall be publicized by appropriate means.

CHAPTER 2.2: Free, Prior and Informed Consent (FPIC)

2.2.2. General Requirements

2.2.2.1. The operating company shall conduct due diligence to determine if the host government conducted an adequate consultation process aimed at obtaining indigenous peoples' informed consent prior to granting access to mineral resources. The key findings of due diligence assessments shall be made publicly available and shall include the company's justification for proceeding with a project if the State failed to fulfill its consultation and/or consent duties.

2.2.5. Implement FPIC Process

2.2.5.2. The operating company shall publicly report, in a manner agreed to by the indigenous peoples, on the FPIC process that was followed and its outcome.

CHAPTER 2.3: Obtaining Community Support and Delivering Benefits

2.3.3. Planning and Delivering Community Benefits

2.3.3.5. The planning process and any outcomes or decisions shall be documented and made publicly available.

CHAPTER 2.6: Planning and Financing Reclamation and Closure

2.6.2. Reclamation and Closure Planning

2.6.2.6. The most recent version of the reclamation and closure plan, including the results of all reclamation and closure plan updates, shall be publicly available or available to stakeholders upon request.

CHAPTER 3.3: Community Health and Safety

3.3.6. Reporting



3.3.6.1. The operating company shall make information on community health and safety risks and impacts and monitoring results publicly available.

CHAPTER 3.4: Mining and Conflict-Affected or High-Risk Areas

3.4.6. Reporting

3.4.6.1. The findings of conflict risk assessments, risk management plans and monitoring shall be reported to senior management of the operating company; and stakeholders, contractors, mine workers and other employees shall be informed of findings that are relevant to them.

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.

CHAPTER 3.5: Security Arrangements

3.5.6. Communication and Disclosure

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.

CHAPTER 4.2: Water Management

4.2.5. Data Sharing, Communications and Reporting on Water Management Performance

- 4.2.5.1. The operating company shall publish baseline or background data on water quantity and quality, and the following water data shall be published annually, or at a frequency agreed by stakeholders from affected communities:
- a. Monitoring data for surface water and groundwater points of compliance; and
- 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.

CHAPTER 4.3: Air Quality

4.3.5. Reporting

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.

CHAPTER 4.4: Noise and Vibration

4.4.3. Reporting

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.

CHAPTER 4.5: Greenhouse Gas Emissions

4.5.4. Reporting



4.5.4.1. The greenhouse gas policy shall be publicly available.

4.5.4.2. On an annual basis, the operating company or its corporate owner shall:

a. Disclose to IRMA auditors an accounting of 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 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.

CHAPTER 4.7: Cyanide

4.7.5. Reporting

4.7.5.1. Cyanide water quality monitoring data shall be published on at least a quarterly basis in tabular format, and graphical format if available, on the mine or the operating company website, or provided to stakeholders upon request.

4.7.5.2. If the operating company is a Cyanide Code signatory it shall include in its annual report or sustainability report a link to the company's audit information and corrective actions published on the ICMI website.

CHAPTER 4.8: Mercury Management

4.8.4. Reporting

4.8.4.1. The operating company shall report publicly, at least annually, a summary report of the findings from the implementation of the mercury monitoring plan, including the monitoring data.

Annex A: Climate Change: Alternatives Analysis, Quantification and Reporting of Greenhouse Gas Emissions

Alternatives Analysis

The alternatives analysis requires the evaluation of technically and financially feasible and cost-effective options available to reduce Project-related GHG emissions during the design, construction and operation of the Project.

For Scope 1 Emissions, this analysis will endeavour to ascertain the best practicable environmental option and will include consideration of alternative fuel or energy sources if applicable. Where an alternatives analysis is required by a regulatory permitting process, the analysis will follow the methodology and time frame required by the relevant process. For Projects in high carbon intensity sectors, the alternatives analysis will include comparisons to other viable technologies, used in the same industry and in the country or region, with the relative energy efficiency, GHG efficiency ratio4, as appropriate, of the selected technology.

IRMA Standard V2.0 – 2^{nd} Draft (to be circulated for comment Q2 2025, date subject to IRMA Board's approval)

CHAPTER 4.6: Climate Action (DRAFT)

4.6.2 Contribution to Climate Change

4.6.2.1

Building on the scoping and risk and assessment processed required in 2.1, an assessment of all, direct and indirect, significant contributions of the project/operation to climate change is conducted and documented by competent professionals. This assessment:

- a. Includes a full inventory of identified causes and effects of the contributions of the project/operation to climate change, and their levels of significance;
- b. Is updated, at least annually, and whenever there is the potential that the magnitude, duration, or probability of already-identified causes and effects have changed; and
- c. Enable the participation of affected rights holders and stakeholders in the assessment process, in accordance with Chapter 1.2

4.6.2.2 IRMA+ (Optional)

The Entity has a system in place to ensure its management plans and mitigation measures to address greenhouse gas emissions and energy reduction, waste and materials management, water

EP4 includes expectations that are not covered in IRMA Standard V1.0.

While the IRMA
Standard V1.0 covers
basic requirements
about Greenhouse Gas
Emissions
quantification and
reporting, and offers a
much stronger and
detailed set of
auditable requirements
than EP4 overall, it has
not fully caught up
with the most recent
development



High carbon intensity sectors indicatively include but are not limited to the following: oil and gas, thermal power, cement and lime manufacturing, integrated steel mills, base metal smelting and refining, and foundries, pulp mills and potentially agriculture.

Following completion of an alternatives analysis, the client will provide, through appropriate documentation, evidence of technically and financially feasible and cost-effective options and justification on why the selected technologies were not selected. This does not modify or reduce the requirements set out in the applicable standards (e.g. IFC Performance Standard 3).

Quantification and Reporting

GHG emissions should be calculated in line with the GHG Protocol14 to allow for aggregation and comparability across Projects, organisations and jurisdictions. Clients may use national reporting methodologies if they are consistent with the GHG Protocol. The client will quantify Scope 1 and Scope 2 Emissions.

The EPFI will require the client to report publicly on an annual basis on GHG emission levels (combined Scope 1 and Scope 2 Emissions) and GHG efficiency ratio, as appropriate, during the operational phase for Projects emitting over 100,000 tonnes of CO2 equivalent annually. Clients will be encouraged to report publicly on Projects emitting over 25,000 tonnes. Public reporting requirements can be satisfied via host country regulatory requirements for reporting or environmental impact assessments, or voluntary reporting mechanisms such as the Carbon Disclosure Project, where such reporting includes emissions at Project level.

Where appropriate, EPFIs will encourage clients to publish a summary of the alternatives analysis as part of the ESIA. In some circumstances, public disclosure of the full alternatives analysis or Project-level emissions may not be appropriate.

Climate Change Risk Assessment

The Climate Change Risk Assessment should address the following questions at a high level:

management, land and soil pollution, air pollution, and biodiversity, ecosystem services, and protected areas, are integrated into a comprehensive project/operation-wide plan (or equivalent) to mitigate and adapt to the adverse environmental, bio-geophysical, and social impacts of climate change, always following the mitigation hierarchy (including through avoiding and minimizing the significant contributions of the project/operation to climate change).

4.6.3 Technology Selection

4.6.3.1 The Entity has a system in place to ensure energy efficiency and minimization of greenhouse gas emissionsⁱ are considered, by competent professionals:

- a. When selecting technology options and alternatives for, where applicable, energy sources, mining and processing methods, technologies and equipment, and the design of new buildings and facilities (at proposed projects, or existing operations);
- b. When there are opportunities to replace, upgrade, or add technology, or change processes; and
- c. The Entity documents how energy efficiency and minimization of greenhouse gas emissions were considered, and the rationale for the final selections.

4.6.4 GHG Emissions and Energy Consumption Quantification

4.6.4.1

For Scope 1 and 2 emissions, at least annually:

- a. Emissions of all relevant Scope 1 greenhouse gases associated with the project/operationⁱⁱ, including emissions from land use changes and reductions in land carbon stock arising from the site's direct activitiesⁱⁱⁱ, are calculated by competent professionals, using internationally-recognized (or national, where they meet or exceed them) protocols or standards
- b. Emissions of all relevant Scope 2 greenhouse gases associated with the project/operation^{iv} are calculated by competent professionals, using internationally-recognized (or national, where they meet or exceed them) protocols or standards^v; and
- c. All Scope 1 and Scope 2 emissions calculations are verified by a credible third-party expert.

4.6.4.2

For Scope 3 Emissions:

- a. A screening exercise is completed by competent professionals to determine relevant upstream and downstream Scope 3 categories associated with the project/operation, using credible methodologies;
- b. At least annually, Scope 3 emissions of all relevant greenhouse gases for those relevant categories of emissions identified are calculated using credible methodologies; and
- c. All Scope 3 emissions calculations are verified by a credible third-party expert.

4.4.4.3

At least annually, energy consumption associated with the project/operation is measured using a credible methodology, and data are disaggregated into:

a. Energy generated by the site from fossil fuels and consumed by fixed and mobile equipment (collectively referred to as 'sources of Scope 1 emissions');

regarding the issues of Alternatives Analysis, Quantification and Reporting, and Climate Change Risk Assessment, that are included in the EP4.

These dimensions are proposed to be fully integrated in the next revision of the IRMA Standard (learn more about the revision process at: https://responsiblemining.net/irma-mining-standard/)



- What are the current and anticipated climate risks (transition and/or physical as defined by the TCFD) of the Project's operations?
- Does the client have plans, processes, policies and systems in place to manage these risks? i.e. to mitigate, transfer, accept or control.

This assessment should also consider the Project's compatibility with the host country's national climate commitments, as appropriate.

- b. Acquired and consumed electricity, steam, heat, or cooling (collectively referred to as 'sources of Scope 2 emissions'); and
- c. Energy derived from renewable sources purchased from external suppliers and, separately, from renewable sources generated by the ENTITY.

4.6.5 Scoping

4.5.6.1

A scoping process is undertaken and documented by competent professionals to identify and prioritize options for managing GHG emissions sequentially, in accordance with the mitigation hierarchy, starting with action to avoid emissions at the level of the project/operation, followed by action to reduce and minimize them, and, as a last resort, compensate^{vi} for them. This scoping process:

- a. Identifies sources of direct and/or indirect emissions that can be eliminated and/or that have the highest reduction potential
- b. Identifies technically feasible opportunities to increase energy efficiency, including through the adoption of less impactful sources of energy^{vii}; and
- c. Identifies opportunities for carbon capture and storage of any emissions that cannot be avoided.

4.6.5.2

This scoping process ensures that any emissions reduction opportunity takes into consideration the potential adverse social and human rights impacts arising from its implementation.

4.6.4 Greenhouse Gas and Energy Targets

4.6.4.1 Critical Requirement

Building on the quantification required in 4.6.4 and the scoping process required in 4.6.5, the Entity has site-based targets in place for **absolute** Scope 1 and Scope 2 greenhouse gas emissions, developed by competent professionals using a credible methodology^{viii}. These targets:

- a. Include time-bound short-term (<5 years), medium-term (5-15 years) and long-term (>15 years) site-based targets;
- b. Are in line with the Paris Agreement, or are part of corporate-level targets that are in line with the Paris Agreement; unless the site meets all the criteria for Green Enabling Projects^{ix} and can demonstrate the environmental benefits of its production's end-use^x; and
- c. Are verified and validated by a credible third-party expert.

4.6.6.2 Building on the quantification required in 4.6.4 and the scoping process required in 4.6.5, the Entity has the following targets in place, developed by competent professionals using a credible methodology:

- a. An energy consumption reduction target, either at site-level or as part of corporate-level targets;
- b. A target for increasing the proportion of energy consumed that comes from renewable sources, either at site-level or as part of corporate-level targets; and



c. Targets to reduce, to the greatest extent possible, Scope 3 emissions of all relevant greenhouse gases, disaggregated by the relevant categories of emissions identified in 4.6.4.2, either at site-level or as part of corporate-level targets.

4.6.7 Greenhouse Gas and Energy Management

4.6.7.1 Building on 4.6.4, 4.6.5, and 4.6.6, a management plan (or equivalent) is developed and documented by competent professionals, at the level of the project/operation, to manage energy and GHG emissions reductions. The plan outlines specific measures and prioritized measures to achieve, in accordance with the mitigation hierarchy:

- a. The site-level Scope 1, Scope 2 and, if relevant, Scope 3 greenhouse gas reduction targets required in 4.6.6 and updated as per 4.6.10;
- b. The site-level energy consumption reduction targets required in 4.6.6 and updated as per 4.6.10; and
- c. The site-level targets for the proportion of energy consumed at the site that comes from renewable sources, required in 4.6.6 and updated as per 4.6.10.

4.6.7.2 The plan:

- a. Assigns implementation of measures, or oversight of implementation, to responsible staff
- b. Includes an implementation schedule, estimates of human resources and budget required, and a financing plan to ensure that funding is available for the effective implementation of the plan; and
- c. Is made and maintained publicly accessible

4.6.7.3 IRMA+ (Optional)

The plan is integrated into an overarching holistic approach that moves beyond the carbon tunnel vision, and takes into account all nine planetary boundaries (Climate change, Change in biosphere integrity, Biogeochemical, Ocean acidification, Land use, Freshwater change, Ozone depletion, Atmospheric aerosols, and Novel entities).

4.6.8 Traditional Knowledge

4.6.8.1 The ENTITY has systems in place to ensure that traditional knowledge, and especially traditional ecological knowledge, of local affected communities, and Indigenous rights holders if applicable, is integrated into:

- a. The scoping process required in 4.6.5;
- b. The development of the management plan required in 4.6.7; and
- c. Relevant monitoring and evaluation processes required in 4.6.9, and relevant review and continuous improvement processes required in 4.6.10

4.6.9 Monitoring and Evaluation

4.6.9.1 To monitor and evaluate the implementation and effectiveness of its climate action, the ENTITY, at least annually:



- a. Tracks and documents its performance on reducing, in accordance with the mitigation hierarchy, site-level Scope 1 and Scope 2 and, if relevant, Scope 3 greenhouse gas emissions, over successive time periods, against the targets required in 4.6.6 and updated as per 4.6.10
- b. Tracks and documents its performance on reducing site-level energy consumption, over successive time periods, against the targets required in 4.6.6 and updated as per 4.6.10; and;
- c. Tracks and documents its performance on increasing the proportion of energy consumed at the site that comes from renewable sources, over successive time periods, against the targets required in 4.6.6 and updated as per 4.6.10

4.6.10 Continuous Improvement

- 4.6.10.1 At least annually, but without undue delay after a <u>significant change</u>, the ENTITY reviews:
- a. Develops and implements time-bound corrective measures to update, if necessary^{xi}, the scoping process in accordance with Section 4.6.5, and the greenhouse gas and energy targets in accordance with Section 4.6.6;
- b. Develops and implements time-bound corrective measures to update, if necessary^{xii}, the greenhouse gas and energy management plan in accordance with Section 4.6.7;
- c. Develops and implements time-bound corrective measures to update, if necessary, the monitoring and evaluation processes, in accordance with Section 4.6.9

4.6.11 Information Sharing and Public Reporting

- 4.6.11.1 At least annually, the Entity makes publicly accessible updated versions of, and maintains^{xiii} publicly accessible all previous versions of:
- a. All the Scope 1 and Scope 2 reduction targets required in 4.6.6.1, either at site-level or corporate-level
- b. All the Scope 3 reduction targets required in 4.6.6.2, either at site-level or corporate-level; and c. All the energy targets required in 4.6.6.2, either at site-level or corporate-level.
- 4.6.11.2 At least annually, the Entity makes publicly accessible updated versions of, and maintains^{xiv} publicly accessible all previous versions of:
 - a. All site-specific Scope 1 emissions calculations^{xv}, verified by a credible third-party expert, as required in 4.6.4.1
 - b. All site-specific Scope 2 emissions calculations^{xvi}, verified by a credible third-party expert, as required in 4.6.4.1; and
 - c. All relevant site-specific Scope 3 emissions calculations/estimates, verified by a credible third-party expert, as required in 4.6.4.2; and
- 4.6.11.3 At least annually, the Entity makes publicly accessible updated versions of, and maintains^{xvii} publicly accessible all previous versions of
 - a. The methods used to measure energy use and calculate Scopes 1, 2 and 3 emissions;
 - b. Quantified progress, informed by the review process required in 4.6.10.1, towards meeting the absolute targets for Scope 1 and Scope 2 emissions, and (if relevant) targets for Scope 3 emissions required in 4.6.6; and



		c. The percentage of greenhouse gas emissions reductions (Scope 1, 2 and/or 3) that has been achieved through carbon offsetting (rather than source elimination or reduction), and, if carbon offsetting was used ^{xviii} , a justification for doing so. 4.6.11.4 At least annually, the ENTITY makes publicly accessible updated versions of, and maintains ^{xix} publicly accessible all previous versions of: a. The site's total energy consumption; b. Disaggregated energy consumption data that details, at a minimum, delivered energy, energy from fossil fuels consumed on-site, renewable energy purchased from external suppliers and renewable energy generated at the site; and c. Quantified progress towards meeting targets for energy reduction and the proportion of energy consumed that comes from renewable sources (as set in 4.6.6.2). 4.6.11.5 At least annually, the ENTITY makes publicly accessible updated versions of, and maintains ^{xx} publicly accessible all previous versions of: a. Key findings of the monitoring and evaluation process required in 4.6.9, and of the review process required in 4.6.10.1; b. A list of the time-bound corrective measures related to its greenhouse gas and energy management plan, identified as per 4.6.10.2; and c. A list of the time-bound corrective measures related to its monitoring and evaluation processes, identified as per 4.6.10.2 See also CHAPTER 2.1: Socio-Environmental Baseline and Ongoing Impact Assessment (DRAFT) 2.1.1 Site Selection for Mineral Processing Projects 2.1.1.1 For a mineral processing project proposed after [DATE-OF-PUBLICATION-OF-STANDARD-V2.0], the ENTITY has a system in place to ensure that: a. The avoidance of adverse impacts to soils is considered and documented by competent professionals in the selection of the project location; b. The potential to locate the project on an existing brownfield site is evaluated; and maintained publicly accessible.	
Annex B: Minimum Reporting	The EPFI will report annually and as per the requirements detailed in all of the sections below.	Unlike other voluntary mining standard, IRMA audit reports are published in their entirety, offering an unparallel level of transparency, at the level of 420+ individual requirements.	IRMA exceeds expectations of EP4.
Requirements	The reports will not contain any personal information related to individuals.	All audit reports published to date can be found online, for free, in relevant languages: https://connections.responsiblemining.net/independently-assessing-mines See for example:	Unlike other voluntary mining standard, IRMA audit reports are
	Data and Implementation Reporting Data and implementation reporting is the responsibility of the EPFI. It will be published on the EPFI's website, in a	Gerdau Audit Report	published in their entirety, offering an unparallel level of



single location and in an accessible format. The EPFI will specify the reporting period (i.e. start and end dates) for all data and implementation reporting.

Project Finance Advisory Services Data

The EPFI will report on the total number of Project Finance Advisory Services mandated during the reporting period. The total will be broken down by Sector and Region. Data for Project Finance Advisory Services will be reported under a separate heading from Project Finance and Project-Related Corporate Loans. Project Finance Advisory Services data may exclude the Category and whether an Independent Review has been carried out because the Project is often at an early stage of development and not all information is available.

Project Finance and Project-Related Corporate Loans Data The EPFI will report on the total number of Project Finance transactions and total number of Project-Related Corporate Loans that reached Financial Close during the reporting period.

The totals for each product type will be broken down by Category (A, B or C) and then by:

- Sector (i.e. Mining, Infrastructure, Oil and Gas, Power, Others)
- Region (i.e. Americas, Europe Middle East and Africa, Asia Pacific)
- Country Designation (i.e. Designated Country or Non-Designated Country)
- Whether an Independent Review has been carried out Data for Project Finance transactions and Project-Related Corporate Loans should be shown separately.

transparency, at the level of 420+ individual requirements.

One should refer to "net GHG emissions" if, and only if, total GHG emissions are partially offset by human-led and deliberate GHG removal activities (like forestation/plantations or tech-based CO₂ removals) thereby leading to net GHG emissions.

ii There are seven greenhouse gases according to the United Nations Framework Convention on Climate Change and Kyoto Protocol. These are: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

iii The physical extent for calculating Scope 1 GHG emissions due to land use change (and reductions in land carbon stock) should only include specific land areas managed or controlled by the mining ENTITY, ensuring that only emissions from activities within these boundaries are considered.

iv There are seven greenhouse gases according to the United Nations Framework Convention on Climate (Ch₁), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₀) and nitrogen trifluoride (NF₃).

^v Including GHG Protocol, PAS 2050, ISO 14064 part 1 or equivalent.

vi Compensation measures (used as a last resort) may include the use of carbon offsets.

vii Including to prioritize use of renewable sources of energy, where technically and economically viable.

viii The requirement is that targets are set for Scope 1 and Scope 2 emissions, but entities can choose to develop Scope 3 targets if they have already developed a robust understanding of their Scope 3 emissions.

ix Specific criteria for eligible Green Enabling Projects, as articulated in the International Capital Market Association (ICMA) 2024 'Green Enabling Projects Guidance document' include:

¹⁾ Necessary for an enabled Green Project's value chain (see details in Guidance document);

²⁾ No carbon lock-in;



- 3) Clear, quantifiable and attributable environmental benefit; and
- 4) Mitigated adverse social or environmental impacts.

Guidance available at: https://www.icmagroup.org/assets/documents/Sustainable-finance/2024-updates/Green-Enabling-Projects-Guidance-document-June-2024.pdf

- * Demonstration of the environmental benefits of the production's end-use are also expected by ICMA, refer to the above document for guidance on sites where: a) the end-user is known and largely traceable; or b) the end-user is not known. The IRMA Chain of Custody Standard provides an auditable framework to ensure accounting and traceability of material produced by IRMA-audited sites. Downstream due diligence and understanding of the risk and impact associated with the end-use of products sold is also addressed under Chapter 1.4 Upstream and Downstream Sustainability Due Diligence.

 ICMA Guidance available at: https://www.icmagroup.org/assets/documents/Sustainable-finance/2024-pdates/Green-Enabling-Projects-Guidance-document-June-2024.pdf
- xi They must be updated if the review process indicates that the site is not on track with its targets (that must be aligned with the Paris Agreement, as per 4.6.6.1).
- xii They must be updated if the review process indicates that the site is not on track with its targets (that must be aligned with the Paris Agreement, as per 4.6.6.1).
- xiii All material must remain publicly accessible at least until the completion of all post-closure activities (including any previous versions, iterations and revisions). Note that the intention is not that the reports should be removed from the public domain after that. Rather, where possible, it should be retained indefinitely as the information may be important for legal or other purposes.
- xiv All material must remain publicly accessible at least until the completion of all post-closure activities (including any previous versions, iterations and revisions). Note that the intention is not that the reports should be removed from the public domain after that. Rather, where possible, it should be retained indefinitely as the information may be important for legal or other purposes.
- Way be reported as CO_2 equivalent (CO_2 e) or as the seven greenhouse gases defined in the United Nations Framework Convention on Climate Change and the Kyoto Protocol (CO_2 , methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3).
- xvi May be reported as CO₂ equivalent (CO₂e) or as the seven greenhouse gases defined in the United Nations Framework Convention on Climate Change and the Kyoto Protocol (CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).
- xvii All material must remain publicly accessible at least until the completion of all post-closure activities (including any previous versions, iterations and revisions). Note that the intention is not that the reports should be removed from the public domain after that. Rather, where possible, it should be retained indefinitely as the information may be important for legal or other purposes.
- xviii Carbon offsets can only be used as a last resort, see 4.6.5.1.
- xiix All material must remain publicly accessible at least until the completion of all post-closure activities (including any previous versions, iterations and revisions). Note that the intention is not that the reports should be removed from the public domain after that. Rather, where possible, it should be retained indefinitely as the information may be important for legal or other purposes.
- ** All material must remain publicly accessible at least until the completion of all post-closure activities (including any previous versions, iterations and revisions). Note that the intention is not that the reports should be removed from the public domain after that. Rather, where possible, it should be retained indefinitely as the information may be important for legal or other purposes.