

# **IRMA-Anglo American Unki Mine Field Test Report**

**November 2016**

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## Introduction and Goals of the Field Test

The Initiative for Responsible Mining Assurance (IRMA) conducted its second field test of the *Standard for Responsible Mining* from 21-24 March 2016.

Anglo American Platinum (“Anglo American”) hosted the field test at its Unki mine, which is a mid-size, underground platinum mining operation located 20 kilometres from Shurugwi, Zimbabwe.

The goals of the IRMA-Unki mine field test (“the field test”) were to:

- Test [draft v.2.0 of the IRMA Standard for Responsible Mining](#) at an existing mid-size, underground mining operation located in Africa; and at an operation owned by a major international mining company.
- Review IRMA Standard requirements with mine site staff and auditors to determine if:
  - requirements are clear, understandable and accurately reflect the intent of the IRMA Steering Committee
  - requirements present potential unintended barriers to some companies wishing to be certified
  - there is duplication with other requirements within the Standard
- Test the suggested means of verification to determine:
  - If the IRMA Standard requirements are auditable
  - If the requirements are written in a way that can be consistently audited by any qualified third-party certification body
  - Where additional guidance would be helpful/necessary for auditors
- Provide information to inform IRMA on how the draft Standard and means of verification may need to be refined prior to finalization of the Standard; and insight into issues to consider as IRMA develops its assurance system.
- Increase confidence, among all stakeholder groups, that the draft Standard is informed by on-the-ground pragmatic information.

## Scope

Given the time available for the field test, and that this was not an actual audit for certification, the scope of the audit was limited to a sub-set of chapters most relevant for learning. The chapters were chosen based on their applicability to the Unki mine site,

and priority was given to chapters that had not been reviewed as part of the first field test of the IRMA Standard (conducted in October 2015).

During field test planning, the IRMA Secretariat and Anglo American selected a set of relevant chapters for potential inclusion in the field test, and ranked them in order of priority, recognizing that there might not be time to review all of the chapters during the field test.

The selected chapters were divided into three streams that aligned with the particular expertise of the three independent auditors who participated in the field test. Table 1 contains a list of the chapters that were covered in the field test.

**Table 1. Chapters reviewed during the IRMA-Unki mine field test**

Auditor 1	Auditor 2	Auditor 3
2.1—Fair Labor and Terms of Work	2.2—Occupational Health and Safety	1.2—Revenue & Payments Transparency
2.7—Community Health	3.1—Water Quality (3 approaches)	2.4—Human Rights Due Diligence and Compliance
2.9—Obtaining Community Support and Delivering Benefits	3.6—Greenhouse Gas Emissions	2.5—Conflict-Affected Areas
2.12—Resettlement	3.8—Biodiversity Outside of Prot. Areas	2.6—Security Arrangements
	3.3—Mine Waste Management (Note: only partially covered due to time constraints)	

## Methodology

The Unki mine field test was designed to maximize learning that could inform improvements to the IRMA *Standard for Responsible Mining*, as well as the assurance system being developed to enable companies to be independently certified as meeting the IRMA Standard.

IRMA field tests are not designed to lead to potential certification of host mine sites. Given this reality, IRMA was conscious of the need to work within the time and resource constraints of the Unki host site. The Unki mine offered to make its staff and site

available for four days in March 2016, although due to travel arrival and departure times the IRMA assessment team was on site for approximately three full days.

Based on learning from the first IRMA field test,<sup>1</sup> and recognition that the on-site time was limited, the field test diverged from a typical certification audit in a number of ways:

- Very little time was spent on document review compared to an actual audit; in many cases, instead of reviewing materials the auditors were provided with verbal descriptions of documentation that existed that could demonstrate the requirement had been met
- Interviews that were conducted with both staff and workers were much more collaborative in nature than a typical audit, and focused primarily on a collective evaluation of the IRMA Standard requirements, and secondarily on determining the mine site's compliance with the requirements.
- The assessment team did short tours of some mine site facilities, but did not examine sites or mining practices in detail, nor did the assessment team request to see areas that were not on the mine tour but which, in a full certification audit, may have been of interest.
- The assessment team did not contact or interview wide range of stakeholders; nor were interviews with workers done in sufficient numbers that would constitute a statistically representative sample size.
- The company did not receive a detailed report outlining the auditors' assessment of its conformance with all of the IRMA Standard requirements reviewed during the field test. However, Anglo American was provided with confidential general feedback on its current practices as measured against the current draft IRMA Standard (v.2.0). This feedback was provided as a benefit to the host mine site, to help it understand how it might further prepare if it decides to pursue IRMA certification.

These deviations from a regular certification audit were made to accommodate the different foci of the field test (i.e., effectiveness of the Standard rather than conformance of the company). A certification audit would have been much more focused on triangulation/verification of evidence of conformance. This would have included auditor review of company documentation to verify that requirements had been met; first-hand observations at the mine site; and interviews with company representatives, workers and other stakeholders.

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<sup>1</sup> For example, the first field test demonstrated that asking mine site employees to chase down documents to demonstrate that the mine would meet a particular requirement was not the best use of time, and therefore, was not given high priority in the second field test.

The assessment team was cognizant of this shift from regular auditing practice and was diligent in noting where they felt that the wording of the Standard might be difficult to verify in an actual audit setting.

The IRMA Secretariat provided auditors with a list of guiding questions. These questions were developed based on experiences with the first field test – and reflected the type of information that the Secretariat felt would be most helpful to guide the revision of the Standard and development of the verification program.

#### Guiding Questions for Interviewees:

- Does everyone understand what is being asked/required?
- Would the mine meet this requirement? If not, is it because the requirement is not appropriate for your circumstances, or is there another reason?
- If you think the requirement is not appropriate as written, do you have suggestions on how it could be reworded (or replaced with another requirement that seems to meet the overall intent)?
- If you think the mine would meet the requirement, does the mine have a way to verify that it meets the requirement (e.g., through documentation that could be presented to an auditor - examples of types of documents would be helpful)?

#### Guiding Questions for Auditors:

- Is the requirement understandable; relevant to the chapter objective; easy/difficult to verify; auditable?
- Are the means of verification appropriate; too cumbersome?
- Do you have thoughts on what other types of documentation would be relevant to review?
- Please record any recommended changes to the requirement or means of verification.

## Assessment Team

The field test assessment team consisted of three independent auditors, two with social auditing experience and one with an environmental and social auditing background.<sup>2</sup> Unlike a typical certification audit, in addition to auditors the assessment team included two members of the IRMA Secretariat, two members of the IRMA Steering Committee, and one Anglo American corporate-level participant.

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<sup>2</sup> Two auditors were from UL ([www.UL.com](http://www.UL.com)), a global independent safety science company that also delivers certification services; and one auditor was from RCS Global ([www.rcsglobal.com](http://www.rcsglobal.com)), a responsible raw materials supply chain audit and advisory group.

IRMA Secretariat representatives participated to provide auditors and the company with background on the intent of the various Standard requirements; and also to receive first-hand feedback to help guide future revisions to the Standard and assurance system. IRMA Steering Committee members participated as observers, but also took part in chapter reviews and discussions involving Unki mine staff, workers and the independent auditors.

Non-Anglo-American assessment team members signed confidentiality agreements with Anglo American prior to beginning the field test. The agreement outlined terms and conditions for sharing information publicly following the field test.

## **On-Site Visit**

The on-site visit to the Unki mine field test was conducted over a four-day period, from 20 through 24 March, 2016.

The on-site visit included a tour of underground and above-ground mine facilities such as the tailings impoundment and concentrator. IRMA assessment team members also visited the Unki mine housing project; as well as some independent artisanal mining operations in the area (i.e., unrelated to the Unki operation).

The majority of time on-site was spent in the Unki mine offices, where the assessment of the IRMA Standard, using Unki's operation as a test case, occurred. The assessment process included interviews with relevant mine management staff and a small sample of workers' representatives; and review of a sample of company documents.

Prior to the on-site portion of the field test, Unki mine representatives uploaded a sample of materials relevant to the chapters being assessed into an electronic folder. These materials included site plans, environmental impact assessments, resettlement evaluation studies, evaluation reports and other related documents. This provision of documents ahead of the field test enabled auditors to examine some information and prepare questions based on their initial findings. Review of additional documents occurred on-site, during some of the chapter reviews.

The interviews were conducted in three concurrent streams, each stream led by an auditor, with an IRMA Secretariat or Steering Committee member present. Occasionally, sessions were interrupted or temporarily delayed to accommodate the schedules and work requirements of Unki staff members.

## Report Writing

Interviewee comments, notes and observations were documented by each auditor during the on-site portion of the field test. These observations were summarized in greater detail, and additional reflections and analysis were provided to the IRMA Secretariat in the weeks following the on-site portion of the field test. This information forms the basis of the discussion section, below.

## Auditor Level of Effort

The total auditor level of effort to perform a field test assessment of 12 chapters (and one other partial chapter) of the IRMA Standard was approximately 7 person days preparation, 12 days on-site, and 3 days for post-field-test report review, for a total of 22 person-days.<sup>3</sup>

- The on-site portion of the field test included three 3 days on the mine site, and a half day of travel to and from Johannesburg to the Unki mine site near Shurugwi, Zimbabwe. More than half a day was spent on orientation and various tours of mine site facilities, while the remaining time was spent with Unki mine staff reviewing the IRMA Standard chapters.
- Preparation involved reviewing relevant chapters of the IRMA Standard requirements and means of verification, as well as some review of documentation uploaded by the Unki mine staff to a shared internet folder.
- The IRMA Secretariat took the lead in drafting the field test report, but auditors were provided with an opportunity to review the report and provide corrections and additions to the content.

## Field Test Costs

The total cost to IRMA for the field test was approximately US \$50,000 (this included travel costs for 3 auditors and 3 IRMA representatives; as well as contract fees for auditors). In-kind contributions from Anglo American (including group transportation costs from Johannesburg to the Unki mine; accommodations and meals while on-site; and transportation costs for participation of two AngloAmerican corporate-level representatives) were in the US \$20,000-25,000 range.

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<sup>3</sup> This does not include IRMA Secretariat or Steering Committee members. Also, note that one chapter was not completely reviewed, due to time constraints.

# Field Test Findings

## Observations on the Standard

Based on the meetings with Unki mine staff, and their own reviews of the chapters that were in scope for this field test, the three auditors provided detailed comments and suggestions for improving the IRMA Standard.

All of the chapters reviewed have some requirements that need additional clarification or guidance to be auditable and to facilitate more uniform interpretation. In general, however, an overwhelming majority of the requirements were viewed as reasonable, and attainable by Unki mine staff and the independent auditors.

Table 2, below, provides an overview of the auditors’ comments. **Appendix I** contains a detailed list of comments for each chapter included in the field test.

**Table 2. Overview of Auditor Comments on the IRMA Standard**

<b>Clarity</b>
Was the assessment team able to reach the same or similar interpretation of the chapter requirements as the Standard writers; was there a need for clearer language or definition of key terms?
<p><b>Summary:</b> For almost all chapters included in the field test scope, specific recommendations were made for improving the clarity of certain requirements. Slight changes in wording, addition of footnotes, or addition of timeframes, etc., were recommended to enable auditors and others to more clearly understand the intent of certain requirements. Some of this clarification can be added into guidance documents, however, in some cases auditors deemed it essential to change the actual wording of the requirements.</p> <p>Also, more clarification is needed on expectations at new versus existing mines. For example, which requirements in chapter 2.12 are relevant for historic resettlements at existing mines?</p> <p>[Comments on “Clarity” found in chapters: 1.2, 2.1, 2.4, 2.6, 2.7, 2.9, 2.12, 3.1, 3.3, 3.6, 3.8]</p>
<b>Potential for variability in interpretation</b>
<p>Is the requirement overly prescriptive, or too open to interpretation?</p> <p>Quite often in sustainability standards there is a struggle between writing requirements that are prescriptive, and consequently quite inflexible, and those that are interpretation-based, and thus more flexible. Prescriptive requirements give the greatest certainty for a particular outcome, whereas interpretation-based requirements allow room for consideration to differences in scale and scope of an operation, desires of different local stakeholders and to</p>

varying ecologic and environmental conditions. Have we achieved an appropriate balance?

**Summary:** Subjective language, which could result in different interpretations, was identified in a number of requirements. For example, words such as ‘meaningful’, ‘timely’, ‘primary’, ‘practicable’, etc., were seen as potentially problematic. In these cases, IRMA would need to change the language, or include guidance to clarify its expectations when such words are used.

Also, there are some cases where the IRMA Standard integrates fairly new concepts or uses terms where there might not be internationally agreed definitions, such as offsetting or wetlands in chapter 3.8. Again, in these cases guidance will need to be provided.

[Comments on “Potential for variability in interpretation” found in chapters: 1.2, 2.1, 2.4, 2.6, 2.7, 2.9, 2.12, 3.1, 3.3, and 3.8]

### Auditability

Are there sufficient means to measure or verify that a requirement had been met (e.g., do companies have the ability to provide enough evidence to demonstrate compliance)?

**Summary:** Other than auditability challenges posed by subjective language (see “Degree of potential for variability in interpretation” above), there were few comments related to auditability of the requirements, although there were many suggestions made on how to improve the means of verification (see section below).

Auditability challenges were noted in chapter 2.9, where there were questions related to auditing the broad community support provision, and also the use of funds provided by companies for community-based initiatives. In other cases it was suggested that the ability to effectively audit certain requirements might require that special trainings or reference materials be available to auditors. For example, in chapter 2.2, some auditors may be unfamiliar with occupational exposure indices developed by the American Conference of Governmental Industrial Hygienists (ACGIH), or in 3.6, auditors may not be familiar with the Greenhouse Gas Protocol Corporate Standard.

[Comments on “Auditability” found in chapters: 2.1, 2.9, 2.12, 3.3, and 3.6]

### Additions or changes to Means of Verification

What changes to existing means of verification (MOV) or additional MOV, including specific examples of documents or potential interviewees, would be helpful in the auditing of a particular requirement?

**Summary:** Based on the auditors’ expertise, there were a numerous recommendations made for revising and adding to means of verification. In some cases, suggestions were made on types of documentation to review (e.g., different types of contracts, agreements, policies or training documents in chapter 2.1), and in other cases changes to language were suggested to improve clarity. The field test auditors also highlighted that IRMA needs to develop guidance or a protocol related to sampling for auditing purposes (e.g., number of documents or records to be reviewed, number of people to be interviewed, etc.) to ensure that a requirement has been adequately verified.

[Comments on “Additions/Changes to Means of Verification” found in chapters: 1.2, 2.1, 2.4, 2.5, 2.6, 2.7, 2.9, 2.12, 3.1, 3.3]

### Potential unintended barriers to certification:

Were there any areas where the assessment team thought there could be barriers to certification that were not intended by the Standard writers? For example, a barrier might be something that a company implemented during early stages of mine development that would be technically impossible or cost prohibitive to fix or change retrospectively, such as lining an existing waste rock dump.

**Summary:** There were a couple of cases from the environmental chapters (i.e., 3.1—Water Quality and 3.3—Waste Management) where the prescriptive requirements were identified as potential challenges to some companies, either because they went beyond current regulatory requirements, or may involve technical requirements that smaller companies, in particular, may not be implementing. IRMA’s Standard is meant to be a reflection of best practice, and many of the practices are drawn from international practice, so this is not unexpected. However, IRMA may want to consider whether some requirements are so stringent that they will preclude some mines that are responsible overall from becoming certified.

[Comments on “Potential unintended barriers to certification” found in chapters: 3.1, and 3.3]

### Duplication/Overlap:

Was there duplication of requirements within a chapter or between chapters? Duplication between and within chapters could be problematic as it may set slightly different, and potentially opposing, criteria for the same issue and result in multiple non-conformances for the same action.

**Summary:** As compared to the [first IRMA field test](#), the auditors in this field test identified very few places where there was duplication or overlap with other chapters in the IRMA Standard. This demonstrates that efforts to reduce such duplication in v.2.0 of the draft IRMA Standard were largely successful. The places where overlap was noted, IRMA representatives had already been aware of the overlap, and had sought to address it in the section of the Standard called “Cross-References to Other Chapters.” The comments from auditors, however, reflect that more work needs to be done to provide clarity around IRMA’s expectations in such situations.

[Comments on “Duplication/Overlap” found in chapters: 2.1, 2.4, 2.5, 2.6, and 3.3]

### Other issues

Were there other significant concerns or comments on a requirement or chapter?

**Summary:** There were numerous comments that fell into the “Other” category. These ranged from observations about the potential compliance burden related to particular requirements (e.g., the need to align with or follow other standards, as found in 2.6.1.2 or 3.3.1.4.c.) to suggestions on sources of information that could be useful to references in

requirements or guidance (such as the World Health Organization water quality criteria, or the Business and Biodiversity Offsets Programme methodology).

There were also recommendations made to add new requirements, where the auditors believed, based on their experience with other Standards or expertise with the subject area, that there were best practices not reflected in the chapters. These suggestions will be considered during the next round of revisions to the IRMA Standard.

[Comments on “Other Issues” found in chapters: 1.2, 2.1, 2.4, 2.5, 2.6, 2.9, 2.12, 3.1, 3.3, 3.6, and 3.8]

## Observations on the Assurance System

In their comments, auditors provided some recommendations to IRMA on issues to consider as it develops its assurance/verification system. Some of these have been incorporated into Table 3, below. Additionally, auditors provided the following suggestions:

### Auditor Guidance

- IRMA should consider how to manage auditor guidance when there are multiple chapters cross-referenced in a given chapter. If more than one auditor is looking at the different chapters, that cross-referencing between auditors might not happen unless the direction is clear. Communication break-down is possible, and the cross-referencing could be missed. This issue should be clearly addressed and managed through the auditor guidance.
- IRMA may want to “shadow” auditors, as this is helpful in training auditors and increasing audit quality.
- Others have developed online training modules for auditors, or have hosted peer exchanges to enable auditors to share information.
- Some systems have a committee that reviews auditor(s)’ recommendations before a certificate is granted. The applicant company should also have a period of time to review/respond to audit findings before a certification decision is made, to give the company an opportunity to challenge or object to audit findings, and also have time to correct minor non-compliances.

### Auditor Accreditation

- Accreditation of audit firms, and also “lead” vs. “team” auditors is helpful. Some Standards accredit even for specific topics that an auditor is allowed to verify. IRMA should consider accrediting firms, and also specific accreditation and training for auditors.

- Auditor and firm accreditation should only be for a fixed time, as staff will change and the IRMA Standard itself is going to evolve. Consider requiring a renewal and evaluation of the accreditation.

**Table 3. Auditor and IRMA Secretariat Observations on Assurance System**

<b>Assurance System Components</b>	
<b>Audit Level of Effort</b>	<p>Three auditors with different areas of expertise were hired by IRMA. These three auditors spent approximately 12 person-days on site, and were able to review 12 complete chapters (and one partial chapter). An actual certification audit would require more time to carry out the document review and stakeholder interviews. Less time, however, would be spent discussing the merits, the clarity and auditability of each requirement in the Standard, and instead, auditors would hone right in on whether or not the company met each requirement.</p> <p>Using a very rough extrapolation, it could take between ½ and 1 day to audit each chapter, thus a team of three auditors might do a complete field test or certification audit testing all 27 chapters in the IRMA Standard in 5 to 9 days. In any particular audit, however, the on-site audit time would depend on:</p> <ul style="list-style-type: none"> <li>• the complexity and size of the mining operation;</li> <li>• the audit scope (i.e., the number of relevant chapters of the Standard) that apply to the site;</li> <li>• the readiness of the applicant (e.g., familiarity of mine site staff with the IRMA Standard requirements, the objectives of the audit, and their expected level of participation during the audit process);</li> <li>• the availability of company documentation in advance of the on-site portion of the audit; and</li> <li>• the extent of stakeholder outreach required during verification.</li> </ul>
<b>Auditor Expertise</b>	<p>The auditors hired for the field test had sufficient expertise to audit the chapter that were within scope. There are many certification bodies that have the expertise to audit the social chapters of the IRMA Standard, as those chapter incorporate principles (such as UN Guiding Principles on Human Rights) that are consistent with or based on other standard systems (such as IFC performance standards; OECD Due Diligence Guidance, etc.).</p> <p>Although the IRMA Standard is very detailed, and contains some highly technical environmental requirements, there are many consultancy firms that have mining expertise. These firms would be ideally placed to become IRMA auditors, as long as they receive appropriate training in auditing, and go through whatever training program IRMA creates as part of its auditor</p>

	registration/accreditation process.
<b>Audit Cost</b>	<p>The cost of certification audits will depends on number of relevant chapters, and complexity of the site and context (see audit level of effort above).</p> <p>Auditor fees are likely to range from US\$800 - \$1,500 per auditor per day, and there are likely to be additional expenses such as travel, accommodations and meals.</p> <p>Based on costs associated with this field test, and factors such as the auditor level of effort above, it is estimated that auditing costs (including preparatory work, on-site visits, and report writing) could range from US\$50,000 to more than \$100,000 (e.g., for a large, complex site that has a broad audit scope).</p> <p>Cost of audits will vary based on the following considerations:</p> <ul style="list-style-type: none"> <li>• auditor level of effort (described above);</li> <li>• location, and subsequent travel costs;</li> <li>• translation (finding qualified local auditors in each mine location may be difficult, so translators may be needed); and</li> <li>• honorarium costs to reimburse time and/or expenses of stakeholders or observers, if relevant</li> </ul>
<b>Mechanism for Interpreting the IRMA Standard</b>	<p>IRMA will need to develop guidance for auditors, to provide more context and information on the requirements and expectations. This should help to reduce the variability in interpretation.</p> <p>Additionally, IRMA will need to develop a separate mechanism that auditors or companies can access if they have questions about issues not covered in guidance.</p>
<b>Auditor Tools</b>	<p>In addition to a guidance manual for auditors, it would be useful for IRMA to provide on-line training modules.</p> <p>Computerized audit templates will be another tool that will help auditors in the field.</p> <p>The templates should include ability to cite and record evidence, observations, and document interviewee names and responses. If the system were cloud-based, evidence could be uploaded.</p> <p>Ideally, these templates would have some automated functionality, whereby the auditor could enter a particular response, and be alerted to any follow-up questions needed. An automated template could also alert auditors to appropriate cross-references with other chapters, so that they are aware of a need to refer to other requirements when auditing a particular requirement or chapter (e.g., many chapters mention stakeholder engagement, and when these references occur the system could remind auditors of the relevant requirements to consider from the Community and Stakeholder Engagement</p>

	<p>chapter).</p> <p>Once the scoring system is developed, the template could also automatically calculate scores for each criteria and chapter.</p> <p>IRMA should also develop a cloud-based system to enable each applicant to upload information that would be made available to auditors prior to the onsite portion of a certification audit. A desktop review of materials could help cut down the time required for the onsite portion of a certification audit, thus reducing the time-burden on mine-site staff during the audit.</p>
<p><b>Other Components</b></p>	<p>There were discussions about creating materials for companies to prepare for an IRMA certification audit. Materials might include self-assessment checklists, examples of documents that will be important, and suggested methods for provision of information and documents to auditors ahead of an on-site audit (see cloud-based system in Auditor Tools above).</p> <p>The more prepared a company can be ahead of an actual certification audit, the less time it will need to invest in having auditors on site (both the cost of the auditors, as well as the costs of staff taking time away from their regular jobs to spend with auditors).</p>

## Observations on the Field Test Process

The Unki field test was the second IRMA field test, and benefited from the learning from IRMA’s first field test, which was conducted five months earlier. During this field test, less time was spent having mine staff chase down specific documentation, and more time was spent discussing the types of documentation that could be provided by the mine to verify that a particular requirement could be met.

Due to IRMA Secretariat work schedules, completion of the audit field test report took several months. In the future, IRMA should ensure that enough staff time is available to complete final field test reports in a more timely manner.

# Appendix I: Auditor Comments

## Chapter 1.2—Revenue and Payments Transparency

<b>Overall</b>	<p>Most requirements in this chapter are relevant and auditable, though some go beyond current best practice, while others could go further. The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p><b>1.2.1.2.</b> Under the EITI standard, companies can choose to report payments, with a 24 months delay. You may wish to specify a time frame here that suggests that at a bare minimum companies should not declare data older than 24 months. Ideally you want your participants to report data in a more timely manner, which is also a big push in the EITI. 12 months is appropriate. “Implementing countries must disclose data no older than the second to last complete accounting period, e.g. an EITI Report published in calendar/financial year 2016 must be based on data no later than calendar/financial year 2014.”</p> <p><b>1.2.2.1.</b> “The operating company shall demonstrate support for the EITI by publishing a clear public statement endorsing the EITI Principles and Standard on its external website.”</p> <p>Comment: This is not an EITI requirement. Suggest delete. See here for the relevant EITI clause: “Publicly declare support for the EITI Principles by publishing a statement of support on the company website. ”</p> <p><b>1.2.3.3.</b> The operating company shall publish <u>audited</u> annual accounts, following international accounting standards.</p>
<b>Potential for variability in interpretation</b>	<p><b>1.2.1.2.</b> “The operating company shall publish all material payments made by itself and its corporate owner, <del>if relevant,</del> to the government of the country . . .”</p> <p>Suggest delete. Don’t limit this to “if relevant”. Subjective – open to interpretation.</p>
<b>Auditability</b>	
<b>Changes to Means of Verification</b>	<p>For 1.2.1.1, 1.2.1.3, and 1.2.1.4. . .</p> <p>Elaborate here that companies will typically file a much more detailed data sheet at the relevant government entity, but may choose to make an effort to distill and package key info from that datasheet in their corporate reporting to their stakeholders.</p> <p>For <b>1.2.2.2</b>, if relevant:</p> <ul style="list-style-type: none"> <li>• Review company forms to ensure that they are up to date <u>and publicly available</u>.</li> <li>• [If ADD 1.2.2.3, add MOV:] For 1.2.2.3 check minute meetings, relevant agendas for government meetings, company reports, press coverage (where applicable).</li> </ul> <p>For <b>1.2.3.1</b> and <b>1.2.3.2</b>. “Review annual accounts, approved by accredited auditor. [ADD:] <u>Check auditor accreditation. Check if following</u></p>

	<p>international accounting standard.”</p> <p>For 1.2.4.2. Put onus on the company to provide you with information on the beneficial owners of the company and cross-check this with public information too.</p>
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	
<b>Other issues</b>	<p>Suggested ADDITION to Objectives/Intent:</p> <p>A key consideration for companies considering IRMA assurance is to use the reporting requirements under this chapter to provide disclosed information in an accessible manner to the mine’s stakeholders so to support the mine’s efforts to demonstrate its socio-economic contribution. This can help to support the company’s social license and aid the resolution of any confusion on the side of stakeholders over the company’s versus the government’s service provision responsibilities.</p> <p><b>1.2.1.</b> Suggest that IRMA’s approach to disclosure does not supersede extraterritorial legislation, the legal frameworks of countries where IRMA mining companies operate or contravene the contracts that they enter into. This stance is aligned with EITI ‘Principle 6’, which recognises that the achievement of greater transparency must be set in the context of respect for contracts and laws.” (If change made, also change 1.1 in Cross-reference Table)</p> <p><b>1.2.1.2.</b> “Material Payment” requires a definition, refer to EITI <b>1.2.1.3.</b> Ensure data are aligned with disclosure requirements in the EU Directives.</p> <p>Suggested NEW requirement:</p> <p><b>1.2.2.3.</b> If the EITI is not implemented in the country where the mine is located, the operating company shall use its government engagement efforts to inform the government about the merit of EITI implementation and the company’s endorsement of the EITI’s principle.</p> <p><b>1.2.4.1.</b> Please cross-check relevant contract transparency clauses under the EITI. The language is much softer. While a progressive stance may be desired, this may come back to you in consultation. The EITI says: “Implementing countries are encouraged to publicly disclose any contracts and licenses that provide the terms attached to the exploitation of oil, gas and minerals.”</p> <p><b>1.2.4.2.</b> Very progressive stance that requires clear guidance in the implementation and auditors handbooks, particularly as it relates to how far back you need to trace ownership and how to treat publicly traded companies (where beneficial ownership frequently changes due to share sales/acquisitions).</p> <p><b>1.2.5.2.</b> “Procedures shall include a requirement to internally report and record . . .”</p> <p>Comment: I think this is very limited. I think procedures should include a clear disciplinary process that includes the option of dismissal.</p> <p><b>1.2.5.3.</b> “Relevant employees and contractors shall be trained in the application of the operating company’s policy and procedures.”</p> <p>Comment: And a clear disciplinary process should accompany these policies and procedures, which include the options of dismissal and contract termination.</p>

## Chapter 2.1—Fair Labor and Terms of Work

<p><b>Overall</b></p>	<p>The requirements in this chapter are relevant and auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<p><b>Clarity</b></p>	<p><b>2.1.1.</b> The requirement is relevant and easy to verify. However, the definition of what constitutes a Human Resources Policy unclear, and can be interpreted differently from one company to the other. To ensure that there is clarity, it is important to indicate the types of policies that companies should have, i.e. the minimum policies. This will also ensure that there is consistency during audits when different auditors audit different companies.</p> <p>In addition, workers should also be made aware of the human resources policies that are applicable to them.</p> <p>IRMA also needs to clarify whether corporate-level human resources policies are sufficient, and/or if there is an added element needed such as demonstration that corporate-level policies are implemented and understood by site-level staff.</p> <p><b>2.1.2.1.</b> Is it necessary that the operating company should have a freedom of association policy?</p> <p><b>2.1.2.5.</b> “The operating company shall remain neutral in any legitimate unionizing or worker-organizing effort; shall not produce or distribute material meant to disparage legitimate trade unions; shall not establish or support a company union for the purpose of undermining legitimate worker representation; and shall not impose sanctions on workers organizations participating in a legal strike.”</p> <p>The wording on this requirement should also include the fact that companies should not influence the election process of union representatives or worker representatives.</p> <p><b>2.1.3.</b> On footnote number 10, the wording should also include discrimination based on employment status i.e. temporary vs. permanent workers</p> <p><b>2.1.3.3.</b> The word harassment should be expanded and all possible forms of harassment should be listed, e.g. sexual harassment, emotional harassment, psychological harassment etc. Alternatively, the word “all” should be added before harassment so that the requirement is exhaustive.</p> <p><b>2.1.4.1.</b> The wording in 2.1.4.1 should also indicate that the retrenchment process should be fair and consistent.</p> <p><b>2.1.6.1.</b> The requirement should have an explicit requirement that companies should have a written disciplinary procedure or equivalent.</p> <p><b>2.1.7.1.</b> Should companies have a child labor policy in writing?</p> <p>It was noted that the requirements do not cover the young persons category, i.e., persons who are above the age of 15 but below the age of 18. This category of workers does not fall under the category of child labor as they are not children but they are young workers/young persons. It is recommended that young workers/persons are also covered in the standard. This is because in many jurisdictions, laws allow young workers to be employed and therefore guidance on this category of workers is important.</p> <p>Some of the issues that can be covered include: that young persons do not work at night and are protected against conditions of work which are prejudicial to their health, safety, morals and development, young workers’ working hours do not prejudice their attendance at school, their</p>

	<p>participation in vocational orientation etc., if there mechanisms to prevent, identify and mitigate harm to young workers, access of young workers to grievance mechanisms, training of young workers on Occupational Health and Safety and have access to related training programs among other things.</p> <p><b>2.1.8.1.</b> The chapter has the definition of forced labor on page 43-it is my suggestion that this wording be brought into the requirement for 2.1.8.1. In addition, retention of original identification documents, involuntary prison labor and recruitment fees should also be added as part of this requirement. Decision should also be made if each and every aspect of forced labor should be stand alone as a requirement or if these should be combined together in one requirement.</p> <p><b>2.1.9.1.</b> Guaranteeing workers social security should also be included as part of the requirement.</p> <p><b>2.1.9.3.</b> Consider changing to refer to legally required method of payment.</p> <p><b>2.1.9.5.b.</b> It should also be added that due process should be followed before the deductions are made and the deductions should be fair.</p> <p><b>2.1.10.1.</b> Auditor recommended that IRMA add a requirement that workers be granted non-working rest breaks during the shift as well as daily rest.</p>
<b>Potential for variability in interpretation</b>	<p><b>2.1.2.</b> It has to be clearly stated in the requirement if having a freedom of association policy is a requirement or the auditor can make a judgment on the basis of interviews with workers, management and reviewed documents. This is because often times, companies may comply with the requirements of this section but they may not have a freedom of association policy that is written in black and white.</p> <p><b>2.1.4.2.</b> The word timely is subjective. Should be further explained.</p> <p><b>2.1.5.1.a.</b> States that the company shall “[..] provides timely feedback to those concerned” the word timely is subjective. Is IRMA going to put in writing the number of days that are acceptable as timely or should this be left to the discretion of the auditor to judge if the feedback was provided in a timely manner? The requirement should also make it clear that employees have the right to be accompanied by worker representatives when lodging grievances.</p>
<b>Auditability</b>	<p><b>2.1.2.3.</b> It is difficult to verify if the workers’ representatives have been provided with the information needed for meaningful negotiation. What type of documents will the auditor review in order to come to a conclusion that the company provided the worker’s representatives with meaningful information? IRMA should provide guidance to auditors on how to verify this, for example, what questions to ask workers’ representatives.</p>
<b>Changes to Means of Verification</b>	<p><b>2.1.1.1.</b> Human resources procedures can also be added here.</p> <p><b>2.1.2.</b> The following document should be added “documents showing evidence of engagement between worker representatives/union representatives”; and Induction/training records should be added to the list of documents that can be used to demonstrate compliance with section 2.1.2.</p> <p><b>2.1.2.1.</b> Workers’ representative agreement with the operating company can be added as documents to be reviewed.</p> <p><b>2.1.2.3.</b> The verification should indicate examples of documents that can be reviewed to prove that workers’ representatives were given information needed for meaningful negotiation. Types of documents that that are typically used in wage negotiations include the financial performance of the company and the projected plans of the company.</p> <p><b>2.1.2.6.</b> Induction records/training records which show that the company employees on their right to freedom of association and collective bargaining.</p>

	<p><b>2.1.2.8.</b> When reviewing the collective bargaining agreement, the auditor should also check if the agreed terms are consistent with the local laws.</p> <p><b>2.1.2.9.</b> Verification means - it says confirm that the company does not use short-term contracts, however does not specify how. It should refer to means of verification - documentation review (employment contracts, hiring notices) and employee interviews</p> <p><b>2.1.2.10.</b> Similar as for a few other requirements, it does not specify means of verification, simply states confirm. Means of verification would be documentation review (hiring procedure, meeting minutes between worker representatives and the company), employee interviews, worker representative interviews.</p> <p><b>2.1.3.1.</b> A footnote should be included which states that there are some countries that legally allow positive discrimination so as to correct historical imbalances in the work place for example the Black Economic Empowerment in South Africa. In such cases, the auditor should be familiar with such positive discrimination laws.</p> <p><b>2.1.3.3.</b> The company has a sexual harassment and anti harassment policy.</p> <p><b>2.1.4.1.</b> Retrenchment procedure should also be added as part of the documents that need to be reviewed by the auditor.</p> <p><b>2.1.5.1.</b> Records of the grievances that were lodged and the investigations thereof.</p> <p><b>2.1.5.2.</b> Induction/training records.</p> <p><b>2.1.6.1.</b> Disciplinary code or equivalent should be added to the list of documents that have to be reviewed.</p> <p><b>2.1.6.2.</b> The auditors have to review disciplinary procedure to confirm it is fair and consistent.</p> <p><b>2.1.7.1.</b> Companies should keep documents prove of age of all the workers.</p> <p><b>2.1.7.2.</b> Review 1) time records showing the hours worked by young workers, 2) work schedule for young workers, 3) policies and procedures on the employment of young workers, training/induction records for young workers, risk assessments for the tasks that are done by young workers.</p> <p><b>2.1.8.1.</b> Some of the means of verification should also include: policy or procedures on forced, bonded, involuntary prison, training records, hiring notices, contracts with labor agencies/recruiters, workers are informed prior to employment (in case of migrant workers, before they leave their home country/region) of the key employment terms and conditions either verbally or in writing via employment letter/agreement/contract in their local language.</p> <p><b>2.1.8.2.</b> Means of verification should also include: evidence of due diligence when recruiting migrant workers. Documentation that could demonstrate due diligence might include:</p> <ul style="list-style-type: none"> <li>• Awareness of the procedures that have to be followed when employing migrant labor, level of understanding of management that migrant laborers are vulnerable to forced labor situations.</li> <li>• Attention given to the hiring process, i.e., direct or indirect (via recruitment agencies).</li> <li>• Awareness of the laws that protect migrant labor-in the host country or country of origin.</li> <li>• Awareness of debt bondage issues.</li> <li>• Preventative measures that are taken by the company to ensure that migrant workers do not end up in forced labor situations.</li> <li>• Engagement with worker representatives on migrant labor issues and existence of grievance mechanisms for violation of migrant labor rights.</li> </ul> <p><b>2.1.9.1.</b> Means of verification should also include wage rates used to determine wages that are paid workers or the equivalent thereof.</p>
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	<p>2.1.9.3. Not only interviews but also documentation review.</p> <p>2.1.10.2. Means of verification should also include review of time records and leave</p>
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	
<b>Other issues</b>	<p>2.1.2.2. Concern that in countries where freedom of association is inhibited by the law, although employees may have the right to associate and bargain, this right may not be fully exercised because of the limitations of the law.</p> <p>2.1.9.1. – 2.1.9.5. How many months of payment records should be reviewed and how many workers should be included in the sample?</p>

## Chapter 2.2—Occupational Health and Safety

<b>Overall</b>	<p>The requirements in this chapter are relevant and auditable.</p> <p>The requirements are largely understandable, but further work can be done on a few requirements to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p>2.2.1.4. The operating company shall develop and implement risk management processes that include strategies to manage risks in the following order of priority:....".</p> <p>Risk management processes give more flexibility than a risk management plan (which is more fixed in terms of required actions).</p> <p>Consider adding examples of equivalent terminology for each step required by IRMA.</p> <p>2.2.1.5.h. Consider replacing "serious danger to the health and safety of workers" with "potential high risk of harm to workers".</p> <p>2.2.5.2. Consider changing 'a minimum of 30 years' to 'the life of mine or a minimum of 30 years, whichever is longer'.</p>
<b>Potential for variability in interpretation</b>	<p>2.2.1.4. Need to clarify if slightly different steps are taken, if they would be viewed as comparable/acceptable.</p>
<b>Auditability</b>	<p>2.2.4.2.d. Auditor may need to self-train with respect to OEL/BEI (as this is not a commonly known standard). Could ILO or regional standards be used as an alternative?</p> <p><b>Auditor Protocol:</b> Need to develop a protocol with instructions on conducting worker interviews and sampling requirements to cover such items as: How many workers will need to be interviewed? Feasibility; Worker interviews without management present; Auditor selected sample of workers instead of selected by management.</p>

<p><b>Changes to Means of Verification</b></p>	<p>2.2.1.4. Consider adding procedures/processes instead of or in addition to plans.</p> <p>2.2.1.5. Could add as examples: a) induction process/procedures; b) site procedures, including operational and maintenance procedures; c) ground stability studies/reports; e) ventilation plans; f) maps showing refuge chambers; g) gas monitoring reports; h) procedures and reporting related to evacuation drills.</p> <p>Need to note that some of the requirements are only applicable to underground mines.</p> <p>2.2.2.2. Means of verification needs to explicitly refer to interviews with workers and H&amp;S representatives that there are no reprisals for reporting with respect to 2.2.2.2.</p> <p>There may also be a policy on this (or such might be part of the H&amp;S policy), which should also be reviewed.</p> <p>2.2.2.6. If there are visitors on site at the time of the audit it may be possible to check with them that they have been appropriately inducted.</p> <p>2.2.3.1. Alternative wording: "Where workers are exposed to hazards the operating company shall: . . ."</p> <p>Specifying physical, chemical or biological is unnecessary (it is the exposure to a hazard that is the important part of the criterion).</p> <p>2.2.3.2 a. Use "refresher" rather than "retraining." Note: Only applicable to u/g mines.</p> <p>2.2.3.4. Add worker interviews</p>
<p><b>Barriers to certification?</b></p>	
<p><b>Duplication / Overlap</b></p>	<p>2.2.3.1.a. Overlaps somewhat with 2.2.2.3 - possibility of streamlining one or other of the criteria?</p>
<p><b>Other issues</b></p>	<p>2.2.3.5.a. Perhaps rather than stating 2/3 of the salary the criterion should be tied to a living wage?</p> <p>Suggested NEW Requirement:</p> <p>Not quite sure where the following fits - perhaps a new criterion under wages, chapter 2.1.</p> <p>If the operating company pays workers a bonus in addition to a fixed salary, there should be a health and safety related bonus that is at least equal to any production-related component.</p> <p>This criterion would need to be matched with a policy of treating under-reporting of H&amp;S incidents as a serious (dismissible) offence.</p> <p>2.2.5.3. Should "confidential" health surveillance and medical exam data be accessible to the workers themselves (rather than just shared with medical professionals)? In many countries individuals do not have a legal right to such information, so this criterion may clash with national laws.</p>

## Chapter 2.4—Human Rights Due Diligence and Compliance

<b>Overall</b>	<p>The requirements in this chapter are relevant and auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made for additional means of verification to be provided.</p> <p>From a content / evidence point of view, some overlap exists with chapter 2.5.</p>
<b>Clarity</b>	<p><b>Scope of Application:</b> New vs. Existing Mines: . . .” At new existing mines, this may not require a human rights impact assessment”</p> <p>Comment: It is important that the implementation guidance booklet makes clear reference to the indicators determining whether or not a Human Rights Impact Assessment is required.</p> <p><b>2.4.2.2.</b> “may be scaled to . . .” Needs guidance, to understand when this might apply, and what it implies.</p> <p><b>2.4.2.3.</b> Need more information about what relevant professional human rights expertise is applicable.</p> <p><b>2.4.2.4.</b> In contexts where rights holders may be unaware or insufficiently aware of their rights, it would be prudent to include a clause on requiring the company to provide information on this to the rights holders through an independent and accredited third party.</p> <p><b>2.4.2.5.</b> Consider specifically referring to gender here.</p> <p><b>2.4.3.1.</b> Does rights-compatible grievance mechanism need to be anonymous (or have the option of being anonymous)?</p>
<b>Potential for variability in interpretation</b>	<p><b>2.4.2.1.c.</b> “. . . in response to changes in the operating environment.”</p> <p>This is quite broadly phrased. Significant scope for subjective judgment unless more narrowly defined.</p>
<b>Auditability</b>	
<b>Changes to Means of Verification</b>	<p><b>2.4.2.6 and 2.4.2.7</b> For the audit guidance: define selection process; take into consideration gender and vulnerable groups.</p> <p><b>2.4.2.8</b> Requires further and more substantial evidence gathering. Examples include:</p> <ul style="list-style-type: none"> <li>• actions cross-referenced in meeting notes</li> <li>• actions cross-referenced in updated management systems documents</li> <li>• updated procedures</li> <li>• evidence of inclusion of actions in updated social management plans</li> </ul> <p><b>2.4.3.1.</b> “Interview a sample of rights holders to confirm that they are aware of the existence of the operational-level grievance mechanism and/or other means to raise concerns about potential or actual human rights impacts related to company activities.” ADD additional indicators:</p> <ul style="list-style-type: none"> <li>• Responses to grievances raised.</li> </ul>

	<ul style="list-style-type: none"> <li>• Documentary evidence of grievances raised</li> </ul> <p>2.4.4.2. Additional indicator: proof of payment for external monitoring for 2.4.4.2.a</p> <p>2.4.5.2. Scrutinize justification for omission of information</p>
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	There is some overlap between this chapter and the Mining and Conflict Affected or High Risk areas chapter (2.5) – they should therefore be read in conjunction. Much of the evidence will be the same or similar.
<b>Other issues</b>	<p>General:</p> <p>As Human Rights is a cross-cutting issue, some evidence required to meet a number of the standard criteria is available in other places. In fact, many companies will either have an integrated approach to assessing Human Rights risks or a free-standing one. From a management systems point of view, this may require a degree of re-structuring and/or re-labelling of existing tools and/or information to make it easier for mine site staff to locate the evidence. Alternatively, the implementation guidance and audit guidance should make specific reference to prompting company staff that some info may be available but simply differently labeled.</p> <p>There are some considerations to be borne in mind regarding the Human Rights Impact Assessment. While such a large, integrated impact assessment is of course welcome, it is important to realize that a range of the indicators featuring in the impact assessment will have been covered already in other undertakings, such as ESIA's or various forms of Risk Assessments, for example. Other indicators may have to be assessed more frequently than others, which means they may still have to be assessed in stand-alone or complementary exercises (see next chapter, for example).</p>

## Chapter 2.5—Mining in Conflict-Affected and High-Risk

<b>Overall</b>	<p>The requirements in this chapter are relevant (for the context of CAHR countries) and they are auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made for additional means of verification to be provided.</p> <p>From a content / evidence point of view, some overlap exists with chapter 2.4.</p>
<b>Clarity</b>	
<b>Potential var. in interpret'n</b>	
<b>Auditability</b>	
<b>Changes to Means of Verification</b>	<p><b>2.5.2.1.</b> Verify if the site has a process / monitoring system in place whereby it gathers information that would allow it to become knowledgeable about its own impacts in the conflict context. Without a process / credible monitoring system it is difficult for the mine to understand its own impacts.</p> <p>For <b>2.5.3.1</b>, review the risk assessment and confirm it [ADD:] <u>included the full scope of provision 2.5.3.1 and followed a recognized methodology as per 2.5.3.2.</u></p> <p>ADD: For <b>2.5.3.2</b>, review who carried out the risk assessment and ensure they were competent professionals with appropriate training or expertise. Demand evidence to support their qualification.</p> <p><b>2.5.4.1</b>, review evidence [ADD:] <u>of the implementation</u> of the risk management plan.</p> <p>For <b>2.5.5.1</b>, review documentation and interview relevant company staff [ADD:] <u>and stakeholders</u> to confirm that monitoring has been carried out . . .</p> <p>ADD: For 2.5.5.2 – review evidence presented that confirms that the company has undertaken credible actions to cease operations and mitigate and resolve impacts prior to restart.</p>
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	<p>There is a degree of overlap between this chapter and the Human Rights chapter – they should therefore be read in conjunction. Much of the evidence will be the same or similar.</p>
<b>Other issues</b>	<p>There is an applicability conversation to be had, which is tied in with the fact that the OECD does not formally provide a definition for CAHR countries. However, similarly to the WGC conflict-free gold standard suggests, there are guidance examples out there, such as the Heidelberg Conflict Barometer. In addition, the CFSI (conflict-free smelter initiative) provides a categorization of conflict-affected and high-risk areas, which is a useful basis to work from.</p>

## Chapter 2.6—Security Arrangements

<b>Overall</b>	<p>The requirements in this chapter are relevant and they are auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made for additional means of verification to be provided.</p> <p>From a content / evidence point of view, some overlap exists with chapter 2.5.</p>
<b>Clarity</b>	<p><b>2.6.1.3.</b> Without having read them, two of the good practice guidelines in footnote 61 refer to “Law Enforcement Officials”. These are typically public sector employees. There appears to be a contradiction therefore in that clause 2.6.1.3 is only applicable to private security. If you want private security to comply with a guideline for public security forces, this should be made clear in 2.6.1.2 and the guidelines should be specifically mentioned. In turn, 2.6.1.4 should make specific reference to the guidelines applying to public sector officials, such as “law enforcement officers”</p> <p><b>2.6.2.2.</b> Add geographical scope. This should cover the mine site/concession area (as appropriate) and the transport routes.</p> <p><b>2.6.2.5.</b> “If the security risk assessment reveals the potential for conflicts between community members or workers and mine security providers, the operating company shall collaborate with communities and/or workers to develop culturally appropriate strategies [ADD:] <u>that take into consideration gender specific requirements and those of vulnerable groups</u> to prevent or mitigate those risks. . .”</p>
<b>Potential for variability in interpretation</b>	<p><b>2.6.1.3.</b> Footnote - You cannot use “E.g.” when listing guidelines that contractors have to comply with. You have to specify the guidelines and limit them. So it should be “I.e.”, rather than “E.g.”. It is otherwise a footnote that makes this provision difficult to implement.</p> <p><b>2.6.1.4.</b> “If public security forces are <u>used</u> in relation to providing security . . .</p> <p>Comment: “Used” is open to interpretation in implementation. It’s about having a formal relationship with public security or not that should determine liability. Irrespective of this formal relationship, the mine should undertake good faith efforts to ensure public security forces apply good practice when conducting their normal roles (as public security service providers) in the area of influence of the mine.</p> <p><b>2.6.1.4.</b> “. . . the operating company shall make a good faith effort to sign a Memorandum of Understanding (MoU) with public security providers that includes <u>similar</u> provisions to those in 2.6.1.3.”</p> <p>Comment: You cannot use the word “similar” in this context. It is open to interpretation in implementation. You got to be specific about the provisions and stipulate which guidelines should be referenced in the contract. Alternatively, use “the same”.</p> <p><b>2.6.3.1.</b> 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, <u>breaches of international humanitarian law or the use of excessive force.</u></p> <ul style="list-style-type: none"> <li>• Comment: Align scope with requirement 2.6.1.1, which only makes reference to “infringement of human rights”. The more expansive scope should be used.</li> </ul>
<b>Auditability</b>	

<p><b>Changes to Means of Verification</b></p>	<p>2.6.1.1. ADD:</p> <ul style="list-style-type: none"> <li>Review external documentation that define and/or credibly suggest which security forces are infringing human rights, e.g. UN Group of Experts report or credible Human Rights NGO reports. (Without this info, it is impossible to check this provision)</li> </ul> <p>For 2.6.1.2, confirm through interviews with relevant operating company staff and document review that procedures are in place related to the use of force and firearms, and that <u>these</u> are consistent with best practices.</p> <p>2.6.1.3. “For 2.6.1.3, if relevant, review signed contracts with private security providers to confirm that they include principles and requirements <u>consistent with the VPs.</u>”</p> <ul style="list-style-type: none"> <li>Comment: Here you do not make reference to “and other applicable international guidelines”. Please revise or delete this part of the provision.</li> </ul> <p>If you ADD transport to 2.6.1.3 (below), add MOV:</p> <ul style="list-style-type: none"> <li>For 2.6.1.3, review signed contracts for delineation of respective duties and obligations with respect to the provision of security in and around the operation, including security provision along company transport routes, if company has contracted security on or along transport routes.</li> <li>For 2.6.1.3, review signed contracts for outline of required training for security personnel.</li> </ul> <p>If you ADD “and update this risk assessment periodically” to 2.6.2.2, add to MOV:</p> <ul style="list-style-type: none"> <li>For 2.6.2.1, confirm that security risk assessment was conducted <del>during the appropriate timeframe</del> <u>at the correct stage of project development and determine if it has been updated periodically</u>, and if not, the company’s rationale for not doing so. Interview stakeholders to determine if they agree with the company’s rationale.</li> <li>For 2.6.2.5, if risks to <del>communities</del> <u>members</u> or workers were identified, review evidence (e.g., minutes of meetings) that the company and relevant community members/workers developed, through a collaborative process, prevention or mitigation strategies <u>that are culturally appropriate and take into consideration the specific requirements of vulnerable groups.</u> . .</li> </ul> <p>CHANGE “For <del>2.6.4.2</del> <b>2.6.4.1</b>, if private security employees have not been trained. . .”</p> <p>If you make suggested CHANGE to 2.6.4.1 (below), add to MOV for 2.6.4.1. “Review accreditation of training providing individual or organization.” AND in second para, “. . . received appropriate training <u>by an accredited individual or organization and review proof thereof.</u>”</p> <p>If you make suggested CHANGE to 2.6.4.2 (below), add to MOV for 2.6.4.2. “. . .such training <u>by an accredited individual or organization another party.</u>”</p> <p>If you make suggested CHANGES to 2.6.4.3, ADD: “For 2.6.4.3 establish if the community has publicly offered to potentially affected communities and other stakeholders a separate training or workshop on the company’s procedures on the use of force and firearms, and other relevant issues related to security and human rights”</p>
<p><b>Barriers to certification?</b></p>	
<p><b>Duplication / Overlap</b></p>	<p>There is a degree of overlap between this chapter and chapters 2.4 and 2.5 – they should therefore be read in conjunction.</p>

<b>Other issues</b>	<p><b>Background:</b> This introduction is much broader than the more narrowly defined role in 2.6.1.1 that only makes reference to: “to maintain the safety and security of its mining project”. Suggest using the more expansive definition in the standard provision.</p> <p><b>Scope of Application:</b> Please ensure that for cases where the company retains possession of its material until it reaches a smelter or further processing site, the provisions in this chapter have to equally apply to the transport routes the company applies which are outside of the immediate mine infrastructure. The security arrangements need to be covered by this provision - if the material is still owned by the mine the responsibility rests with the mine.</p> <p><b>2.6.1.3.a.</b> VPSHR and footnote add a compliance burden, as companies now need to check these additional guidelines as referred to in footnote 61. Please ensure there is sufficient justification for their inclusion and the stipulations are not covered in sufficient detail in the UN <i>Basic Principles on the Use of Force and Firearms</i>, which you already request compliance with in clause 2.6.1.2.</p> <p><b>2.6.1.3.b.</b> Delineates respective duties and obligations with respect to the provision of security in and around the operation [ADD:] <u>including security provision along company transport routes, if company has contracted security on or along transport routes; . . .</u> (also apply this to 2.6.4.2. “mine-related”)</p> <p><b>2.6.1.4.</b> “If public security forces are used in relation [ADD:] to providing security to the mining operation and/or to the mine’s transport of its production (in cases where the mine retains ownership of the product in transport), the operating company shall make a good faith effort. . .”</p> <p><b>2.6.3.1.</b> “Prior to . . .” to assess security risks and potential human rights impacts that may arise from security arrangements [ADD:] <u>and update this risk assessment periodically.</u></p> <p><b>2.6.4.1.</b> Prior to deployment of company or private security personnel, the operating company shall provide training <u>to be delivered by an accredited individual or organization,</u> that incorporates. . .</p> <p><b>2.6.4.3.</b> <del>If requested by the community,</del> † The operating company shall offer <u>publicly to potentially affected communities and other stakeholders for community stakeholders</u> a separate training or workshop on the company’s procedures on the use of force and firearms, and other relevant issues related to security and human rights.</p>
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## Chapter 2.7—Community Health and Safety

<b>Overall</b>	<p>The requirements in this chapter are relevant and auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p><b>2.7.1.1, 2.7.1.2, 2.7.1.3, 2.7.2.1.</b> Ideally significant risks and impacts would be ideally covered in the environmental and social impact assessment reports. Are the risks identified in these reports enough?</p> <p><b>2.7.1.3.</b> The wording should maybe revised so as to clearly specify the wording, “impacts caused by the mining” or “mining-induced health impacts”. Give examples of “susceptible” and “vulnerable”: e.g. pregnant workers, workers with HIV, hearing loss, TB.</p> <p><b>2.7.3.1.</b> It should be made clear that in cases where the local government is responsible for designing community health and safety risk</p>

	<p>management plans, the operating company should incorporate these into their own risk management plans and keep the documents thereof. Absence of written community health and safety management plans should be considered as a non-conformance.</p> <p><b>2.7.3.2.</b> It might be difficult for the auditor to be able to verify that mitigation measures are being prioritized in order to avoid risks and impacts over minimization? What is the auditor going to look for when auditing this requirement? I think maybe the question may need to be rephrased so that it is clear.</p>
<b>Potential for variability in interpretation</b>	<p><b>2.7.3.3.</b> The standard talks of updating the risk management as necessary, no time frame has been specified as a result. However, it should be noted that words such as necessary are subjective and in some cases difficult to measure.</p>
<b>Auditability</b>	
<b>Changes to Means of Verification</b>	<p><b>2.7.1.1, 2.7.1.2, 2.7.1.3, 2.7.2.1.</b> May also review environmental impact assessment report and social impact assessment reports.</p> <p><b>2.7.1.3.</b> From an auditor's point of view, there is a concern that the procedure may not be in writing. If the procedure is not in writing, it is highly recommended that it is written down. Alternatively, if the clinic gets these written guidelines from the local health authorities, then these should be kept on file.</p> <p><b>2.7.3.1.</b> (1) Also review: Local government community health and safety risk management plans. (2) There is a spelling error on the word plans, i.e. [...] 'are addressed in management plants' on the means of verification.</p> <p><b>2.7.3.2.</b> "Confirm that prevention/avoidance is prioritized over minimization" is not clear. Need to re-phrase. Also, consider adding: Document/record update log sheet or equivalent.</p> <p><b>2.7.4.1.</b> Additional documentation could include HIV/AIDS/TB/Malaria prevalence reports.</p> <p><b>2.7.4.2.</b> Additional documentation could include HIV/AIDS/TB/Malaria policies and or local government policies and procedures in this regard. Also, reports such as inspections for insect breeding sites.</p> <p><b>2.7.5.1.</b> Review local government statistics reports on the diseases.</p> <p><b>2.7.6.1.</b> Procedure on communicating and reporting health risks and impacts to the communities/interested and affected parties.</p>
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	
<b>Other issues</b>	

## Chapter 2.9—Obtaining Community Support and Delivering Benefits

<b>Overall</b>	<p>The requirements in this chapter are relevant and but auditing some of the requirements as written poses a challenge.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity and reduce the potential variability in interpretation.</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p>See 2.9.1.1 in following section.</p> <p><b>2.9.2.2.</b> Question regarding the difficulty to decide who speaks for the community. Representatives may in some cases fail to consistently speaking fairly/representatively for the community.</p> <p><b>2.9.3.1.</b> As worded, this section sounds like a development planning – which is ideally something the government is should do. If the idea is that planning is meant to guide how the company will engage stakeholders in delivering benefits to the community over time, the requirement needs to be reworded.</p>
<b>Potential for variability in interpretation</b>	<p><b>2.9.1.1.</b> The wording of this requirement is not very clear and can be interpreted differently.</p> <p>“The operating company shall publicly commit to enhancing the health, social and economic wellbeing of affected communities, and developing a project only if it gains and maintains broad community support.”</p> <p>The interpretation of the requirement in some cases may be that the company should only start working on health, social and economic wellbeing of affected communities if they gain broad community support. In the event that a company does not have broad community support, should that company seat back and not do anything. This is notwithstanding the fact that in some instances broad community support can be obtained once trust has been built and this may take time.</p> <p>The word enhance cannot be measured because it is subjective.</p> <p><b>2.9.2.1.</b> The word broad community support is subjective. There is need to agree on the definition of broad community support. Once the definition of this term has been agreed on, then it would be easy to comment if the requirement is measurable and the means of verification required in this regard.</p> <p><b>2.9.3.6.</b> The word periodically is subjective and may be interpreted differently by companies.</p>
<b>Auditability</b>	<p><b>2.9.2.2.</b> Local democratic process or governance mechanism - what should auditor accept as evidence of conformance? Additional guidance is needed.</p> <p><b>2.9.3.6.</b> How would auditors be able to verify that company’s funds were used in accordance with what has been agreed?</p>
<b>Changes to Means of Verification</b>	<p><b>2.9.3.1.</b> Community development participatory framework/procedure or equivalent; Also, could add: meeting minutes with the stakeholders, correspondence letters and action plans.</p>
<b>Barriers to certification?</b>	

<b>Duplication / Overlap</b>	
<b>Other issues</b>	Should the Community Benefits be a separate chapter from Community Support? Seems there are many ways to enlist support – including assuring clean water and other IRMA chapters – and this may be different than the delivery of benefits?

## Chapter 2.12—Resettlement

<b>Overall</b>	<p>The requirements in this chapter are relevant and auditable, although further clarification is needed relating to which requirements must be audited when there are historic resettlement projects.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p><b>General:</b> Greater clarity/direction is needed on if/which specific requirements will be expected of existing mines with a previous resettlement. The introduction in this chapter gives broad conceptual guidance that past resettlement doesn't need to meet all the requirements in the chapter – but then it's not clear which requirements a mine site with a historic resettlement does need to meet.</p> <p><b>2.12.1.3.</b> A footnote with examples of consultant qualifications that should also be added so that the requirement is clear for both the auditor and the operating company.</p> <p><b>2.12.4.</b> Consider changing wording from “living conditions” to “livelihood,” as “living conditions” sounds like a house, not the broader wellbeing of a person/family. Unless there is a particular reason to use both terms in this chapter.</p> <p><b>2.12.1.5.</b> The wording on the requirement should also include that the assessment should also be made available to interested parties. While some parties may not be affected but they may be interested in the assessments and they should therefore the assessments should be made available to them.</p> <p><b>2.12.2.2.</b> The requirement should clarify what is meant by ‘other experts’. The names types of the experts need to clearly pointed out.</p> <p><b>2.12.2.3.</b> The wording should also include a mechanism which is also anonymous.</p> <p><b>2.12.2.4.</b> Consider using the term “livelihood” instead of living conditions since the term “livelihood” is more encompassing than the term living conditions.</p> <p><b>2.12.6.1 and 2.12.6.2.</b> There is need to clarify the language around “agreements”. There is need to put more information regarding what is meant by “agreements”.</p>
<b>Potential for variability in interpretation</b>	<b>2.12.4.1.</b> The word ‘improve’ in 2.12.4.1.b is subjective. Auditors may interpret the word improve differently.
<b>Auditability</b>	<b>2.12.5.1. [but applies more generally to this chapter]</b> How to sample stakeholders to get this information? Also, what is the sample size?

	<p>Look to SA 8000 and RJC for examples of labor interviews; sample size is usually a % of employees or a % of employees on site at the time. These sources also provide a definition of how many you should interview individually versus in groups.</p> <p><b>2.12.5.1. [but applies more generally to this chapter]</b> There may be an unintentional impact of interviewing stakeholders of past resettlement projects – auditors may raise expectations; community members may become confused as to what was the company’s responsibility versus the mine’s responsibility.</p> <p>Might there be a cut-off date for interviewing stakeholders from past resettlements?</p> <p>It can be very important for an auditor to make clear to community members being interviewed that this is just for an audit, not a new opportunity to negotiate for more associated with the resettlement. Suggestion also that it be made clear to stakeholders whether the auditor is asking about the process that the company went through in carrying out the resettlement versus asking about the outcome (e.g. “did you get enough money?”) as this will likely create different responses.</p> <p>The MOV and/or auditor guidance should be clear on that. Auditors could really use a set of questions – specific questions – that IRMA wants auditors to use in these types of interviews. And also for other requirements in this chapter and the broader standard.</p>
<b>Changes to Means of Verification</b>	<p>2.12.1.1. Review risk and impact assessment reports.</p> <p>2.12.2.2.e. Auditor should also be able to verify if the experts were truly independent. Some of the best practices that were discussed were for operating companies to set a fund for affected communities, the affected communities will then have the opportunity to appoint their own experts and they will be paid from the established fund.</p> <p>2.12.2.3. Grievances that have been lodged with regards to the resettlement.</p>
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	
<b>Other</b>	<p>2.12.1.2. “Disclosure of compensation payments”: Is it possible to also consider adding the compensation “framework” and not specific payments since some companies make the framework available as opposite to the disclosure of the actual payment as this may cause problems in communities.</p>

## Chapter 3.1—Water Quality Approach A

<b>Overall</b>	<p>The requirements in this chapter are for the most part relevant and auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate.</p>
<b>Clarity</b>	<p><b>3.1.2.2.</b> Need to make it clear that the material that is made available is appropriate to the audience and in a form that they can understand and respond to. This implies a substantial effort - simplifying assumptions and model results for discussions with non-specialists is a real challenge if it is to be done properly. Also implies capacity building, particularly for communities.</p> <p><b>3.1.3.2.</b> Only relevant to cases where models are required or have previously been prepared. What happens if no modeling done?</p>
<b>Potential for variability in interpretation</b>	
<b>Auditability</b>	
<b>Changes to Means of Verification</b>	
<b>Barriers to certification?</b>	<p><b>3.1.2.1.</b> Technically possible, but cost implications, particularly to retrospectively address.</p> <p><b>3.1.2.1.a.</b> Many companies will only routinely monitor the concentration of elements noted in their permits, which may not be sufficient for modelling purposes (particularly with respect to contaminants of future potential concern). But, technically, it should be relatively easy for most if not all companies to assess the complete suite of contaminants present in discharges and receiving waters (although they may not always have access to in-country accredited laboratory facilities).</p>
<b>Duplication / Overlap</b>	
<b>Other issues</b>	<p>General:</p> <p>The Zimbabwe regulated system is essentially a 'pay to pollute' approach, which is diametrically opposed to the concept of the IRMA criterion. This approach may be followed in a number of countries (e.g. former Soviet countries), but does not prevent a site from complying with the IRMA criterion, but means that there may be a transitional period between a 'pay to pollute' approach can be upgraded to a 'protect baseline conditions' approach.</p> <p><b>3.1.1.2.</b> Also include mutagenic compounds?</p> <p>This is complicated by the fact that there may be chemicals used in the process that are carcinogenic, which do not occur naturally in the environment (and therefore the baseline concentration is zero). However, for these chemicals there may also be a threshold below which (a)</p>

	they do not have a health impact (there may be information on this for certain - but not all – chemicals) and (b) they cannot be detected by available analytical methods (i.e. it is not possible to prove they are not present, only that they are present at a concentration below the limit of detection). In this context, rather than saying carcinogenic chemicals should not exceed baseline concentrations, it might be better to say they should not exceed the concentration at which there is no observable increase in the risk of cancer. Essentially, the concentration should be based on a proper risk assessment.
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## Chapter 3.1—Water Quality Approach B

<b>Overall</b>	<p>The requirements in this chapter are for the most part relevant and auditable, although some requirements may not reflect best practice.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors) if certain requirements have not been fully met at the time of certification.</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p><b>3.1.2.1.</b> Q: what happens if monitoring not done in permitting stage (e.g., not legally required)?</p> <p><b>3.1.2.2.</b> Need to make it clear that the material that is made available is appropriate to the audience and in a form that they can understand and respond to. This implies a substantial effort - simplifying assumptions and model results for discussions with non-specialists is a real challenge if it is to be done properly. Also implies capacity building, particularly for communities.</p> <p><b>3.1.3.1.</b> Criterion needs to be focused on water quality rather than general impacts. Alternative wording: "3.1.3.1. The operating company shall establish, implement and maintain a documented program to monitor the potential impacts of the mining project on both surface water and groundwater <u>quality</u>."</p> <p><b>3.1.4.3.</b> Need further guidance on sediment sampling. It is not only contaminated sediments entering the surface water that is a concern but also the transfer of contaminants from the aqueous phase to the sediment (which could occur anywhere). What will be measured in the sediment - total contaminants or the bio-available / leachable fraction?</p> <p><b>3.1.4.3.</b> Need to be sure that if company is only adhering to legal requirements that they are also meeting IRMA requirements. Legal requirements may be only loosely defined and/or poorly informed with respect to statistically sound sampling.</p> <p><b>3.1.5.1.</b> How will this work in countries where (as in Zimbabwe) there is no fixed compliance value, but rather a range of values that are acceptable? In such cases, the regulated values are themselves quasi-trigger levels, so that scenario needs to be accommodated in the wording of the criterion perhaps.</p> <p><b>3.1.7.</b> It might be clearer to just call this criterion "Stormwater", as that fits with the definition in the glossary. Or possibly change to "Non-point sources" as a broader category.</p>
<b>Potential for variability in interpretation</b>	<p><b>3.1.5.2.</b> What does "consistently exceeded" mean - how many sampling periods in a row or out of a year? If samples are taken quarterly and two samples are beyond the trigger level is this better or worse than four monthly samples in a row that are out of specification? What if a different metal each month is out of specification - would that count as "consistently exceeded"?</p>

<b>Auditability</b>	
<b>Changes to Means of Verification</b>	3.1.2.2. Guidance to auditors – could ask “given the complexity of the information how would you share that with people in a way meaningful to them”
<b>Barriers to certification?</b>	<p>3.1.4.1. May be challenges to some companies as biological and benthic aquatic parameters may not be monitored if there is no legal requirement.</p> <p>3.1.4.4. Implies that samples may need to be sent abroad in some cases. That means that multiple samples will be required if different labs are used for different parameters.</p> <p>It would be sensible to assess the IRMA standards against routine laboratory limits of detection in USA, UK, China, South Africa, Peru and Australia (for examples) to see how they compare with 'typical' regional level laboratory services.</p> <p>3.1.9.1. What if decision to publish data electronically is corporate decision?</p>
<b>Duplication / Overlap</b>	
<b>Other issues</b>	<p>3.1.1.1. Q: if a mine comes in to an impacted watershed, where “background” isn’t at all “natural” but is instead contaminated by previous dischargers in the area – does the company have to respond to that in any way? Does that influence what they can put out (like PSD in air quality)?</p> <p>Suggestions for further work:</p> <ol style="list-style-type: none"> <li>1. Compare IRMA water quality criteria with the national standards from a wide range of established mining countries in Africa, Asia, Europe, North America, South America and Oceania - look at (a) the range of elements that are regulated and (b) the end of pipe standards and (c) environmental quality standards (receiving waters) (where these exist).</li> <li>2. Compare the IRMA water quality criteria with water quality standards that are typically achievable with (a) standard liming processes (these remain the dominant means of mine and process water treatment in the mining sector) and (b) more innovative (more expensive) processes (such as sulphide treatments, which can achieve higher water quality standards).</li> </ol> <p>These two pieces of work would show the feasibility of a 'typical' mine in different jurisdictions achieving the IRMA standards. That can then inform the potential refinement of the criteria (e.g. could more stringent requirements be phased in rather than becoming an immediate requirement).</p> <p>3.1.1.3. For water quality criteria tables, it does not make sense to use aquaculture as the most sensitive use - these are unlikely to be present downstream of the vast majority of mines - I would suggest that the next most sensitive use should be noted (with a footnote, that if an aquaculture facility exists downstream then the aquaculture value should be used instead).</p> <p><b>Table 3.1.f</b>, I think it is reasonable to use WHO wherever there is a criterion for a specific parameter. Only when WHO does not specify a criterion should non-WHO sources be used.</p> <p>Replace Table 3.1.j with a footnote explaining that criteria will be developed on a case-by-case basis.</p> <p>3.1.3.2. Only relevant to cases where models are required or have previously been prepared.</p>

	<p><b>3.1.4.2.</b> b) Although one year may be abnormal, I still think that there is little justification from a science perspective for two years. One year should show the seasonal variation; a much longer period would be required to show climate-related and other cycles that may influence baseline conditions, including exceptional conditions. Perhaps there is a need to qualify the criterion and note that if the 12 month period indicates that the conditions are unusual / exceptional, then additional data should be collected (however, this might not be practical if the baseline data are collected as part of an ESIA and the timing of the ESIA is linked to submission of an application for a mining licence (for example), making it difficult to simply extend the baseline data acquisition period.</p> <p>Question: Why two years for baseline if you can argue that in less time you have covered the variability in the seasons? I reply that likely the issue is that one season in one year (say it's a drought year) may not be very indicative, so 2 years is an effort to get a bit more range of data. I ask: could you make this case if you have other data that show this information? Paul comments that most often now govts/best practice doesn't like companies relying on data from other companies because it's been done poorly for so long.</p> <p><b>3.1.6.1.</b> Auditor comment: Mixing zones are not best practice for any approach in my opinion for most contaminants - this is equivalent to dilute and disperse as practiced in the 1980s.</p> <p><b>3.1.8.1.</b> For most discharges land application is unlikely to be relevant due to metal content. Not sure what the reason is for including this option for any of the three approaches? Again, it is more something I would consider a 1980s approach.</p> <p><b>3.1.8.2.</b> Plants not only route - pica in children, inhalation and ingestion of dust, capture on root vegetables (soil on unwashed food)... [Note, this comment from Approach C, but relevant here]</p> <p><b>3.1.8.4.</b> Cross-reference to land contamination in Reclamation and Closure chapter.</p>
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## Chapter 3.1—Water Quality Approach C<sup>4</sup>

<b>Overall</b>	<p>The requirements in this chapter are for the most part relevant and auditable, although some requirements may not reflect best practice. The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors) if certain requirements have not been fully met at the time of certification. Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p><b>3.1.7.2.</b> Does the mixing zone include the sediment zone and bioaccumulation? Is mixing zone natural or forced (abstraction or turbulent mixing)? Absence of zone of acute toxicity will limit contaminant concentrations at the point of discharge.</p> <p><b>3.1.12.1.</b> Replace "mining operations may consider" with "mining operations shall consider".</p> <p><b>3.1.11.3.</b> Comment as in Approach B above regarding trigger levels.</p>
<b>Potential for variability in interpretation</b>	

<sup>4</sup> Approach C is not a relevant approach at Unki (but Unki staff did make some comments during discussions on this approach).

<b>Auditability</b>	
<b>Changes to Means of Verification</b>	3.1.1.2. Need to include examples of the documents that would be considered appropriate evidence of a commitment to a catchment-wide approach (could range from technical documents through to minutes of discussions with relevant government authorities, consultants and NGOs).
<b>Barriers to certification?</b>	3.1.1.1. Not sure how many smaller companies would be familiar with ISO 31000.
<b>Duplication / Overlap</b>	
<b>Other issues</b>	<p>3.1.1.2. A substantial capacity building exercise may be necessary for stakeholders in many contexts.</p> <p>3.1.6.1. "best available practice" could be replaced with "internationally recognised good practice" (defining best available practice is difficult and implies prioritizing one approach over all others, whereas it is possible to define multiple equivalent good practices).</p> <p>3.1.7.2. As mentioned in Approach B above, auditor does not believe that mixing zones should be included.</p> <p>3.1.8.1. As above, auditor doesn't believe that LAD should be included.</p> <p>3.1.8.2. Plants not only route - pica in children, inhalation and ingestion of dust, capture on root vegetables (soil on unwashed food).</p>

## Chapter 3.3—Mine Waste Management

<b>Overall</b>	<p>The requirements in this chapter are for the most part relevant and auditable, although some requirements may not reflect best practice.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors), definitions, terminology, and what to do if certain requirements have not been fully met at the time of certification.</p> <p>Means of verification are appropriate, but suggestions have been made to supplement types of documentation that could be provided.</p>
<b>Clarity</b>	<p>3.3.1.2. Guidance on the level of accuracy is needed - composite samples will give an estimated mass balance, but not necessarily entirely accurate. Would that be acceptable? Very few countries have a program like TRI in place, so most would be reliant on a mass balance approach.</p> <p>Companies may focus on elements that are noted in their permits and thus be unable to do a complete mass balance for all potentially problematic elements.</p> <p>3.3.2.1. Reference to 'water supply dams' in the wrong section? Should it be moved to 3.3.4 Tailings Dams, and change the criterion to "Tailings and Water Supply Dams".</p> <p>3.3.3.1. this says "newly constructed" – does this mean that existing unlined tailings facilities are fine? And, if so, should say so specifically.</p> <p>3.3.4.1.a. What if not all Cdn Dam Safety guidelines are followed?</p> <p>3.3.4.2. What is independent? What if third-party review is carried out by a firm not involved in design/construction etc.</p>

	<p><b>3.3.5.2.</b> Only applicable at new facilities (since it describes “design”, and this cannot occur retrospectively at existing facilities)? If so, should specify this.</p> <p><b>3.3.6.1.</b> Delete 'intentionally' for c) - it may be difficult to distinguish between an accidental and intentional breach, so better just to note that there should be no breach (which can be verified by review of groundwater monitoring data for example).</p> <p>Definitions:</p> <p><b>3.3.5.1.</b> Add definition of impoundment, to distinguish from tailings “dam”</p> <p><b>3.3.5.2.</b> Need to define what 'dry' means - there will almost certainly be some moisture present. Does this mean interstitial water is acceptable but not 'free' water?</p>
<b>Potential for variability in interpretation</b>	<p><b>3.3.10.</b> The key will be to define 'practicable' in this context.</p> <p>See also comment for 3.3.5.1 in “Auditability” box below.</p>
<b>Auditability</b>	<p><b>3.3.1.1.</b> Operating plan should be reviewed by auditor ahead of the site visit to improve audit efficiency.</p> <p><b>3.3.1.3.</b> Current satellite / aerial imagery (where available) should be reviewed by auditor prior to site visit (to get overview of disposal methods).</p> <p><b>3.3.5.1.</b> Demonstrating that safety is the primary consideration may be difficult (difficult to verify).</p>
<b>Changes to Means of Verification</b>	<p>If accept suggested changes to language for 3.3.1.4 below, review following:</p> <p>For 3.3.1.4, review mine waste geochemistry. Confirm that construction materials coming from mine waste have been sampled for acid generating/metals leaching using methods drawn from with GARD guidelines. See IRMA Guidance for Chapter 3.3, 3.3.1.4. Mine Waste—Further Information for GARD Guidelines.</p> <p><b>3.3.7.2.</b> Spelling mistake for verification text: 'tkane'.</p> <p><b>3.3.11.</b> “Also see IRMA Guidance for Chapter 3.3, 3.3.11.3. Mortalities of Migratory Birds, Threatened Species, and Local Wildlife Species” should read “...3.3.11.1...” I think?</p>
<b>Barriers to certification?</b>	<p><b>3.3.1.1.</b> May be difficult for smaller companies to achieve - may not collect suitable spread of information to support a credible mass balance (particularly with respect to mine waste and tailings).</p>
<b>Duplication / Overlap</b>	<p><b>3.3.12.1.</b> Does this duplicate 3.3.8.2 and 3.3.9.2 wholly or in part?</p>
<b>Other issues</b>	<p>3.3.1.4. Suggested wording:</p> <p>b. All mine rock used for construction outside of a waste facility shall be free of <del>acid/metals leaching</del> <u>acid generation and metal leaching</u>, and shall be tested before use as construction material.</p> <p>Comment: Perhaps in 3.3.1.4.b. “free of acid-generating” should be changed to “not acid generating” – as waste rock may have some acid generating material but not be problematic even when used for construction.</p> <p>c. Testing shall <del>follow</del> <u>be consistent / aligned with</u> the guidelines published in the Global Acid Rock Drainage (GARD) Guide issued by the</p>

	<p>International Network for Acid Prevention.</p> <p>Comment: I think that the methods used for testing the mine waste should be consistent with or drawn from the GARD Guide rather than 'following' the guidelines, which seems a lot more onerous and not justified. There are lots of standard tests and in many cases, companies may be aware of these, but not the GARD Guide.</p> <p><b>3.3.3.1 (and 3.3.5.1)</b> Is there a need to understand and balance issues of stability (i.e., potential that liners may impact geotechnical stability) with geochemical issues?</p> <p><b>3.3.4.1.</b> Is 3.3.4.1.b consistent with the Cdn Dam Association Dam Safety Guidelines?</p> <p><b>3.3.7.1.</b> Suggested alternative wording: "Waste rock facilities shall be designed to <u>avoid or control</u> <del>minimize</del> seepage of contaminated water to groundwater".</p> <p>Comment: "Minimize" if used here needs to be combined with a qualifier, such as "using practicable approaches" (without the qualifier, minimized implies steps should be taken whether practicable or not).</p> <p><b>3.3.7.3.</b> This seems like only half the picture - if a contaminating seep is being monitored that is good, but shouldn't it also be treated or otherwise managed to avoid / minimize environmental and social impacts?</p> <p><b>3.3.8.1.</b> Suggested alternative wording: "b. Be constructed and operated to <del>minimize</del> <u>avoid or control</u> seepage to groundwater; and" (see 3.3.7.1 above, for rationale).</p> <p><b>3.3.8.2.</b> A very stringent requirement - consider limiting to new and expanded facilities? That would be in keeping with 3.3.9.1.</p>
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## Chapter 3.6—Greenhouse Gas Emissions

<b>Overall</b>	<p>The requirements in this chapter are for the most part relevant and auditable.</p> <p>The requirements are largely understandable, but further work can be done to add more clarity regarding expectations (for companies and auditors).</p> <p>Means of verification are appropriate</p>
<b>Clarity</b>	<p><b>3.6.1.1.</b> What if policy not site specific, but adhered to at site level? (E.g., other places in IRMA state that corporate-level policies may be used – see 2.4.1.1)</p> <p><b>3.6.4.1.</b> Just to clarify - to comply with this criterion, the policy must not only be public but also comply with 3.6.1? So there is a dependency between the two criteria.</p> <p><b>3.6.4.2.</b> Important clarification required (which applies to 3.6.1, 3.6.2 and 3.6.3 too): are absolute emission reductions required or are emissions normalized per ton of production? Emissions may go down in years where production dips while emissions per ton of production can be rising. Equally total emissions can rise if production takes off, even though the emissions per ton is dropping. Important to distinguish which type of reduction is required.</p>
<b>Potential for</b>	

<b>variability in interpretation</b>	
<b>Auditability</b>	3.6.2.1. Auditor would need good working knowledge of the GHG Protocol Corporate Standard (generalist auditors would therefore need appropriate time allowance for self-training ahead of the audit).
<b>Changes to Means of Verification</b>	
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	
<b>Other issues</b>	3.6.1.1.d. Another example that might trigger a change in the policy is if legislation or regulations change. 3.6.3. Where a site has committed to targets, perhaps there should also be a review of whether the targets have been met (or demonstrable progress towards them). That could be another criteria: "Progress Towards Targets" - if a site has targets that it never hits or makes any progress towards, that would not be picked up in the criteria and requirements as they stand (at least that is my read of it).

## Chapter 3.8—Biodiversity Outside of Protected Areas

<b>Overall</b>	The requirements in this chapter are for the most part relevant and auditable. The requirements are largely understandable, but more work needs to be done to add clarity regarding expectations (for companies and auditors) for a number of the requirements. Means of verification are appropriate.
<b>Clarity</b>	3.8.1.1. Need to clarify whether reports that are available on request are classed as "publicly accessible". 3.8.1.2.b. seems out of place given the title of this Chapter? Or is this referring to unofficially protected areas? 3.8.1.2.c. "species listed as threatened or endangered" – does this refer to IUCN red list? Does it include national listings? (What if they are different? e.g., <a href="http://www.int-res.com/articles/esr2012/18/n018p247.pdf">http://www.int-res.com/articles/esr2012/18/n018p247.pdf</a> ) The most conservative approach would be to identify species on the IUCN Red List and national list on a species by species basis. 3.8.2.1. What if no significant biodiversity risks identified? Do they still need a plan? 3.8.3.2. Clarify what should be made publicly available: the pre- and/or post-review monitoring report? The review itself? Or all of these? What does publicly available mean - does it include on request? Is it publicly available if a small administrative fee is charged (as regulators might do when they share documents with the public)?
<b>Potential for</b>	3.8.1.2.e. Offsetting is a relatively recent concept (at least as a widely accepted and well developed method) - is there a need to consider this

<b>variability in interpretation</b>	<p>in the wording?</p> <p><b>3.8.2.1.c.</b> who defines 'wetland'? e.g., What if host government does not recognize as a wetland something that another stakeholder does define as being one.</p>
<b>Auditability</b>	
<b>Changes to Means of Verification</b>	
<b>Barriers to certification?</b>	
<b>Duplication / Overlap</b>	
<b>Other issues</b>	<p>What if biodiversity assessment is historical (e.g., conducted before certain concepts and methodologies for things like offsets well developed)?</p> <p><b>3.8.1.2.</b> Grammatical error: "3.8.1.2. The assessment shall include consultation with stakeholders shall include explicit identification and consideration of:" Missing 'that' before second "shall" perhaps?</p> <p><b>3.8.1.2.e.</b> Should BBOP be referenced as an example of an offset methodology? [Guidance]</p> <p><b>3.8.2.1.b</b> Suggested addition: add indicators, budget, resources and responsibility to the list of what the management plan should include.</p> <p><b>3.8.2.1.e.</b> Need guidance on tools for measuring/quantifying loss/gain.</p> <p><b>3.8.2.2.</b> "Biodiversity management planning shall be carried out and documented by competent professionals using best practice procedures to . ." Should 'best' be 'good' (i.e. good practice procedures)?</p> <p><b>3.8.2.2.a.</b> "Identify key biodiversity indicators sufficient to monitor the impact of the operating company's activities over time, and to demonstrate that the overall net impact is neutral or positive;" - this implies that the methodology to measure and demonstrate that the overall net impact is neutral or positive is already in place (so that comment should be added somewhere - the methodology needs to be designed before or at least in parallel with the selection of indicators).</p> <p><b>3.8.3.1.</b> Give examples of acceptable methodologies for demonstrating net neutral or positive impact. Could this be adapted to qualitative assessment initially and then semi-quantitative (to enable smaller companies to have a better chance of complying and working towards a fully quantified demonstration)?</p> <p><b>3.8.4.</b> Note that the allocation of resources should be relative to the timeframe in which biodiversity loss and restoration will occur.</p>