

Engagement guide on water management and mining



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Introduction

This engagement guide is intended to function as a possible tool for asset managers for engagement with mining companies on water management. It aims to aid in the development of sustainable water management practices adhering to SMART principles (Specific, Measurable, Achievable, Realistic, Time-bound), leading to an environmentally and socially responsible site-level water management strategy. Using this guide, not all questions will be relevant for all mining companies; rather this guide is intended to be used as a supporting document of which most relevant questions can be selected.

This guide is a result of a joint working group on responsible mining by ACTIAM, Aegon Asset Management, NN Investment Management, Robeco, IUCN NL and VBDO. The joint group participants have been working on starting engagement with mining companies on pressing sustainability issues of which water management is one (the other two topics are Reclamation and Biodiversity).

This engagement guide is based on multiple international standards and guidelines including IRMA, ICMM, IFC and the GRI.

CHALLENGES IN WATER MANAGEMENT FOR MINING COMPANIES

The mining industry faces several challenges when it comes to water management. Mines are often large local water users, which stresses the need for efficient water use. Their use of water can potentially enhance competition and conflict over the use of available water sources with other stakeholders. Impacts on water are highly location specific as they are influenced by the local and/or regional climate and local dependencies and uses, prompting the need for a tailored approach. As water scarcity has been assessed as one of the most pressing challenges for the future, this is a critical concern for many stakeholders. Additionally, surface water and groundwater contamination can be a source of stakeholder conflict and local opposition to mining operations. Prevention of contamination and transparency about this process is in the best interest of the company operating the mining site.

DECIDING ON ENGAGEMENT

Assess the company's views on water and water management, including the materiality framework. How important is water and water management? What is being done and are there points in which to engage? The engagement process should clarify if and how water-related risks are on the company's radar, and how it views water and water management in general on both a company and mine-site level. Ideally, the engagement process will enhance the company's understanding of water-related risks and their importance and induce improvements to their water management.

¹'Water scarcity is one of the greatest challenges of our time', World Economic Forum, March 22nd, 2019 (www.weforum.org/agenda/2019/03/water-scarcity-one-of-the-greatest-challenges-of-our-time).

1. Site-level water management

As conditions influencing water management can vary greatly per site, it is important to map local conditions and maintain positive relationships with (local) stakeholders (current and future) in order to mitigate risks. Examples of relevant questions are:

- › **Could the company give a brief overview of its general water management policy and its main components on a company-wide level?**
Good practices would be: a specific policy on water management, examples of how water management is embedded in other policies, (for example climate policy, sustainability policy etc.), a statement on water and/or water management.
- › **What possible challenges regarding water management has the company identified? (local and regional level)**
Good practices would be: a mapping document on waterbodies relevant to/affected by the mine's operations, list of challenges (for example use of river water by local communities, depletion of aquifers, groundwater pollution etc.).
- › **What concrete steps have been taken to collaborate/consult with affected stakeholders, e.g. local communities? Which stakeholders did you consult, how frequently did you consult with them and at what stages of the mine's operation? Have concerns and observations by stakeholders been taken into account in the EIA (Environmental Impact Assessment) or the SEA (Strategic Environmental Assessment)?**
Good practices would be: evidence of a catchment-based approach, overview of engagement with local communities, list of steps taken to engage stakeholders, process of implementing stakeholder observations in relevant documents.
- › **How has the company applied FPIC² (free prior and informed consent), and with what parties? If not, how does the company fully account for the consequences of its mining operations at the local and regional level?**
A good practice would be: having a clear process of applied FPIC.
- › **How has the company incorporated concerns from the local community into its strategy and operations?**
Good practices would be: an overview of engagement with local communities, a list of steps taken to engage stakeholders.
- › **What concrete steps has the company taken to positively contribute to the area surrounding mine sites (areas outside of the mine's direct footprint, areas affected by mining operations etc.)?**
Good practices would be: an overview of engagement with local communities, list of actions taken to contribute to local area.
- › **What communication methods does the company have in place to quickly alert all relevant stakeholders in case of imminent threat?**
Good practices would be: a list of relevant stakeholders for each mine site and communication methods.
- › **How often does the company monitor water quantity and quality? (on company level and on mine-site level)**
Good practices would be: having a monitoring plan and periodical monitoring results/reports.
- › **Is the company aware of potential other sources of water contamination, unrelated to the mining operations?**
Good practices would be: having an overview in place of outside influences on water quality and quantity, model of water flows, both in and surrounding the mine site, conceptual site model (CSM), numerical water flow model, other related numerical models.

²Free prior and informed consent (FPIC) refers to a UNDRIP recognized right for Indigenous Peoples to give or withhold consent to projects: the usage of resources: developments etc: within the concerning Indigenous Populations territory and/or ancestral lands: Additionally: FPIC requires consultation with affected communities: For more information: see the FAO's Manual for Project Practitioners Free Prior and Informed Consent

- › **How did the company calculate potential future use, and how is it assured enough water will remain for future use (including post-mining)?**
Good practices would be: local reports on water quantity, quality and use, regular checks on water quality regarding certain chemicals, (excess) reports with relevant parameters (for example bio-indicators like macro-fauna), risk assessment of potential adverse impacts on water quality and quantity, water use plan, list of all stakeholders in the agreement, overview of current and future water flows, overview of a participatory monitoring process with an active role for local communities.
- › **To what extent is the company familiar with seasonal changes in the water quality and quantity at the mine sites? How have you incorporated seasonal changes into your risk assessment? To what extent do you account for extreme weather events in your risk assessments (e.g. floods, droughts, etc.)?**
Good practices would be: monthly fluctuations in water supply and demand, overview of outside influences on water quality and quantity, risk assessment and the underlying data/process (preferably through a publicly accessible monitoring system).
- › **How often are data collected on environmental consequences in the area surrounding the mine (e.g. check on consequences for biodiversity)?**
Good practices would be: periodical reports on collected data, locally conducted studies on biodiversity etc., related mitigation strategy.
- › **How does the company ensure clean water will remain available in the surroundings of the mine?**
Good practices would be: risk assessment of potential adverse impacts on water quality and quantity, possible mitigation measures, baseline levels of chemicals present in the water compared to current levels, water use plan, list of all stakeholders in the agreement, overview of current and future water flows.
- › **To what extent is the company aware of toxic or polluted water leaking into groundwater or surface water?**
Good practices would be: baseline levels of chemicals present in the water compared to current levels, reports on/data results of periodical water quality checks, overview of current and future water flows.
- › **If any excesses have been reported, were they structural? If not, how is this determined? How are excesses managed?**
Good practices would be: regular checks on water quality regarding certain chemicals, (excess) reports with relevant parameters, baseline levels of chemicals present in the water compared to current/excess levels.
- › **In what way(s) did the company determine which potentially hazardous chemicals and wastes to incorporate in its risk assessment/mitigation plans?**
Good practices would be: risk assessment of potential adverse impacts on water quality and quantity, water use plan, mitigation plan.

2. Implementation progress

The implementation of a (progressive) water management strategy can be achieved by using one of the leading international standards and guidelines (ICMM, IRMA, etc.). Additionally, external auditing can be a motivator to improve existing strategies and policies, and aid in developing a more progressive strategy by pointing out gaps and/or flaws in the implementation of existing protocols. Examples of relevant questions are:

- › **Which international standards or guidelines is the company using (ICMM, IRMA, GRI chapter 303: Water and effluents, etc.) to inform on water management practices?**
Good practices would be: Proof of signing/subscribing to a standard/guideline/initiative, reference(s) to a standard/guideline/initiative in reporting (sustainability report, annual report etc.), reference to standard/guideline/initiative in water management strategy.
- › **Is the company aware of best practices in the sector and how are these practices incorporated in your policies? (company level)**
Good practices would be: Reference to best practices in water management strategy, reference to best practices reporting (sustainability report, annual report etc.).
- › **Have any external checks and/or audits on behalf of stakeholders been performed? (company level and on mine-site level)**
Good practice would be: proof of independent third-party auditing.

3. Disclosure and reporting

Disclosure and reporting are key tools to enhance transparency, which in turn can lead to positive stakeholder relationships, knowledge sharing and improved performance. Examples of relevant questions are:

- › **How does the company discuss strategy, performance and adaptive management with relevant stakeholders? (company level, mine-site level)**
Good practices would be: List of all relevant stakeholders for each mine site including communication methods, dates and summaries of stakeholder meetings.
- › **How does the company report on water management in the annual report, sustainability report, or any other reports?**
Good practices would be: Quantitative and/or qualitative data relating to water management in reporting, separate statement or document on water management.
- › **Are reports on water made publicly available or do you provide them to stakeholders when requested? If not, why are reports not published in the public domain and/or why are reports not provided to stakeholders on request? (company level)**
Good practices would be: Location (online and offline) of reports, list of viewing requests (anonymous).
- › **Can grievances be reported without any obstacles or potential risk to the person reporting said grievance? (company level and mine-site level)**
Good practices would be: Location of grievance reporting system, method of communicating existence of grievance system in all relevant languages, accessible (online and offline) grievance reporting system, option to report anonymously.
- › **Are water quality sample reports discussed with local communities and through what methods? If not, why not? (company level, mine-site level)**
Good practices would be: reports on stakeholder meetings, sample reports, stakeholder engagement strategy/plan/report, dates with possibilities for stakeholders to participate and summaries of said events.
- › **Does the company have multi-stakeholder monitoring teams? (mine-site level)**
Good practices would be: Monitoring plan, stakeholder engagement strategy, and list of monitoring team members.
- › **Is there a system for participatory monitoring set-up? (company level, mine-site level)**
Good practices would be: Monitoring plan, stakeholder engagement strategy.
- › **How often are community stakeholders offered the opportunity to review and participate in revising monitoring plans? (mine-site level)**
Good practices would be: Local reports on stakeholder meetings, stakeholder engagement strategy/plan/report, dates with possibilities for stakeholders to participate and summaries of said events.

4. Accountability and responsibility

Taking responsibility for effective water management and accountability for potential impacts is an important component for a leading practice in water management. Examples of relevant questions are:

- › **If an agreement on water use was reached with potentially affected stakeholders, how did the company ensure it incorporated all relevant stakeholders? (mine-site level)**
Good practices would be: Proof of participation of local stakeholders, water use plan, list of all stakeholders in the agreement, stakeholder engagement plan, list of stakeholders.
- › **How does the company determine the safety parameters of water quality and quantity? (company level and mine-site level)**
Good practices would be: Safety parameters, value of trigger indicators that provide early warnings, bio-monitoring programme.
- › **Which scenarios does the company consider for the assessment of future risks? (company level, mine-site level)**
Good practices would be: Safety parameters, monitoring plan, frequent water quality and quantity data, value of trigger indicators that provide early warnings, planned actions to monitor predicted impacts, adaptive management plans for when threshold levels are reached including timelines for their implementation, previous data on the use of the adaptive management plan, its execution, and possible setbacks.
- › **To what extent is the water policy adapted/ revised if a predicted potential risk has become reality? (company level, mine-site level)**
Good practices would be: Planned actions to monitor predicted impacts, adaptive management plans for when threshold levels are reached including timelines for their implementation, previous data on the use of the adaptive management plan, its execution, possible setbacks.
- › **To what extent is it considered to be the responsibility of the board and/or board committee that an effective water management strategy is implemented? Is this linked to executive compensation? (company level)**
Good practices would be: Proof of the implementation of an effective water management strategy being linked to executive compensation.
Relevant ICMM principles: 1.

Appendix

Shortlist of standards, guidelines and other publications regarding water management in the mining industry

GRI 303: Water and Effluents 2018, GRI (2016).

IFC Performance Standards, IFC.

IRMA Standard for Responsible Mining IRMA-STD-001, IRMA (June 2018).

Leading Practice Handbooks for sustainable mining (series, includes a volume specifically on water management), Australian Government (different publication date for each volume).

Position statement on water stewardship, ICMM (January 2017).

Sustainable Development Framework: ICMM Principles, ICMM (Revised:2015).

The CEO Water Mandate, An initiative by business leaders in partnership with the international community, UN Global Compact (2011).

Treading Water, Corporate Responses to Rising Water Challenges, CDP (2018).

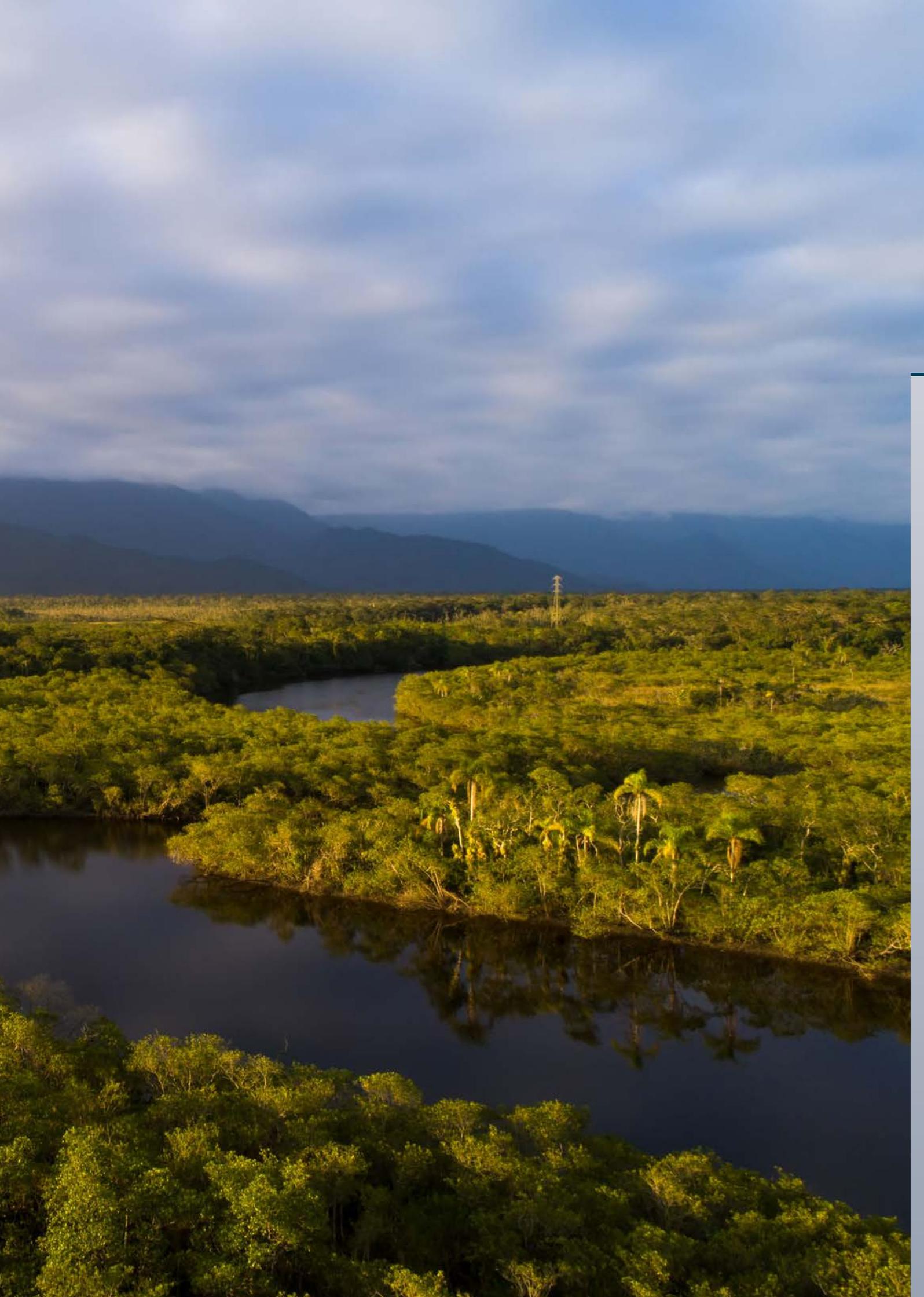
Water Accounting Framework for the Minerals Industry, Minerals Council of Australia (January 2014).

Water management in mining: a selection of case studies, ICMM (2012).

ICMM principles³

³Source: www.icmm.com/website/publications/pdfs/commitments/revise-2015_icmm-principles.pdf





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