



The Copper Mark Guidance on Tailings Management

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Disclaimer:

This guidance should be understood as an interpretation of the existing Copper Mark Responsible Production Criteria.

Participants and approved assessors of the Copper Mark are required to refer to the guidance when determining conformance with the Copper Mark Responsible Production Criteria.

1 Overview

The [Criteria Guide for the Risk Readiness Assessment](#), version of October 2023, (herein referred to as “RRA”), includes criterion 31. Tailings Management. Participants must “*Avoid, minimize, rectify, and compensate for adverse impacts from tailings through the implementation of a system to manage on-land tailings in line with internationally recognized frameworks and good practice.*”

The full text of the RRA, Criterion 31: Tailings Management is provided in [Annex I](#) of this document. The Copper Mark recognizes that its participants need to identify the most appropriate method of tailings construction to ensure the safe and sustainable operation of a facility. The Copper Mark notes that the Global Tailings Review¹ explicitly excluded riverine, deep sea and non-tailings related storage systems from the scope of its review. The Copper Mark considers it appropriate to its purposes to provide this Guidance to address riverine, lake and ocean tailings management.

This Guidance defines additional requirements for participants operating riverine, lake or ocean tailings systems.

In developing this Guidance, the Copper Mark has considered two main elements:

1. The Copper Mark vision and principles
2. Current practice in existing standards

Copper Mark Vision and Principles

The Copper Mark has considered the available standards and guidance in the context of its vision, mission and core principles, particularly:

- For Copper Mark participants to be recognized as having adopted internationally recognized responsible operating practices;
- Inclusiveness, meaning the Copper Mark is accessible to all companies in scope, at whatever stage along their journey to sustainability, and to all sizes of operations.
- The continuous improvement of responsible production practices through regular reviews of the Copper Mark standards and their implementation.

Current Practice in Existing Standards

Based on a desktop research, the Copper Mark notes:

1. The main “*internationally recognized standards*” for tailings management referenced in the Copper Mark Criteria Guide do not explicitly address riverine tailings systems and few reference lake and ocean tailings systems.

¹ See the Scope of Work of the Global Industry Standard for Tailings Management (GISTM) as defined here: https://globaltailingsreview.org/wp-content/uploads/2019/06/190604_GTR_governance-and-scope.pdf.

The GISTM defines a tailings facility as “*A facility that is designed and managed to contain the tailings produced by the mine. Although tailings can be placed in mined-out underground mines, for the purposes of the Standard, tailings facilities refer to facilities that contain tailings in open pit mines or on the surface (‘external tailings facilities’)*”.

2. The Copper Mark is aware of three standards that explicitly address riverine, lake and ocean tailings systems ². Across the three standards, :
 - a. Riverine tailings systems are not considered good international practice.
 - b. Two of the three standards provide additional criteria for lake or ocean tailings systems. Such criteria include the expectation that lake or ocean tailings systems may only be used if there is scientific evidence to demonstrate that these would result in less environmental and social impact than land-based options.
 - c. The third standard does not certify sites that use riverine, lake and ocean tailings system, noting however that further work is required to determine specific requirements under which lake and ocean tailings systems could be considered for certification.

In addition, the Copper Mark consulted other references on best practices in managing tailings disposal for the preparation of this guidance.

² See e.g. the International Finance Corporation (IFC), [Environmental Health and Safety Guidelines for Mining](#), 2007, p.7; The Responsible Jewellery Council [Code of Practices](#), 2019, Provision 39.3, or the The Initiative for Responsible Mining Assurance (IRMA) [Standard for Responsible Mining](#) v.1.0, Chapter 4.1.8

2 Guidance on Riverine, Lake and Ocean Tailings Disposal

2.1 Principles

1. **Elimination of Tailings:** Participants should minimize tailings and works towards the goal of eliminating them entirely.
2. **Zero Harm:** Participants should manage tailings with the goal of causing zero harm to people and the environment. Sites should:
 1. Review all possible tailings systems alternatives and implement the system that is the most aligned with the overall objective to cause zero harm.
 2. Implement a management system that reflects best available practices to design, construct, operate, monitor and close their tailings system.
2. **No New Riverine Tailings Disposal:** New Sites operating riverine tailings disposal systems are not able to receive the Copper Mark. A “New Site” is a Site starting to operate a riverine tailings disposal system after 1st January 2024.

2.2 Core Requirements

Sites with existing riverine tilings, or lake and ocean tailings disposal are required to implement Criterion 31: Tailings Management of the RRA, specifically to review and implement all applicable provisions of the GISTM or equivalent standard, and must demonstrate that they meet the following requirements:

1. **To identify potential and actual ESG risks and impacts from tailings.** Sites’ risk assessments shall ensure comprehensive coverage of the potential and actual **ESG issues** of tailings discharge, disposal, and storage through assessments that:
 1. Apply a comprehensive, multi-criteria analysis of the options for tailings discharge, disposal, and storage with the specific goal of selecting an option that minimizes risks to people and the environment throughout Sites’ operational life. Sites must be able to demonstrate that riverine, lake or ocean tailings system result in less risk of actual environmental and social impact than all tailings systems alternatives.
 2. Are based on science, which means the application of the scientific method to arrive at conclusions;
 3. Are risk-based, which means analysis and calculations are made according to the severity and then likelihood of that impact to people and the environment should it occur;
 4. Provide supporting evidence to substantiate conclusions and claims.
3. **To respect the rights of affected stakeholders** and meaningfully engage them at all phases of the tailings system lifecycle, including closure. Sites shall:

1. Refer to Copper Mark Criteria 8 and 24 (Stakeholder Engagement and Indigenous People's Rights) for requirements on the engagement with affected stakeholders.
 2. Communicate impacts to affected stakeholders in ways that are physically accessible and understandable.
4. **To implement a system to manage tailings** that shall:
1. Identify relevant laws and regulation and ensure compliance with regulations, statutes, guidelines, codes, and standards.
 2. Cover the design, operation, maintenance, monitoring and closure and reclamation of tailings facilities and tailings disposal systems.
 3. Implement long-term monitoring of environmental, social and local economic impacts, including cumulative impacts and implementation of a mitigation plan;
 4. Be proportional to its level of risk of potential and actual adverse impacts.
 5. Demonstration of the application of best practices.
 6. Include an emergency response plan that has been developed with relevant and affected communities, businesses, and government stakeholders.
5. **To conduct monitoring and review of the tailings** that shall:
1. Implement long-term monitoring of environmental, social and local economic impacts, including cumulative impacts and implementation of a mitigation plan;
 2. Include a regular review throughout Sites' operating lives, including:
 1. Year-over-year changes of the impact(s), supported by relevant monitoring
 2. Assessment of the effectiveness of the site's management, mitigation and remedy measures set out in the remedial action plan.
 3. Review of technologies and /or management strategies available to mitigate and / or remedy the adverse impact(s).
 3. Develop and maintain an interdisciplinary knowledge base to support safe tailings management throughout the tailings lifecycle, including closure. This knowledge shall capture uncertainties due to climate change.
 4. Be validated by a competent, qualified, and independent firm to confirm it appropriately incorporates measures to address potential and actual adverse impacts and it meets applicable regulations, statutes, guidelines, codes, and standards.
6. **To disclose publicly relevant information.** This shall:
1. Include disclosure of impacts, action plans, progress and results related to Sites' management of tailings facilities and tailings disposal systems
 2. Refer to Copper Mark Criteria 6 (Sustainability Reporting) for requirements on public disclosure.
 3. Include a summary of the regular review described in 5.2 in the disclosure.

4. Include performance on the mitigation of adverse impacts from tailings disposal systems
5. Include any updates of Environmental and Social Impact Study (ESIA) or other studies.

2.3 Verification and Reporting

Conformance with the core requirements in this Guidance is verified by the Copper Mark approved assessor during the independent site assessment.

The Copper Mark will include an additional disclosure with the Assessment Summary Report for any site that receives The Copper Mark and that is required to implement this Guidance. The disclosure:

- Will be published with the site's Assessment Summary Report on the Copper Mark's website.
- Will include the description of the tailings disposal system, a summary of how conformance with this Guidance is verified and the link to the site's disclosure on tailings disposal.
- Will include contact details for the Copper Mark, the site, and the assessor / assessment firm for interested stakeholders to obtain further information.

3 Annex I: Criteria Guide for Criterion 31: Tailings Management

CRITERION 31: Tailings Management

Avoid, minimize, rectify, and compensate for adverse impacts from tailings through the implementation of a system to manage on-land tailings in line with internationally recognized frameworks and good practice.

I. Implementation:

a. Interpretation guidance

Tailings management is a continual exercise throughout the lifecycle of a mine. Therefore, this Criterion is relevant for mining at every phase of mining, which includes selecting options for and designing and implementing plans to discharge tailings, including the operation, maintenance, monitoring and closure of external tailings impoundments, dams, and containment facilities on land, and other means of tailings' storage.

b. Core Requirements

Sites are expected to avoid, minimize, rectify, and compensate for adverse impacts from tailings.

- **To manage tailings facilities and tailings disposal systems in line with internationally recognized frameworks** which means, where applicable, to demonstrate implementation of the [Global Industry Standard On Tailings Management, 2010](#) (GISTM) or equivalent standard.

Sites with tailings facilities and tailings disposal systems that are not in scope of the GISTM should contact either RMI or the Copper Mark for guidance.

- **To disclose publicly** impacts, planned actions, progress and results related to Sites' management of tailings facilities and tailings disposal systems, in line with Criterion 6 on Sustainability Reporting.

II. Key References

Internationally Recognized Frameworks

The following international frameworks should be followed for the implementation of this Criterion where applicable to Sites' operational activities:

- [The Global Industry Standard on Tailings Management published by ICMM, The United Nations Environment Programme, and the Principles for Responsible Investment](#)