



| Section / Guideline | Change from previous version | Rationale |
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| General | <ul style="list-style-type: none"> Changed terminology from “tailings storage facility” to “tailings disposal facility.” | <p>The use of the word “storage” implies a temporary placement of tailings and does not fully reflect the fact that tailings are a waste material.</p> |
| Introduction | <ul style="list-style-type: none"> Removed references to the draft version of the Global Industry Standard on Tailings Management (GISTM). Added language to clarify the intent and audience for the document. Added language around the role of regulators and the need for transparency in tailings management. Added a description of the process to update Safety First. Added a tailings management hierarchy to show how we can reduce the overall amount of tailings produced. | <p>The final version of the GISTM was released in August of 2020.</p> <p>This document is meant to be a tool and resource for mining-affected communities and the organizations they work with. In particular, the authors hope that the document provides a community perspective on tailings management and empowers communities to take a more active role in tailings management.</p> <p>There was almost universal feedback during the comment period that regulators are not fulfilling their responsibilities to protect public safety related to tailings disposal. The new language attempts to underscore the need for improved regulation, transparency and oversight, while acknowledging the shortcomings of current regulatory systems.</p> <p>Informs readers on how changes were made to the updated version and thanks participants and commenters for their feedback.</p> <p>Aboveground tailings storage must be a last resort, and steps, such as reducing minerals demand and minerals recycling must be taken, to decrease the amount of tailings produced.</p> |
| Scope | <ul style="list-style-type: none"> Expanded the description of chronic environmental impacts of tailings disposal, and provided specific examples. Clarified what types of engineered structures fall under these guidelines. | <p>In response to concerns raised during the consultation process, a new section recognizes the serious public and environmental health concerns of communities living in the vicinity of tailings that fail slowly or over long periods of time.</p> <p>Operating companies use a broad range of vocabulary to describe their waste disposal facilities. Often they will avoid or omit using the word “dam,” especially in the case of filtered tailings facilities. Safety First is intended for any engineering structure that stores mine tailings, regardless of the terminology used by the operating company.</p> |

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| <p>1. Make safety the guiding principle in design, construction, operation, and closure</p> | <ul style="list-style-type: none"> Expanded the definition of safety to include the health of ecological resources and fragile ecosystems in our definition of human safety. | <p>During the consultation process, communities and NGO representatives provided feedback that it is important to consider the health and safety of our natural environment as an extension of human health and safety. This better reflects the interconnected and interdependent relationship people have with their natural environment.</p> |
| | <ul style="list-style-type: none"> Changed the phrase “The ultimate goal of tailings management must be zero harm to people and the environment” to a goal of zero tolerance for human fatalities and harm, and a goal to limit environmental harms overall, but specifically to just the mine site. | <p>Throughout the revision process, technical experts, communities and NGO representatives stressed that zero harm is an unattainable goal, because mining will always cause some adverse impacts for people and the environment. The wording of this goal was changed to present a goal that is achievable but still requires the safety of people and the environment take precedent above all else.</p> |
| <p>2. Consent of affected communities</p> | <ul style="list-style-type: none"> Added language to clarify that consent means “the right to say yes, the right to say no, or the right to say yes with conditions.” | <p>During the consultation process the authors heard that operating companies have misconstrued or misrepresented consultation processes as consent. The updated language attempts to clarify that communities and Indigenous Peoples must have the right to say no to a project.</p> |
| | <ul style="list-style-type: none"> Added that communities must be able to define the format and who participates in a consultation process. Operating companies must provide an impact study in advance for communities to use in their decision-making process, and they also must provide access to legal and technical experts throughout the process. | <p>Protects the rights of affected communities to have an informed consultation process, and defines the parameters of the consultation process. This also aims to eliminate interference in consultation mechanisms by governments or operating companies.</p> |
| | <ul style="list-style-type: none"> Clarified why FPIC is a right for Indigenous Peoples by virtue of their occupation and stewardship of land prior to colonization. | <p>The authors wanted to recognize the precedent of FPIC for Indigenous Peoples.</p> |
| <p>3. Ban new tailings facilities where inhabited areas are in the path of a tailings failure</p> | <ul style="list-style-type: none"> Changed the language “ban new tailings facilities immediately upstream from inhabited areas” to “ban new tailings facilities where inhabited areas are in the path of a tailings dam failure.” | <p>Broadens the areas that are protected under this guideline and better reflects the fact that it is not only downstream communities that are at risk in the event of a tailings failure.</p> |
| | <ul style="list-style-type: none"> Added the right of affected communities to define no-go zones, and expanded the guideline to contemplate both the safety of people and ecological and cultural resources. | <p>Provides more rights to affected communities in delimiting no-go zones for mining and protecting sensitive areas.</p> |
| | <ul style="list-style-type: none"> Added that tailings must never be deposited in bodies of water, such as rivers, streams, oceans, etc. | <p>Emphasizes the importance of a ban on aqueous tailings disposal.</p> |

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| 4. Ban upstream dams at new mines and close existing facilities | <ul style="list-style-type: none"> Added that the structural zone must not be constructed on top of uncompacted or lightly-compacted filtered tailings. | <p>This would be an upstream dam and would thus be prohibited.</p> |
| | <ul style="list-style-type: none"> Added clarifying language on the concept of “modified centerline” to specify that it is considered an upstream dam. | <p>Operating companies have used the concept of “modified centerline” to avoid compliance with the prohibition of upstream dams.</p> |
| 5. Any potential loss of life is an extreme event and design must respond accordingly | <ul style="list-style-type: none"> Few changes made | |
| 6. Mandate the use of Best Available Technology for tailings, in particular filtered tailings | <ul style="list-style-type: none"> Clarified that filtered tailings still require a dam and thus must be designed, constructed and maintained according to tailings dam safety standards. | <p>Ensures that operating companies do not try to avoid following safety standards by claiming that filtered tailings facilities are not tailings dams.</p> |
| | <ul style="list-style-type: none"> Included additional detail on the Mt. Polley Report recommendations on the use of filtered tailings for existing tailings impoundments, for new tailings facilities and for closure. | <p>Clarifies the concept of Best Available Technology as specified in the Mt. Polley Report.</p> |
| 7. Implement rigorous controls for safety | <ul style="list-style-type: none"> Highlighted some of the issues with over reliance on the Factor of Safety, and added detail around the annual probability of failure. | <p>Avoids complacency with the use of a Factor of Safety, and provides more safeguards to counteract the limitations of Factor of Safety calculations.</p> |
| 8. Ensure a detailed evaluation of the dam foundation and of the tailings properties | <ul style="list-style-type: none"> Added that the structural zone must not include contractive and brittle tailings, and that all tailings must be tested for brittle behavior. | <p>Brittle tailings are more prone to failure by liquefaction.</p> |
| 9. Appropriate monitoring systems must be in place to identify and mitigate risk | <ul style="list-style-type: none"> No major changes made. | |

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| 10. Ensure the independence of reviewers to promote safety | <ul style="list-style-type: none"> Expanded guidelines for Independent Tailings Review Boards (ITRB) to include: a mandate to protect people and the environment, an obligation to receive third-party information from whistleblowers and civil society, and the need for reviewers to provide declarations on their past and present relationship with a client or commissioning party. | <p>Guarantees the independence and transparency of Independent Tailings Review Boards.</p> |
| | <ul style="list-style-type: none"> Added that the competence of reviewers must include a demonstrated ability to engage with rural and Indigenous communities in a meaningful way. | <p>Because rural and Indigenous communities are those most frequently impacted by mining activities, reviewers must have demonstrated skill and experience engaging with these communities.</p> |
| | <ul style="list-style-type: none"> Revised language to state that ITRB reports and the operating company's subsequent response must be provided to the local regulatory agency and any communities that could be affected by the tailings facility. | <p>The original version of the guideline did not require as much transparency with ITRB reports.</p> |
| | <ul style="list-style-type: none"> Added the requirement for an Environmental Impact Assessment (EIA) for every tailings disposal facility. | <p>It is important for regulators and the public to have access to the data in an EIA to make informed decisions about the tailings disposal facility.</p> |
| 11. Towards safer closure with no credible failure modes | <ul style="list-style-type: none"> Added the clarification that without perpetual monitoring, inspection and maintenance, failure is inevitable. If a regulatory agency does not believe that an operating company can carry out both perpetual care and perpetual financial responsibility, the facility must not be constructed. At closure, the facility should be put in a state of maximum safety, that is, eliminate all credible failure modes, although it must be recognized that the facility will not remain in that state indefinitely without monitoring, inspection and maintenance. | <p>Clarifies some of the inherent contradictions and tensions in tailings facility closure. While there are steps that operating companies must take to more safely close a tailings facility, failure is inevitable without perpetual inspection, maintenance and monitoring.</p> |
| | 12. Addressing financial risks, including securities for site closure and proper insurances for accidental spills | <ul style="list-style-type: none"> Added that operating companies must not declare bankruptcy or sell to junior companies to avoid closure monitoring and liability. |
| <ul style="list-style-type: none"> Added details of industries and regulatory agencies that require comprehensive general liability insurance for accidental occurrences. | | <p>Demonstrates insurance requirements in certain jurisdictions and industries as example for tailings disposal facilities.</p> |
| <ul style="list-style-type: none"> Added that financial assurance value calculations must be run for a minimum of 300 years and must include inflation estimates, unless updated annually. | | <p>Provides better guidance and more protective parameters for the financial assurance requirements.</p> |

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| 13. Grievance procedures and whistleblowers | <ul style="list-style-type: none"> Added examples of remedy for complaints. Stipulated that operating companies must publish grievances and their resolutions annually and that there must be a clear timeframe for resolving grievances, and regular communication with the complainant throughout the process. | <p>Provides more specific guidance on the grievance procedure and complainant rights throughout the grievance process to make the guideline more practical.</p> |
| 14. Emergency preparedness and response | <ul style="list-style-type: none"> Added agricultural producers and business to the list of stakeholders that must be consulted during emergency response planning. | <p>Communities and NGOs commented during the consultation process that tailings failure can have severe economic impacts on farmers, fisherfolk and local businesses downstream. The full range of impacted stakeholders must be included in the emergency response planning process.</p> |
| | <ul style="list-style-type: none"> Included language to stipulate that operating companies must assume the entirety of the costs of indemnification, remediation and reclamation. Also added that the scope of criteria must be determined through a participatory process contingent on the approval of affected communities, producers and businesses, and made publicly available. | <p>Communities affected by tailings dam failures, especially in Brazil, have documented how operating companies attempt to restrict the scope of compensation for tailings dam failures. Affected stakeholders should be part of the decision making process for indemnification, remediation and reclamation after a failure.</p> |
| | <ul style="list-style-type: none"> Included language to clarify that indemnification criteria must undergo periodic updates, including in the event of a failure. | <p>The first version of Safety First only stipulated that indemnification criteria must be developed in advance of a failure, and the updated language clarifies that determining criteria must be an ongoing process.</p> |
| | <ul style="list-style-type: none"> Added language to acknowledge the traumatic nature of emergency drills and the need to address potential impacts of these drills. | <p>Communities living in “Zonas de Auto-Salvamento”(Self Rescue Zones) in Brazil have said that emergency drills can cause anxiety for downstream communities or evoke the memory of past tragedies.</p> |
| | <ul style="list-style-type: none"> Further specified the types of buildings and facilities (ie: hospitals, prisons, assisted living facilities) that must not be in the self-rescue zone due to the evacuation challenges they present. | <p>Protects vulnerable populations (ie: disabled people, the elderly, the incarcerated) that might struggle to evacuate without professional assistance.</p> |

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| 15. Information regarding mine safety must be made publicly available | <ul style="list-style-type: none"> Added a requirement that the name, ownership, exact location, footprint and height of all tailings disposal facilities must be made publicly available. | <p>Currently, basic information related to tailings dams is not available to the public. Some operating companies have disclosed information in the Global Tailings Portal but many companies have not.</p> |
| | <ul style="list-style-type: none"> Included language to require operating companies to disclose the date, location, amount of tailings released and impacts on surrounding areas from any tailings failure. | <p>Communities and NGOs are often unaware when there is an event where tailings are released from a disposal facility. Operating companies must proactively disclose this information, which is important for public safety.</p> |
| | <ul style="list-style-type: none"> Added information on governments and regulators responsibilities to disclose information. | <p>Operating companies aren't the only ones not disclosing information the public needs to assess the safety of tailings disposal facilities. During the consultation process there was widespread criticism from communities and NGOs that regulators do not make information available to the public.</p> |
| 16. Ensure access to independent technical assistance | <ul style="list-style-type: none"> This is a new guideline that addresses the right of affected communities to access independent technical assistance throughout different phases of the mine life. | <p>During the Safety First community workshops, many participants stated the need for access to independent technical experts to be able to analyze and understand information provided by the operating company, and to have more equal footing with operating companies during consultation or negotiation processes. This was a major concern for consulted community members due to a lack of trust in operating company representatives and regulatory agencies.</p> |
| | <ul style="list-style-type: none"> Requires experts be chosen by affected communities. Technical assistance must be offered from the earliest stages of exploration through closure, must be funded by the operating company, and must be offered if a community is affected by a tailings dam failure or for a complainant during a grievance procedure. | <p>Provides guidance on how to keep the experts accountable to communities and establishes a number of different scenarios where community members might need access to technical assistance.</p> |
| 17. Accountability for risk, minimizing consequences, preventing failure, and the consequences of failure must primarily rest with the Board of Directors | <ul style="list-style-type: none"> Added that the Board of Directors (BoD) must sign off on any safety risks that could result in loss of human lives or severe environmental damage, and that they must guarantee safety considerations are not sacrificed at the expense of production. | <p>Further ensures that the BoD is responsible for guaranteeing the safety of a tailings facility and for ensuring that safety is not sacrificed at the expense of cost.</p> |
| | <ul style="list-style-type: none"> Added that at least one BoD member must have expertise in tailings facilities and management. | <p>Ensures that the BoD has the expertise necessary for evaluating decisions made regarding tailings facilities and management.</p> |