

Application of the *IRMA Draft Standard for Responsible Mining and Mineral Processing 2.0* to all phases of Mineral Development Projects and Operations

Proposed Normative Requirements for
Exploration, Project Development, Project Permitting,
Mining Operations, and Mineral Processing

CONSULTATION DRAFT

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Context and Disclaimer on this draft IRMA Application document

This draft IRMA Application document is being released to accompany the *IRMA DRAFT Standard for Responsible Mining and Minerals Processing 2.0* ('*IRMA Draft Standard 2.0*') that is currently open for public comment (until January 26, 2024), inviting the world to join in a conversation around expectations that drive value for greater environmental and social responsibility in mining and mineral processing. The *IRMA DRAFT Standard 2.0* is based on content already in practice in the IRMA Standard for Responsible Mining Version 1.0 (2018) for mines in production, combined with the content drafted in the IRMA Standard for Responsible Mineral Development and Exploration (the 'IRMA-Ready' Standard – Draft v1.0 December 2021) and in the IRMA Standard for Responsible Minerals Processing (Draft v1.0 June 2021).

This draft document provides guidance to determine the proposed applicable **normative requirements** for an IRMA audit that would be based on the *IRMA DRAFT Standard 2.0*, depending on the phase of development for a given entity. Like the IRMA DRAFT Standard for Responsible Mining and Minerals Processing 2.0, this is not a finished document, nor seeking final review.

In the context of this document, a **normative requirement** modifies a given IRMA requirement from the IRMA DRAFT Standard 2.0 for a specific phase, by either replacing or supplementing the original text of this requirement. We use the terminology "normative requirements" here since they modify the elements that would actually be required and that auditors would measure against, not just guidance that helps to enrich or guide understanding of those requirements. Given the draft status of the IRMA DRAFT Standard 2.0, open for public comment until January 26, 2024, these are **proposed normative requirements**.

Neither this draft document nor the intended final version will preempt the need for an entity willing to engage in an IRMA independent audit to go through the IRMA Assurance System and submit an application. The IRMA application process ensures there is a shared understanding on the entity's unique context and the scope of relevant requirements applicable to the entity. The information provided in this application document can be used: a) by existing projects, operations or entities; and b) as an initial screening tool for potential projects.

This application document does not address the applicability of the *IRMA DRAFT Standard 2.0* for the construction, the reclamation, the closure, and the post-closure phases. It is assumed that those activities would be addressed and assessed within project permitting and/or operations phase requirements.

This draft application document is shared in its current form to inform global conversation and stakeholder input as part of the *IRMA DRAFT Standard 2.0* revision process. It does not represent content that has been endorsed by IRMA's equally-governed multistakeholder Board of Directors.

IRMA is dedicated to a participatory process including public consultation with a wide range of affected people globally and seeks feedback, comments, questions, and recommendations for improvement of the IRMA DRAFT Standard 2.0 as well as this application document. IRMA believes that diverse participation and input is a crucial and determining factor in the effectiveness of a Standard that is used to improve environmental and social performance in a sector. To this end, every submission received will be reviewed and considered.

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1. Introduction

The IRMA Draft Standard 2.0 incorporates the draft IRMA Standard for Responsible Mineral Development and Exploration (the ‘IRMA-Ready’ Standard – Draft v1.0 December 2021), the draft IRMA Standard for Responsible Minerals Processing (Draft v1.0 June 2021), and the IRMA Standard for Responsible Mining 1.0 (2018) into one integrated standard that covers all phases and types of mineral development activities. The 2023 proposed revisions for version 2.0 are meant to apply at any phase of the mineral development life cycle (e.g., exploration, project development, permitting, construction, mining and processing operations, reclamation and closure, post-closure).

The revised standard addresses four principles: Principle 1—Business Integrity; Principle 2— Planning and Managing for Positive Legacies; Principle 3— Social Responsibility; and Principle 4—Environmental Responsibility. It contains 27 chapters and 510 individual requirements.¹ The normative requirements provided in this document are intended to assist users of the revised standard in determining how the chapters and associated individual requirements apply to the different phases of the mineral development life cycle.

This document introduces the key terms as defined in the IRMA Standards for the mineral development life cycle phases and corresponding activities. It then provides a summary of the IRMA Draft Standard 2.0 Normative Requirements for the exploration, project development, project permitting, and mining/mineral processing operations phases of the mineral development life cycle. The IRMA Draft Standard 2.0 Normative Requirements for each chapter are provided and discussed in Appendix A.

In the context of this document, a *normative requirement* modifies a given IRMA requirement from the IRMA DRAFT Standard 2.0 for a specific phase, by either replacing or supplementing the original text of this requirement. We use the terminology “normative requirements” here since they modify the elements that would actually be required and that auditors would measure against, not just guidance that helps to enrich or guide understanding of those requirements. Given the draft status of the IRMA DRAFT Standard 2.0, open for public comment until January 26, 2024, these are proposed normative requirements.

This draft application document does not address the applicability of the revised standard for the construction phase or the reclamation, closure and post-closure phase. It is assumed that those activities would be addressed and assessed within project permitting and/or operations phase requirements.

¹ Chapter 2.4 has two potentially applicable sections, 2.4A and 2.4B, but is counted as a single chapter.

Associated Documents

An excel version, broken down by phase and including statistics summary, is available [online](#).

Commenting on this draft guidance document

Comments on this draft guidance document, as well as on the IRMA Standard are always welcome.

They may be emailed to IRMA at: comments@responsiblemining.net

Additional information about IRMA is available on our website: responsiblemining.net

2. Defining the Mineral Development Life Cycle and Mining-Related Activities

IRMA Draft Standard 2.0 together with the IRMA Draft Ready and Mineral Processing Standards 1.0 contain specific definitions that are intended to make key distinctions as to the applicability of IRMA requirements to the mineral development life cycle phases and types of mining activities.

It is important that those definitions, and in particular the distinctions they make with respect to the application of various criterion within the revised standard, are understood as a first step in applying it to a given project or operation.

The definitions² are presented below in an order intended to aid in the understanding of the mineral development life cycle and mining-related activities and related phases and activity types as further described herein.

Mineral Development Life Cycle

All the stages from cradle to grave to produce a saleable mineral/metal product. Includes early-stage desktop through late-stage exploration, project development including planning and permitting, construction, mining and/or mineral processing operations including downstream stand-alone operations, and the reclamation and closure, and post-closure stages.

Mining-Related Activities

Any activities carried out during any phase of the mineral development life cycle for the purpose of locating, extracting and/or producing mineral or metal products. Includes physical activities (e.g., land disturbance and clearing, road building, sampling, drilling, airborne surveys, field studies, construction, ore removal, brine extraction, beneficiation, mineral or brine processing, transport of materials and wastes, waste management, monitoring, reclamation, etc.) and non-physical activities (e.g., project or operational planning, permitting, stakeholder engagement, etc.).

Normative Requirement

In the context of this document, a *normative requirement* modifies a given IRMA requirement from the IRMA DRAFT Standard 2.0 for a specific phase, by either replacing or supplementing the original text of this requirement. We use the terminology “normative requirements” here since they modify the elements that would actually be required and that auditors would measure against, not just guidance that helps to enrich or guide understanding of those requirements. Given the draft status of the IRMA DRAFT Standard 2.0, open for public comment until January 26, 2024, these are proposed normative requirements.

² The definitions presented in this document are proposed revisions from those in the Draft IRMA Mining and Mineral Processing Standard v2.0 and Draft IRMA Ready and Mineral Processing Standards v1.0. The revisions are proposed to ensure consistency between the various documents and to make key distinctions between some phases.

Project(s)

The phases before a mining or mineral processing operation can begin (e.g., exploration and development). Includes all desktop and field-based activities, including exploration activities, needed to inform and develop a project proposal, support the environmental and social impact assessment of a proposal, generate information necessary to fulfill regulatory and permitting requirements, engage with stakeholders and rights holders, and maintain the entity's business endeavor.

Exploration

A process or range of activities undertaken to find commercially viable concentrations of minerals to mine and to define the available mineral reserve and resource. May occur concurrent with, and on or adjacent to, the same site as existing mining operations.

Exploration Stage 1: Office compilation, photo-geologic study, pre-contact and exploration investigations (e.g., review of existing information, previous studies, research, and screening evaluations). The strict assumption in all cases is that there are no on-the-ground or in-the-air activities or activities that presume future exploration, such as contact with affected communities or applying for permits during the desktop stage of exploration.

Exploration Stage 2: Preparatory activities, consultations with affected communities, exploration project specific free, prior and informed consent (FPIC) determination, initial non-invasive site visits. The assumption in all cases is that these activities are conducted prior to other Stage 2 activities including any aerial examinations, geologic examinations, mapping and investigations, geochemical sampling, geophysics-airborne/ground, non-mechanized surface trenching.

Exploration Stage 3: Continued consultations with affected communities, exploration project specific FPIC determination, road construction, mechanized surface trenching, rotary drilling, core drilling, underground work, other surface work (e.g., surface facilities to support underground work), bulk sampling, on-site pilot processing plant. If additional exploration or in-fill drilling is performed during mine development or the operations stages, then the requirements of Stage #3 are applicable to those activities.

Project Development

Baseline environmental data collection, stakeholder engagement related to mining project proposals, proposed operations level FPIC determination, project designs, pre-feasibility, and feasibility study.

Project Permitting

Permit application and environmental social impact assessment, permit finalization.

Construction

For new projects, applies to the period between permit finalization and initiation of operations. Includes site clearing, topsoil salvage, development of utility corridors,

construction of roads and facilities (may only be first stage or site – other stages may occur after operations have commenced).

Operation(s)

The set of activities being undertaken for the purpose of extracting and/or processing mineral resources, including the running and management of facilities and infrastructure required to support the activities, and the ongoing legal, environmental, social and governance activities necessary to maintain the business endeavor.

Mining

Activities undertaken to extract minerals, metals, and other geologic materials from the earth. Includes extraction of minerals in solid (e.g., rock or ore) and liquid (e.g., brine or solution) forms.

Mineral Processing

Activities undertaken to separate valuable and non-valuable minerals and convert the former into an intermediate or final form required by downstream users. In IRMA this includes all forms of physical, chemical, biological, and other processes used in the separation and purification of the minerals.

Reclamation

The process of achieving stability, hydrologic balance and converting disturbed land and/or water resources to a productive post-mining (or post-mineral processing) land use, or establishing the potential for productive use. Components of reclamation may include: removal or isolation of hazardous material and waste, decommissioning and removal of buildings and other structures, removal and disposal of polluted soils, adjustment and stabilization of landforms (e.g., earthwork including backfilling, grading, recontouring, stormwater controls), creation of suitable conditions for the introduction of desired flora and fauna (topsoil placement, revegetation, ecological restoration), and any other planned mitigation (e.g., wetlands construction, water diversion, other).

Closure

Refers to the post-reclamation activities that are required to close and secure a site to maintain compliance with environmental and health and safety regulations. It includes interim fluid and site management in addition to post-reclamation monitoring and maintenance during the period when the success of reclamation measures to achieve site-safety, stability, revegetation, and water quality as well as other reclamation objectives is measured and maintained. The closure period is finite and typically no more than ten years in duration.

Post-Closure

The period after reclamation and closure activities have been completed, and long-term management activities (e.g., ongoing monitoring and maintenance, and, if necessary, water management and treatment) are occurring to ensure that a site remains stable and ecological restoration objectives continue to be achieved. This phase continues until final sign-off of site responsibility and relinquishment of post-closure financial assurance can be obtained from the regulator.

3. Applicability of IRMA Draft Standard 2.0 to Mining Life Cycle Phases

As previously mentioned, the proposed revised standard is comprised of 27 chapters and 510 individual requirements. For any given mineral exploration, development, permitting, mine and/or mineral processing operation, based on the proposed normative requirements provided in Appendix A, the actual applicable requirements as well as their scope may be much fewer, and vary significantly, as discussed herein to address the impacts of mineral development at different phases.

The IRMA Draft Standard 2.0 requirements by principle and chapter, and applicability by phase, are summarized in Table 1 (page 12). The following describes the applicability and proposes normative requirements by phase.

As noted below, the Stage 1 Exploration requirements identified in this document are also required for all phases and types of projects or existing operations (mining and mineral processing). **The Stage 1 Exploration requirements should be used as a first step in determining the overall applicability of the revised standard to all projects and operations.**

STAGE 1 EXPLORATION

69 requirements are applicable to Stage 1 exploration which includes office compilation, photo-geologic study, pre-contact and exploration investigations (e.g., review of existing information, previous studies, research, and screening evaluations). The strict assumption made to define the proposed requirements applicable to Stage 1 exploration is that in all cases there is both:

- a) no on-the-ground AND no in-the-air activities; and
- b) no activities that presume future exploration, such as contact with affected communities or applying for permits during this desktop stage of exploration.

Some requirements, such as policies, apply to the overall entity and are not project specific. Other requirements, such as screening evaluations, are intended to apply to a potential specific project area. The same policy and screening requirements are also applicable to all phases and types of project or operations.

The requirements for Stage 1 exploration and all other phases and types of projects or operations relative to the IRMA chapters are summarized in Table 2 (page 13). As there is no actual on-the-ground project contemplated for Stage 1 exploration the following 13 chapters are not applicable (but would be applicable to later phases):

1.4 Complaints, Grievance Mechanism, Access to Remedy	4.1 Waste and Materials Management
2.1 Environmental and Social Impact Assessment and Management	4.2 Water Management
2.5 Community Emergency Preparedness and Response	4.X Management of Physical Stability
2.6 Planning and Financing Reclamation and Closure	4.3 Air Quality
3.3 Community Health and Safety	4.4 Noise and Vibration
3.4 Conflict-Affected and High-Risk Area Due Diligence	4.5 Greenhouse Gas Emissions and Energy Consumption
	4.XX Land and Soil Management

As shown in Table 2 (page 13), there are 14 chapters that contain the 67 requirements that are applicable to Stage 1 exploration and are also applicable to projects and operations in all phases. The requirements for the 14 chapters can further be broken out by whether they involve entity policy or address screening.

For Stage 1 exploration, policy commitments by the entity including procedures, communication and implementation are required in nine chapters (57 total requirements). Those same requirements for policy commitments by the entity are also applicable to projects and operations in all phases.

Screening is required for Stage 1 exploration projects in seven chapters (12 total requirements). These same requirements are also applicable to projects and operations in all phases. As previously noted, all entities should conduct or perform the specific “screening” requirements as noted in these seven chapters. The applicability of the additional requirements in each of those chapters for all projects and operations other than Stage 1 is dependent on the mapping, analysis, assessments and processes as required. As such, the applicability of the IRMA revised standard for all subsequent phases cannot be accurately suggested by an entity, or assessed by an auditor, until those requirements are fulfilled.

As an example, if a stakeholder mapping and analysis as required in 1.2.1.1 for Community and Stakeholder Engagement documented to the auditor’s satisfaction that there were no affected communities or stakeholders, the additional nine requirements for the chapter would not be applicable. If the same result were applied to the other five chapters where screening is indicated in Table 2, then up to 99 of the requirements for projects and operations at all phases following Stage 1 exploration could be eliminated or significantly reduced in scope.

STAGE 2 EXPLORATION

325 requirements are potentially applicable to Stage 2 exploration.

Although many requirements are deemed applicable, the actual level of effort in Stage 2 exploration will vary based on the nature and scale of the proposed or actual activities, and some requirements may not be fully applicable as written (e.g., some elements of some requirements may not be applicable due to site-specific, project specific or other circumstances). For example, if there are only a limited number of directly affected stakeholders, then engagement activities will require less effort than if several communities are affected. Similarly, an assessment of environmental impacts will be more onerous if, for example, there are important water bodies or threatened species in the area of influence. Also, as the intensity of activities increases, the level of effort should increase accordingly.

CONSULTATION QUESTION: Ideally, during Stage 2, a significant number of requirements should be carried out prior to exploration activities (e.g., in some cases, certain documents, procedures, processes, etc. should be in place or take place prior to engaging with stakeholders, in other cases they should be done prior to carrying out any physical activities at a project site).

IRMA is considering whether or not to create normative expectations regarding the timing of these activities. If temporal expectations become normative, then an entity would not be able to fully meet a requirement if certain actions did not occur at the appropriate times. The alternative is to keep the temporal expectations as best practice guidance only, and simply evaluate if the outcome has been achieved.

QUESTIONS:

1. Should the IRMA normative requirements identify where activities during Stage 1 exploration should occur prior to engagement or on-the-ground activities?
2. Should temporal expectations become normative and result in an entity not being able to fully meet a requirement if it did not happen during previous phases?

As discussed in the prior section on Stage 1 exploration, in many chapters the applicable requirements for Stage 2 may be reduced by performing screening. For example, Chapter 2.1 ESIA indicates 21 requirements as being potentially applicable to Stage 2 exploration. However, if the screening process required by 2.1.1.1 – 2.1.1.3 results in an ESIA not being warranted, then the other 18 requirements in this chapter indicated for Stage 2 exploration would not be required.

Conceptually, while 337 requirements are potentially applicable to Stage 2 exploration, application of the normative requirements could result in less than 200 actual applicable requirements, many of which would have limited scope.

STAGE 3 EXPLORATION

432 requirements are potentially applicable to Stage 3 exploration.

Like Stage 2 exploration, the extent of applicability of Stage 3 exploration requirements will vary based on the nature and scale of the actual exploration activities (e.g., some elements of some requirements may not be applicable due to site-specific, project specific or other circumstances). As a result, the actual requirements, and the extent of their applicability and level of effort needed to meet the requirements will be highly specific to each individual exploration project.

Conceptually, while 432 requirements are potentially applicable to Stage 3 exploration, application of the normative requirements could result in less than 250 actual applicable requirements, many of which would have limited scope.

PROJECT DEVELOPMENT AND PERMITTING

451 requirements are potentially applicable to the project development phase.

As with Stage 2 and 3 exploration, many of these requirements will vary in applicability based on the diversity, nature and scale of the actual on-the-ground activities related to project feasibility and development. As a result, the level of effort needed to meet the requirements will vary based on site-specific, project specific or other circumstances.

Some requirements, such as baseline data collection, are a pre-requisite to the project permitting phase.

471 requirements are potentially applicable at the project permitting phase, and all relate to the proposed project (not project development activities), although a small number are only applicable if the proposed project includes open pits, underground mines, or mineral processing operations. As with other phases, some requirements may not be fully applicable due to site-specific, project-specific, or other circumstances.

Conceptually, application of the normative requirements to project development and permitting could result in less than 300 actual requirements. Those requirements for project development might have some limited scope, while those for project permitting are more likely to entail the full scope of each requirement.

OPERATING MINES or MINERAL PROCESSING (MP)

There are 504 requirements potentially applicable to new and/or existing mines and/or mineral processing operations. For the most part the requirements are the same with a few specific to either open pit or underground mines, or to mineral processing operations. Some requirements are not applicable to new mines, such as those which require a formal review following a period of operations. **Some requirements may also not be applicable due to site-specific, project-specific, or other circumstances as previously described.**

Conceptually, application of the normative requirements to operations could result in less than 300 actual requirements, the scope of which is specific to each operation.

Table 1. Summary of IRMA Requirements by Chapter and Applicability.

	Principle/Chapter	Requirements and Applicability							
		Total	Applicable to All	Exploration Stage 1	Exploration Stage 2	Exploration Stage 3	Project Development	Project Permitting	Mine or Mineral Processor
1	Business Integrity								
1.1	Legal Compliance	6	1	1	6	6	6	6	6
1.2	Community and Stakeholder Engagement	13	1	1	13	13	13	13	13
1.3	Human Rights Due Diligence	13	1	1	13	13	13	13	13
1.X	Gender Equality and Gender Protections	10	2	2	10	10	10	10	10
1.4	Complaints, Grievance Mechanism, Access to Remedy	10	0	0	10	10	10	10	10
1.5	Financial Transparency and Anti-Corruption	10	4	5	10	10	10	10	10
	Sub-Total	62	9	10	62	62	62	62	62
2	Planning for Positive Legacies								
2.1	Environmental and Social Impact Assessment and Management	25	0	0	22	22	19	19	22
2.2	Indigenous Peoples and FPIC	21	2	2	20	20	20	20	21
2.3	Obtaining Community Support and Delivering Benefits	9	3	3	9	9	9	9	9
2.4A	Proposed Land Acquisition, Displacement, Resettlement	32	2	2	32	32	32	32	32
2.4B	Historical Land Acquisition, Displacement, Resettlement	21	3	3	21	21	21	21	21
2.5	Community Emergency Preparedness and Response	15	0	0	14	14	14	15	15
2.6	Planning and Financing Reclamation and Closure	13	0	0	1	12	12	12	12
	Sub-Total	136	10	10	119	130	127	128	132
3	Social Responsibility								
3.1	Fair Labor and Terms of Work	39	39	39	39	39	39	39	39
3.2	Occupational Health and Safety	39	3	3	39	39	39	39	39
3.3	Community Health and Safety	15	0	0	15	15	15	15	15
3.4	Conflict-Affected and High-Risk Area Due Diligence	19	0	0	0	0	0	0	19
3.5	Security Arrangements	20	1	1	20	20	20	20	20
3.6	Artisanal and Small-Scale Mining	6	1	1	4	4	4	6	6
3.7	Cultural Heritage	11	1	1	9	9	9	9	11
	Sub-Total	149	45	45	126	126	126	128	149
4	Environmental Responsibility								
4.1	Waste and Materials Management	24	0	0	0	23	23	24	24
4.2	Water Management	30	0	0	0	29	29	30	30
4.X	Management of Physical Stability	28	0	0	0	2	15	23	28
4.3	Air Quality	19	0	0	0	17	17	19	19
4.4	Noise and Vibration	9	0	0	0	9	9	9	9
4.5	Greenhouse Gas Emissions and Energy Consumption	17	0	0	0	0	7	12	17
4.6	Biodiversity, Ecosystem Services and Protected Areas	18	4	4	18	18	18	18	18
4.XX	Land and Soil Management	18	0	0	0	16	18	18	16
	Sub-Total	163	4	4	18	114	136	153	161
	Total	510	68	69	325	432	451	471	504

Table 2. Summary of IRMA requirements Applicable to Stage 1 Exploration and All Phases

	Principle/Chapter	No. Requirements	Requirements	Policy	Screening
1	Business Integrity				
1.1	Legal Compliance	1	1.1.1	policy commitment	
1.2	Community and Stakeholder Engagement	1	1.2.1		stakeholder mapping and analysis
1.3	Human Rights Due Diligence	1	1.3.1	policy commitment	
1.X	Gender Equality and Gender Protections	2	1.X.1.1, 1.X.2.2	policy commitment and screening	
1.5	Financial Transparency and Anti-Corruption	5	1.5.1.3, 1.5.1.5, 1.5.3.1 - 1.5.3.3	policy and procedures	
2	Planning for Positive Legacies				
2.2	Indigenous Peoples and FPIC	2	2.2.1.1, 2.2.3.1	policy commitment	identification and mapping of Indigenous Peoples
2.3	Obtaining Community Support and Delivering Benefits	3	2.3.1.1, 2.3.3.5, 2.3.3.6	policy commitment	
2.4A	Proposed Land Acquisition, Displacement, Resettlement	2	2.4.1.1, 2.4.2.1		due diligence and risk screening
2.4B	Historical Land Acquisition, Displacement, Resettlement	1	2.4.1.1		due diligence and impact screening
3	Social Responsibility				
3.1	Fair Labor and Terms of Work	39	All	policy commitment and implementation	
3.2	Occupational Health and Safety	3	3.2.1.1, 3.2.1.2, 3.2.4.1	policy commitment and communication	
3.5	Security Arrangements	1	3.5.1.1	policy commitment	
3.6	Artisanal and Small-Scale Mining	1	3.6.1.1		scoping process
3.7	Cultural Heritage	1	3.7.1.2		scoping process
4	Environmental Responsibility				
4.6	Biodiversity, Ecosystem Services and Protected Areas	4	4.6.1.1 - 4.6.1.4		scoping process

Appendix A

Proposed Normative Requirements for the IRMA Draft Standard 2.0

The following sections provide the IRMA Draft Standard 2.0 Proposed Normative Requirements for each chapter. The proposed normative requirements for each chapter are provided in tabular form which aligns with the individual requirements of the IRMA Draft Standard 2.0. This is followed by discussion intended to explain the application of the proposed normative requirements to the different life-cycle phases.

The two following proposed *Normative Requirements* for specific phases are applicable to all chapters.

Stage 2 and Stage 3 Exploration and Project Development Phases

The actual level of effort to meet the requirements identified as applicable to the Stage 2 and Stage 3 exploration and project development phases will vary based on the nature and scale of the proposed or actual activities.

All Phases

Some requirements may not be fully applicable as written (e.g., some elements of some requirements may not be applicable due to site-specific, project specific or other circumstances).

Principle 1 – Business Integrity

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors		
1.1	Legal Compliance	1.1.1.1	Legal compliance policy required in all phases						
			Only a. and b. required	Required					
		Rest of chapter	Not required	Required					

This chapter contains six requirements with sub-parts of one requirement (1.1.1.1.a. and b) being applicable to Stage 1 exploration (which assumes no on-site actions). All six requirements are applicable to Stage 2 and 3 exploration and project development, and to permitting and mining/mineral processing operations.

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors		
1.2	Community and Stakeholder Engagement	1.2.1.1	Stakeholder mapping and analysis required in all phases						
			Only a. - e. required	Required					
				Sub-requirement f. only required if there are proposed changes to project or context.					
	Rest of chapter	Not required	Required						

This chapter contains 13 requirements with sub-parts of one requirement (1.2.1.1.a. – e.) being applicable to Stage 1 exploration (which assumes no on-site actions). One requirement sub-part (1.2.1.1.f.) is not required if it can be demonstrated that there are no proposed changes to project or changes to the operational, environmental or social context.

All 13 requirements in this chapter are potentially applicable to project permitting and mining/mineral processing operations.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
1.3	Human Rights Due Diligence	1.3.1.1	Human rights policy required in all phases						
		Rest of chapter	Not required	Required					
		1.3.2.4		Only required if there are proposed changes to project or context					
		1.3.4.3		Not required if due diligence has resulted in consistent identification and response to human rights issues					
		1.3.5.2		Not required if external monitoring was not required in 1.3.4.3					

This chapter contains 13 requirements with one requirement (1.3.1.1) being applicable to Stage 1 exploration (which assumes no on-site actions).

All 13 requirements in this chapter are potentially applicable to all other phases (Stage 2 exploration, Stage 3 exploration, project permitting and mining/mineral processing operations). Requirement 1.3.2.4 is not applicable if it can be demonstrated that there are no proposed changes to the project or changes to the operational, environmental or social context. Requirement 1.3.4.2 is not applicable if it can be demonstrated that human rights due diligence has consistently been successful at detecting and responding to human rights issues. Requirement 1.3.5.2 is not applicable if no external monitoring is required in 1.3.4.3.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
1.X	Gender Equality and Gender Protections	1.X.1.1	Gender equality policy required in all phases						
		1.X.2.2	Screening for gender-related workplace and employment-factors (sub-requirements d.i, d.ii, d.iii) are required, and sub-requirement f is required if issues are identified.	Required					
		Rest of chapter	Not required	Required					
		1.X.2.4		Only required if there are proposed changes to project or context					

This chapter contains 10 requirements with two requirements being applicable to Stage 1 exploration (which assumes no on-site actions). Stage 1 exploration includes a gender policy requirement (1.1.1.1) and also screening for gender-related workplace/employment issues (found in sub-requirements 1.X.2.2.di, ii and iii). If issues are revealed in screening, then the entity would be expected to develop mitigative actions, as required in 1.X.2.2.f. Requirement 1.X.2.4 is not applicable if it can be demonstrated that there are no proposed changes to project or changes to the operational, environmental or social context.

All 10 requirements in this chapter are potentially applicable to Stage 2 and Stage 3 exploration, project development, project permitting and mining/mineral processing operations.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
1.4	Complaints and Grievance Mechanism and Access to Remedy	Entire chapter	Not required	Required				

This chapter contains 10 requirements with none of them being applicable to Stage 1 exploration (which assumes no on-site actions). All 10 requirements in the chapter are required in all other phases.

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors		
1.5	Financial Transparency and Anti-Corruption	1.5.1.3, 1.5.1.4, 1.5.3.1 - 1.5.3.3	Adherence to international accounting standards Anti-corruption policy and procedures						
		1.5.1.5	Not required	Required					
		1.5.1.1		Required					
				Only required if there are material payments made to the host country government					
				Required					
		1.5.1.2		1.5.1.2.c.i, ii, v. not applicable 1.5.1.2.c.iii applicable only if material payments occur due to project.					Required
Rest of chapter	Required								

This chapter contains 10 requirements with five of them (1.5.1.3, 1.5.1.4, 1.5.3.1 - 1.5.3.3) being applicable to Stage 1 exploration (which assumes no on-site actions). All 10 requirements are applicable to all other phases with the following exceptions. 1.5.1.1 is not applicable if it can be demonstrated that there are no material payments³ made to the host country government. 1.5.1.2.c. i, ii, v. are not applicable during the exploration and development phases as no production is occurring, and 1.5.1.2.c.iii. is not applicable if it can be demonstrated that there are no material payments being made by the entity to the host country government.

³ Material payments are defined in the IRMA Glossary.

Principle 2 – Planning and Managing for Positive Legacies

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors			
2.1	Environmental and Social Impact Assessment and Management	Not required	Not required	Environmental and Social Impact Screening Process	Not required					
				2.1.1.1 - 2.1.1.3	Required					
				2.1.2.2	Not required if there is no government led ESIA process					
				2.1.9.1 - 2.1.9.3	Not required					Required
				2.1.9.3	2.1.9.3 not required if new risks not identified and there is no potential that risks have changed					
Rest of chapter	Required	Specific to project development activities only	Required			Additional ESIA required only for major modification				
			Not required if decision for no ESIA in 2.1.1.3							

This chapter contains 25 requirements. None of the requirements are applicable to Stage 1 exploration (which assumes no on-site actions).

There are 22 requirements for Stage 2 and Stage 3 exploration that are potentially applicable depending on the screening process described in 2.1.1.1 - 2.1.1.3, which is only applicable to Stage 2 and Stage 3 exploration and accounts for the nature and scale of the proposed activities in determining if an ESIA is warranted. If an ESIA is not warranted, then there are no further requirements applicable in this chapter for the Stage 2 and Stage 3 exploration phases. If an ESIA is warranted, the requirements in this chapter are applicable to those phases. If, during either Stage 2 or 3 additional exploration activities are proposed that may increase the scope or intensity of potential impacts, then another screening processing would be expected to take place to determine if an ESIA is warranted. There are 19 requirements potentially applicable to project development activities.

There are 19 requirements potentially applicable to project permitting, and 22 requirements are applicable to mining/mineral processing operations. If a major modification is proposed during permitting or operations, then an additional ESIA is required.

One requirement (2.1.2.2) is only applicable if there is a government-led ESIA process for that phase. 2.1.9.1 – 2.1.9.3 are only applicable to operations and 2.1.9.3 is not required if it can be demonstrated that new social or environmental risks have not been identified, or there is no potential that the magnitude of risks to worker or community health, safety, human rights, or the environment have changed.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
2.2	Indigenous Peoples and Free, Prior and Informed Consent (FPIC)	2.2.1.1	FPIC policy required in all phases					
		2.2.3.1.	Identification and engagement with Indigenous Peoples required in all phases					
		2.2.4.1	Not required					Required
		Rest of chapter	Not required	Required				
			Not required if 2.2.3.1 does not identify Indigenous Peoples					

This chapter contains 21 requirements. Only two of the requirements, 2.2.1.1 which requires a policy commitment, and 2.2.3.1.a, which involves the identification of Indigenous Peoples, are applicable to all stages, including Stage 1 exploration. The reason that 2.2.3.1.a is required during Stage 1 is so that an entity can understand whether or not the FPIC of Indigenous Peoples will be necessary, and therefore make an informed decision regarding whether or not to proceed to Stage 2.

For all phases, if 2.2.3.1 is fully met and no Indigenous Peoples (or potential impacts on their rights or interests) are identified then the remainder of the chapter, other than 2.2.1.1, is not required.

When Indigenous Peoples are identified, 20 of the requirements are potentially applicable to Stage 2 exploration, Stage 3 exploration, project development and project permitting activities. Requirement 2.2.4.1 is not required during these phases, it only applies to mining and mineral processing operations.

All 21 requirements are applicable to mining/mineral processing operations.

Some requirements (2.2.2.1 – 2.2.3.2) would not be expected to be carried out during a particular phase if they were performed and fully met during a previous phase. Some requirements (2.2.3.3 – 2.2.5.1) must be performed again if there are new/proposed activities that may affect the rights and interests of Indigenous Peoples that were not previously agreed through FPIC process.

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
2.3	Obtaining Community Support and Delivering Benefits	2.3.1.1	Public commitment to communities					
		2.3.3.5 - 2.3.3.6	Procurement policy and monitoring					
		2.3.3.1	Not required	The entity is required to consult with affected communities to develop initiatives that will deliver them positive benefits	Required			
		Rest of chapter		Required				
Not required if there are no affected communities								

This chapter contains nine requirements with three requirements related to entity policies being applicable to Stage 1 exploration (which assumes no on-site actions). All 9 requirements are potentially applicable for Stage 2 exploration. In Stage 2 exploration, 2.3.3.1 requires that the entity consult with affected stakeholders and community leaders to develop initiatives that will deliver positive benefits to affected communities.⁴ This is a less prescriptive requirement for later stages, when the potential environmental and social impacts would be expected to increase.

The 9 requirements in this chapter are also all potentially applicable to Stage 3 exploration, project development, permitting, and mining/mineral processing operations.

One requirement (2.3.2.1), which requires that broad community support be obtained, must be performed again if there are major modifications to operations or major new activities (e.g., during exploration) being proposed that were not previously agreed to through a broad community support process.

Six of the requirements would not be applicable at any phase if it can be demonstrated that there are no affected communities (i.e., those that are experiencing or have the potential to experience direct environmental or social or economic impacts from current or proposed activities). Note that “local” governments that receive taxes would not be considered affected communities if there are no environmental or social impacts on any communities from the project/operation.

⁴ Affected communities would include those that are experiencing or have the potential to experience direct environmental or social or economic impacts from current or proposed activities. Note that local” governments that receive taxes would not be considered affected communities if there are no environmental or social impacts on any communities from the project/operation.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
2.4	General	2.4A is applicable to all entities that acquired land for the purposes of exploration or development after 2011 2.4B is applicable If land acquisition occurred before 2012						
2.4 A	A-Proposed Land Acquisition, Displacement and Resettlement	2.4.1.1	Required as part of screening	Required				
		2.4.2.1	See below Normative Requirements	Required				
		Rest of chapter	Not required	Required				
		2.4.5.1		Not required if there is only past or potential economic (not physical) displacement				
		2.4.5.2		Not required if there is no past or potential physical displacement or Not required if all people who will be physically displaced have no legal rights or claims to lands or assets				
		2.4.5.3		Not required if there is no past or potential physical displacement or Not required if all people who will be physically displaced people have recognizable legal rights or claims to lands or assets				
		2.4.6.1 - 2.4.6.2		Not required if there is only past or potential physical (not economic) displacement				
		2.4.6.3		Not required if there is only past or potential physical (not economic) displacement or Not required if there are no impacts on access, livelihoods or income levels				
		2.4.7.1		Not required if 2.2.3.1 demonstrates no Indigenous Peoples have been or will be displaced				
		2.4.7.3		Not required if affected peoples have not rejected compensation offers.				
		2.4.7.4 - 2.4.7.5		Not required if affected peoples have not refused to leave the lands they own or occupy.				

	2.4.7.7	Not required if there is no past or proposed <u>temporarily transitional resettlement of people</u>
	2.4.7.9	Not required if there has not been any past voluntary displacement related to the project/operation (this would be based on due diligence in 2.4.1.1), and none is proposed
	2.4.9.1	Not required if land acquisition and resettlement are not the responsibility of government

Chapter 2.4A contains 32 requirements. Only two of the requirements are applicable to Stage 1 exploration: 2.4.1.1, which requires documentation of land acquisition information; and a modified 2.4.2.1 as follows:

The entity is required to investigate if exploration-related activities may require land acquisition that could result in the involuntary resettlement.

These screening activities are required so that that an entity can understand whether or not resettlement of people might be necessary, and therefore make an informed decision regarding whether or not to proceed to Stage 2.

All 32 requirements are potentially applicable to all phases of the life cycle other than Stage 1 (i.e., Stage 2 exploration, Stage 3 exploration, project development, project permitting and operating mines/mineral processing). Based on the outcome of requirements 2.4.1.1 and 2.4.1.2, however, it is possible that the remaining 30 requirements in the chapter may not be applicable. Note, however, that 2.4.1.2 must be performed (again) if any new/proposed activities may result in displacement.

Of the remaining 30 requirements, there are also scenarios that may affect the applicability of some of requirements:

2.4.5.1 is only applicable where there has been or will be some involuntary physical displacement.

2.4.5.2 is only applicable if there are cases where some physically displaced people have recognizable legal rights or claims to lands or assets.

2.4.5.3 is only applicable if there are cases where some physically displaced people do not have legal rights or claims to lands or assets.

2.4.6.1 - 2.4.6.2 is only applicable where there has been or will be some involuntary economic displacement.

2.4.6.3 is only applicable if: 1) there are project- or operation-related restrictions on access to natural resources or other impacts that may adversely affect livelihoods or income levels, or 2) if there are economically displaced people whose livelihoods are wage-based or dependent upon access to natural resources.

2.4.7.1 is only applicable if 2.2.3.1 demonstrates there are Indigenous Peoples who have been or will be displaced.

2.4.7.3 is only applicable if affected peoples have rejected compensation offers.

2.4.7.4 - 2.4.7.5 is only applicable if affected peoples have refused to leave the lands they own or occupy.

2.4.7.7 is only applicable if there is no past or proposed temporarily transitional resettlement of people.

2.4.7.9 is not applicable if there are no activities/major modifications currently proposed that may require the voluntary displacement of people.

2.4.9.1 is only applicable if land acquisition and resettlement are the responsibility of government.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
2.4	General	2.4A is applicable to all entities that acquired land for the purposes of exploration or development after 2012						
		2.4B is applicable If land acquisition occurred before 2012						
2.4 B	B-Historical Land Acquisition, Displacement and Resettlement	2.4.1.1 - 2.4.2.2	Required as part of screening	Required				
		Rest of chapter	Not required	Required				
		2.4.7.1		Not required if 2.4.2.2 demonstrates no displacement prior to 2012				
		2.4.9.1		Not required if 2.2.3.1 demonstrates no Indigenous Peoples have been involuntarily displaced				
		Not required if land acquisition and resettlement are not the responsibility of government						

Chapter 2.4B contains 21 requirements. Only one screening requirement, 2.4.1.1, is applicable to Stage 1 exploration (which assumes no on-site actions). This screening of historic resettlement is required so that that an entity can understand whether resettlement of people occurred in the area of interest and make an informed decision whether or not to pursue Stage 2 Exploration knowing that it may involve some reparations for past resettlements.

All 21 requirements are potentially applicable to all other phases of the life cycle other than Stage 1 exploration (i.e., Stage 2 exploration, Stage 3 exploration, project development, project permitting and operating mines/mineral processing). Based on the outcome of requirement 2.4.1.1, however, it is possible that the remaining 20 requirements in the chapter may not be applicable. There also a few scenarios that may affect the applicability of some of requirements (see the table above).

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
2.5	Community Emergency Preparedness and Response	2.5.1.1 - 2.5.2.1, 2.5.2.3 - 2.5.7.1	Not required	Required		Specific to project development only	Required	
		2.5.6.1		Not required if no actual emergency situation has ever occurred				
		2.5.2.2		Not required			Required	
		2.5.2.4		Only required if there are proposed changes to project or context				

This chapter contains 15 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions). The requirements 2.5.3.1.e, 2.5.4.1, 2.5.4.3.b and 2.5.4.3.c are not applicable if it can be demonstrated that there are no communities that are experiencing or have the potential to experience environmental or social impacts from industrial accidents and unwanted events related to current or proposed activities.

There are 14 requirements for Stage 2 and 3 exploration and project development. The requirements for project development are specific to emergency preparedness and response activities related to project development activities only.

The 15 requirements in this chapter are all potentially applicable to project permitting and mining and/or mineral processing operations. 2.5.2.2 is not applicable if there are no critical facilities.⁵ 2.5.2.4 is not applicable if it can be demonstrated that there are no proposed changes to project or changes to the operational, environmental or social context. 2.5.6.1 is not applicable if it can be demonstrated that no actual emergency situation has ever occurred.

⁵ Defined in IRMA Draft Standard 2.0. Critical Facility- A facility that has a high, very high or extreme failure consequence classification, or a significant consequence classification that includes potential loss of life.

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors		
2.6	Planning and Financing Reclamation and Closure	2.6.1.1	Not required	See below Normative Requirements	Specific to project development only	Required			
		2.6.1.2 - 2.6.1.3		Required	Specific to project development only	Required			
		2.6.1.4		See below Normative Requirements	Required				
		2.6.1.5 - 2.6.1.7		Required					
		2.6.2.1	Not required	Required			Not required		
		2.6.2.2	Not required				Required		
		2.6.2.3	Not required				Not required if no open pit mining		
							Required		
		2.6.3.1 - 2.6.4.1	Not required		Required				

This chapter contains 13 requirements, none of which are applicable to Stage 1 exploration (which assumes no on-site actions) and only one requirement (2.6.2.1) is applicable to Stage 2 exploration, which assumes there would no impacts requiring reclamation consistent with description of activities for Stage 2 exploration provided in the glossary.

There are 12 requirements that are potentially applicable to Stage 3 exploration, project development and permitting. For Stage 3 exploration 2.6.1.1 provides specific requirements for reclamation and closure planning and 2.6.1.4 for cost estimation for this phase. The requirements for the project development stage are specific to reclamation and closure actions related to project development activities only.

For requirement 2.6.1.1, the normative expectations for Stage 3 exploration are as follows:

At a minimum, the exploration reclamation plan shall contain:

- a. A general statement of purpose;
- b. Site location and background Information;
- c. A description of all proposed exploration areas, including roads, to be reclaimed;
- d. The role of affected communities in reviewing the exploration reclamation plan;
- e. Agreed-upon post-exploration land use and facility use;
- f. Earthwork:
 - i. Stabilization and final topography of the reclaimed lands;
 - ii. Stormwater runoff/run-on management;
 - iii. Topsoil salvage to the maximum extent practicable;
 - iv. Topsoil storage in a manner that preserves its capability to support plant regeneration; and.
- g. Revegetation/Ecological Restoration:
 - i. Use of stockpiled (salvaged) topsoil;
 - ii. Plant material selection, prioritizing native species as appropriate for the agreed post-exploration land use;
 - iii. Quantitative revegetation standards with clear measures to be implemented if these standards are not met within a specified time; and;
 - iv. A defined period, no longer than 2 years after completion of permitted exploration, when planned revegetation tasks shall be completed;
 - v. Measures for control of noxious weeds and invasive alien species;
 - vi. Planned activities to restore natural habitats (as well as biodiversity, ecosystem services and other conservation values as per Chapter 4.6);
- h. Hazardous materials disposal;
- i. Facility demolition and disposal, if not used for other purposes
- j. Post-reclamation monitoring and maintenance plan (for more details, see 2.6.4);
- k. The role of the community in post-reclamation maintenance and monitoring (if any); and
- l. A schedule that demonstrates that reclamation activities will take place in a timely manner.

For requirement 2.6.1.4, the normative expectations for Stage 3 exploration are as follows:

The reclamation plan shall include a detailed determination of the estimated costs of exploration reclamation, based on the assumption that reclamation will be completed by a third party, using costs associated with the reclamation plan as implemented by a regulatory agency. These costs shall include, at minimum:

- a. Earthwork;
- b. Revegetation/Ecological Restoration;
- c. Disposal of hazardous materials;
- d. Facility demolition and disposal;
- e. Holding costs that would be incurred by a regulatory agency if the company were to declare bankruptcy. These costs shall be calculated based on the assumption that there would be a one-year period before reclamation activities would begin.
- f. Post-reclamation monitoring and maintenance;
- g. Indirect Costs:
 - i. Mobilization/demobilization;
 - ii. Contractor overhead and profit;
 - iii. Agency administration; and
 - iv. Contingency; and
- h. Either:
 - i. A multi-year inflation increase in the financial surety; or
 - ii. An annual review and update of the financial surety.

There are 12 requirements that are potentially applicable to mining/mineral processing operations. Requirements 2.6.2.2 and 2.6.2.3, addressing open pit and underground mining respectively, do not apply to mines without those features nor do they apply to mineral processing operations.

Principle 3 – Social Responsibility

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
3.1	Fair Labor and Terms of Work	Entire chapter	Required in all phases					
		3.1.4.1, 3.1.4.2	Not required if there have not been any collective dismissals					
		3.1.7.3	Not required if there have not been any children between the ages of 15 - 18 hired to do non-hazardous work					
		3.1.7.5	Not required if the risk assessment in 3.1.7.4 determines that there is not a high risk of child labor amongst contractors or suppliers in the project/operation's supply chain					
		3.1.8.3	Not required if the risk assessment in 3.1.8.2 determines that there is not a high risk of forced or trafficked labor amongst contractors or suppliers in the project/operation's supply chain					
		3.1.9.9	Not required if there are no entity-provided worker accommodations					

The 39 requirements in the chapter apply to all phases (i.e, Stage 1, Stage 2 and Stage 3 exploration, project development, project permitting and operations), because they are applicable whenever there are employment relationships (regardless of whether physical, site-based activities are taking place).

Six requirements (3.1.4.1, 3.1.4.2, 3.1.7.3, 3.1.7.5, 3.1.8.3 and 3.1.9.9) may not be applicable in all circumstances (see table above for more details).

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
3.2	Occupational Health and Safety	3.2.1.1, 3.2.1.2, 3.2.4.1	Occupational health and safety policy, accountability and communication required in all phases						
		Rest of chapter	Not required	Required					
		3.2.3.5		Not required if the hazard identification and risk assessment process (3.2.2.1 - 3.2.2.5) finds that there is not a significant risk of worker exposure to infectious diseases.					
		3.2.4.6		Not required if there are no entity-provided worker accommodations					
		3.2.7.5		Not required if no changes or evaluations of performance do not suggest areas that need attention					

There are 39 requirements in the chapter. Three policy-related requirements are applicable to Stage 1 exploration which assumes no on-site actions. All 39 requirements are required in all other phases because either there are activities that may have occupation health and safety implications (e.g., during Stage 2 and 3 exploration, project development and operations), or because OHS planning needs to occur (in project development and project permitting).

3.2.3.5 is not required if it can be demonstrated through the hazard identification and risk assessment process (3.2.2.1 – 3.2.2.5) that there is not a significant risk of worker exposure to infectious diseases. One requirement (3.2.4.5) is not applicable if there are no entity-provided worker accommodations. 3.2.7.5 is not required if it can be demonstrated there are no changes to procedures, risk assessments or management plans, and the evaluations of the operation’s occupation health and safety performance do not suggest areas that need attention.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
3.3	Community Health and Safety	Entire chapter	Not required	Required				
		3.3.2.4		Only required if there are proposed changes to project or context				
		3.3.3.4		Not required if scoping (3.3.1.1) and risk assessment (3.3.2.2) find that there is no significant risk of community exposure to infectious diseases due to transmission between workers/contractors and the community				
		3.3.4.3		Not required if scoping (3.3.1.1) and risk assessment (3.3.2.2) find that there is no significant risk of community exposure to airborne emissions				

There are 15 requirements in the chapter. None are applicable to Stage 1 exploration, which assumes no on-site actions and therefore no potential impacts on community health and safety.

All 15 requirements are required for all phases other than Stage 1 exploration (i.e., Stage 2 exploration, Stage 3 exploration, project development, project permitting and operating mines/mineral processing).

3.3.2.4 is not required if it can be demonstrated that there are no proposed changes to project or changes to the operational, environmental or social context. Two requirements (3.3.3.4 and 3.3.4.3) may not be applicable, if scoping and risk assessment find that the mentioned risks are not present.⁶

⁶ The table mentions scoping (3.3.1.1) and risk assessment (3.3.2.2), but some evidence may come from other sources, such as air quality assessments, etc.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
3.4	Conflict-Affected and High-Risk Area Due Diligence	3.4.1.1 - 3.4.3.1, 3.4.6.1 - 3.4.7.1	Not Required					Required
		Rest of chapter	Not Required					Required Not required if no red flags identified in 3.4.3.1

This chapter contains 19 requirements which are only potentially applicable to mining/mineral processing operations, not other phases. A number of requirements are only applicable if red flags are identified in the risk assessment (3.4.3.1).

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
3.5	Security Arrangements	3.5.1.1	Security policy required for all phases						
		Rest of chapter	Not required	Required					
		3.5.2.3		Only required if there are proposed changes to project or context					
		3.5.3.2		Not required if assessment in 3.2.2.1 and 3.2.2.2 does not reveal any potential for conflicts between security providers and affected community members or workers					
		3.5.3.5, 3.5.3.7, 3.5.4.1		Not required if there is no use of private security personnel					
		3.5.3.6, 3.5.3.8, 3.5.4.2, 3.5.6.4		Not required if there is no use of public security forces					
		3.5.5.2		Not required if there have not been any security-related events					

There are 20 requirements in this chapter. One policy requirement is applicable to Stage 1 exploration (which assumes no on-site actions). All 20 requirements are required for all phases other than Stage 1 exploration (i.e., Stage 2 exploration, Stage 3 exploration, project development, project permitting and operating mines/mineral processing). Some requirements may not be applicable as noted in the table.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
3.6	Artisanal and Small-Scale Mining	3.6.1.1	ASM activity scoping required for all phases						
		3.6.4.1, 3.6.4.2	Not required				Required		
		Rest of chapter	Not required	Required					
				Not required if 3.6.1.1 does not identify ASM activity					

There are six requirements in this chapter. One requiring screening is applicable to Stage 1 exploration which assumes no on-site actions.

Four requirements are potentially applicable to Stage 2 and Stage 3 exploration and project development. Six requirements are potentially applicable to project permitting and mining/mineral processing operations.

Two requirements (3.6.4.1 and 3.6.4.2) are applicable only if ASM sourced primary input material is proposed or used in operations, and if no ASM activity is identified in 3.6.1.1 then three requirements are not applicable.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors		
3.7	Cultural Heritage	3.7.1.1	Not required					Cultural heritage <u>impact</u> scoping required		
		3.7.1.2	Only a. - b. required as part of scoping	Cultural heritage <u>risk</u> scoping required						
		3.7.2.1	Not required	Not required					Required	
				Not required if impact scoping (3.7.1.1) reveals no past impacts on cultural heritage						
		3.7.2.2		Required						
				Not required if 3.7.1.2 does not identify any potential risks to cultural heritage from proposed activities						
		3.7.3.1 - 3.7.3.6		Required						
				Not required if 3.7.1.2 does not identify Indigenous peoples' cultural heritage that may be impacted by proposed activities					Not required if cultural heritage impact scoping (3.7.1.1) and risk scoping (3.7.1.2) do not identify Indigenous peoples' cultural heritage that has been or may be impacted by past or proposed activities	
3.7.4.1	Required									
	Not required if 3.7.1.2 does not identify any potential risks to cultural heritage from proposed activities					Not required if 3.7.1.1 does not identify past impacts on cultural heritage and 3.7.1.2 does not identify potential risks to cultural heritage from proposed activities				

There are 11 requirements in this chapter. One requirement, a screening requirement (3.7.1.2) is applicable to Stage 1 exploration. Even though Stage 1, itself, assumes no on-site actions, this step is intended to provide information to on

risks to cultural heritage so that an informed decision can be made regarding whether or not to proceed to Stage 2 exploration.

Two requirements (3.7.1.1 and 3.7.2.1) are not applicable unless there is an operating mine/mineral processing site, but the remaining 9 requirements are potentially applicable to Stage 2 and Stage 3 exploration, project development, and permitting.

If scoping of potential risks to cultural heritage (3.7.1.2) does not identify potential cultural heritage that may be affected by the entity's activities, then many other requirements in the chapter are not applicable. Requirement 3.7.1.2 may be carried out either as part of Chapter 2.1 (see Criterion 2.1.1) or as a separate exercise. Note that the cultural heritage risk assessment would be expected to be performed (again) if there are new/proposed activities that have not previously been scoped for their potential risks to cultural heritage.

All 11 requirements are potentially applicable to mining/mineral processing operations. If scoping does not reveal any past impacts on cultural heritage (3.7.1.1), and scoping of potential risks (3.7.1.2) does not identify cultural heritage that may be affected by the entity's activities, then many other requirements in the chapter are not applicable during the operations phase (see table above). However, as mentioned above for other phases, the cultural heritage risk assessment would be expected to be performed (again) if there are new/proposed activities at operating sites that have not previously been scoped for their potential risks to cultural heritage.

The disclosure requirement (3.7.4.1) is applicable to all phases except Stage 1 exploration, but the items that need to be disclosed will vary based on whether or not materials beyond the cultural heritage assessments were required to be produced.

Principle 4 – Environmental Responsibility

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
4.1	Waste and Materials Management	4.1.1.1	Not Required	Hazardous waste and materials identification				
		4.1.1.2		Hazardous waste and materials characterization				
		4.1.6.1	Not required				Required	Not required if cyanide not used
		4.1.6.2	Not Required		Required			
					Not required if 4.1.1.1, 4.1.1.2 does not identify mercury containing hazardous materials or waste	Specific to project development activities only Not required if 4.1.1.1, 4.1.1.2 does not identify mercury containing hazardous materials or waste	Not required if no mercury present in ores, concentrates or waste materials	
		4.1.6.3			Required - No waste disposal in natural water bodies			
		Rest of chapter			Required			
					Not required if 4.1.1.1, 4.1.1.2 does not identify hazardous materials or waste	Specific to project development activities only Not required if 4.1.1.1, 4.1.1.2 does not identify hazardous materials or waste	Required	

This chapter contains 24 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or Stage 2 exploration which assumes there would no use or production of hazardous materials or waste for Stage 2 exploration based on the activities provided in the glossary.

There are 23 requirements that are potentially applicable to Stage 3 exploration and project development. 4.1.6.2 is not required is not required for Stage 3 or project development if 4.1.1.1, 4.1.1.2 demonstrate the project will not use or produce mercury containing hazardous materials or waste. The rest of the chapter, with the exception of 4.1.6.3 is potentially applicable to Stage 3 exploration or project development, unless 4.1.1.1, 4.1.1.2 demonstrate the project will not use or produce hazardous materials or waste.

All 24 requirements in this chapter are all potentially applicable to project permitting and mining/mineral processing operations. Requirement 4.1.6.1 is not applicable if it can be demonstrated that no cyanide will be or is used in mining/mineral processing. Requirement 4.1.6.2 is not applicable if 4.1.1.1, 4.1.1.2 demonstrate if no mercury present in ores, concentrates or waste materials.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors	
4.2	Water Management	4.2.1.1	Not required		See below Normative Requirements		Required		
		4.2.3.5			Required				
		4.2.4.7			Only required if there are proposed changes to project or context				
		Rest of chapter			See below Normative Requirements	For new project permitting	Required		
					Required				

This chapter contains 30 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or to Stage 2 exploration (which assumes no activities impacting water quality or quantity).

There are 29 requirements applicable to Stage 3 exploration and project development. This includes the following 4.2.1.1. normative requirements:

Baseline or background data should be gathered 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 exploration project,

ii. Water quantity (i.e., flows and levels of surface waters, natural seeps/springs and groundwaters) that may be affected by the exploration project, and

b. Sources of contamination and changes in water quantity or quality that are unrelated to the exploration project.

The requirements for Stage 3 exploration are applicable depending on the nature and scale of the activities. 4.2.4.7 includes the following normative requirements:

A program to monitor changes in water quantity and quality shall be developed and implemented. The program shall:

a. Establish sufficient 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. Use credible methods and appropriate equipment to reliably detect changes in water characteristics.

The requirements applicable to project development are for the purpose of new project permitting. The 30 requirements in this chapter are all potentially applicable to project permitting and mining/mineral processing operations. Requirement 4.2.3.5 is not required if it can be demonstrated that there are no proposed changes to project or changes to the operational, environmental or social context.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
4.X	Management of Physical Stability	4.X.1.1 - 4.X.1.2	Not required		Required	Specific to project development only	Required	
		4.X.1.3 - 4.X.3.1			Not required	For new project permitting		
		4.X.3.2 - 4.X.3.4				Required		Not required if no critical facilities identified in 4.X.3.1
		4.X.4.1, 4.X.4.2, 4.X.5.1, 4.X.5.2, 4.X.5.4, 4.X.6.1 - 4.X.6.3			Required		Not required if no critical facilities identified in 4.X.3.1	
		4.X.4.3 - 4.X.4.5, 4.X.5.3, 4.X.5.5			Required		Not required if no critical facilities identified in 4.X.3.1	

This chapter contains 28 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or to Stage 2 exploration (which assumes no on-site physical disturbance). There are 2 requirements (4.X.1.1, 4.X.1.2) applicable to Stage 3 exploration which require scoping.

There are 17 requirements applicable to project development for the purpose of new project permitting. There are 23 requirements in this chapter applicable to project permitting, and all 28 requirements in this chapter are applicable to existing mining and/or mineral processing operations and to reclamation and closure, post-closure.

As noted in the table, depending on the phase, these requirements are not required if no critical facilities are identified in 4.X.3.1.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
4.3	Air Quality	Entire chapter	Not required		Required	Specific to project development only	Required	
		4.3.3.2			Required			
		4.3.4.3, 4.3.5.3			Not required if there are no proposed changes to project or context			
		4.3.4.3, 4.3.5.3			Required			
					Not required if mercury not present (see 4.1.1.1, 4.1.1.2)			

This chapter contains 19 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or to Stage 2 exploration (which assumes no on-site physical disturbance).

There are 17 requirements applicable to Stage 3 exploration and specific to project development activities only. All 19 requirements in this chapter are potentially applicable to project permitting and mining/mineral processing operations.

4.3.3.2 is not required if it can be demonstrated that there are no proposed changes to mining-related activities that will result in new sources or changes in the volume of emissions, or if there are changes in the operational or social context that may change the probability or severity of impacts of (e.g., a new school is constructed downwind of the site).

4.3.4.3 and 4.3.5.3 are not applicable if 4.1.1.1, 4.1.1.2 demonstrate mercury is not present in ores, concentrates or waste materials.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
4.4	Noise and Vibration	4.4.1.1	Not required		Required - identification of all potential sources of air emissions			
		Rest of chapter			Required	Specific to project development only	Required	
		4.4.1.2, 4.4.2.1			Not required if 4.4.1.1 scoping determines no noise impacts on human or wildlife receptors			
		4.4.2.2			Not required if 4.4.1.1 scoping determines there are no residential, institutional or educational receptors that may be affected by noise			
		4.4.2.3			Not required if 4.4.1.1 scoping determines there are no institutional or educational receptors that may be affected by noise			
		4.4.2.4			Not required if 4.4.1.1 scoping determines there are no human noise receptors that may be affected by noise or vibration from blasting activities			
		4.4.2.5			Not required if no credible, supported grievance is adversely impacting human or wildlife noise receptors			

This chapter contains nine requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or to Stage 2 exploration (which assumes no on-site physical disturbance). All nine requirements are applicable to Stage 3 exploration, project development activities only, to project permitting and mining/mineral processing operations.

Some requirements may not be applicable as noted in the table.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
4.5	Greenhouse Gas Emissions and Energy Consumption	4.5.1.1 - 4.5.3.4	Not required			For new project permitting	Required	
		4.5.4.1, 4.5.5.1 - 4.5.6.1	Not required					
		4.5.4.2, 4.5.6.2 - 4.5.6.5	Not required					Required

This chapter contains 17 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or to Stage 2 or Stage 3 exploration (which assumes no applicable facilities).

There are 17 requirements in this chapter applicable to project development for the purpose of new project permitting and project permitting (which assumes no applicable facilities). All 19 requirements in this chapter are applicable to mining/mineral processing operations.

As noted in the table, depending on the phase, various requirements are not applicable to the different phases.

Chapter	Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
4.6	Biodiversity, Ecosystem Services and Protected Areas	4.6.1.1, 4.6.1.2, 4.6.1.3, 4.6.1.4	Identification of biodiversity, ecosystem services and protected areas required as part of screening	Identification and mapping of project/operation areas and screening for biodiversity, ecosystem services and protected areas			
		Rest of chapter	Not required	Required			
		4.6.2.1, 4.6.2.2, 4.6.5.1 - 4.6.6.1		Not required if no important global/national/local biodiversity <u>or</u> ecosystem services <u>or</u> protected areas are identified in scoping			
		4.6.3.1, 4.6.3.2, 4.6.3.5		Not required if no important global/national/local biodiversity <u>or</u> ecosystem services are identified in scoping.			
		4.6.3.3		Not required if no important global/national/local biodiversity is identified in scoping.			
		4.6.3.4		Not required if no ecosystem services are identified in scoping.			
		4.6.4.1 - 4.6.4.3		Not required if no protected areas are identified in scoping.			

This chapter contains 17 requirements. A total of four requirements are applicable to Stage 1 exploration (which assumes no on-site actions). The four screening-related expectations are reduced from the requirements that are applicable to other phases, and involve the identification of the area of interest being considered for potential exploration (4.6.1.1), and the presence of protected areas (4.6.1.2), areas of potentially important global, national or local biodiversity (4.6.1.3), and ecosystem services (4.6.1.4). The purpose of carrying out this identification process as early as Stage 1 exploration is to enable entities to make an informed decision as to the potential challenges or risks that might need to be addressed should they move on to Stage 2 exploration.

All 17 requirements are potentially applicable to Stage 2 and Stage 3 exploration and project development, project permitting and mining/mineral processing operations. Depending on the outcomes of the scoping requirements (4.6.1.1 – 4.6.1.4), various requirements for all phases other than Stage 1 exploration may not be applicable if protected areas,

important areas of biodiversity and/or ecosystem services are not identified in the project/operation's area of influence (see table, above for more details).

Note that if new activities are proposed during any phase that may change the area of interest, then scoping as per requirements 4.6.1.1 - 4.6.1.4 would be expected to take place again.

Chapter		Criteria	Stage 1 Exploration	Stage 2 Exploration	Stage 3 Exploration	Project Development	Project Permitting	Operating Mines/ Mineral Processors
4.XX	Land and Soil Management	4.X.1.1	Not required			Required for proposed mineral processing only		Not required
		4.XX.4.1				Required for proposed mineral processing only		Applicable to mineral processing only
		Rest of chapter	Not required	Required	Specific to project development only	Required		

This chapter contains 18 requirements. There are no requirements applicable to Stage 1 exploration (which assumes no on-site actions) or to Stage 2 exploration (which assumes no on-site physical disturbance). There are 16 requirements applicable to Stage 3 exploration. All 18 requirements are applicable to project development and are specific to project development activities only.

All 18 requirements in this chapter are potentially applicable to project permitting and mining/mineral processing operations. 4.XX.1.1 and 4.XX.4.1 are applicable to mineral processing only.