

Global Industry Standard on Tailings Management Global Tailings Management Institute

Frequently Asked Questions

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1. What is the GISTM?

The Global Industry Standard on Tailings Management (GISTM) encompasses a set of requirements that strive to achieve the ultimate goal of zero harm to people and the environment with zero tolerance for human fatality. It requires Operators to take responsibility and prioritise the safety of tailings facilities, through all phases of a facility's lifecycle, including closure and post-closure. It also requires the disclosure of relevant information to support public accountability. The GISTM is built around 15 Principles and 77 Requirements; The Principles are grouped into six topics:

- Affected Communities.
- Integrated Knowledge base.
- Design, Construction, Operation & Monitoring.
- Management and Governance.
- Emergency Response & Long-Term Recovery.
- Public Disclosure & Access to Information.

2. Why create the GISTM?

Following previous tailings dam failures, the catastrophic and tragic failure of a tailings facility at Vale's Corrego do Feijão mine in Brumadinho in January 2019 was a tipping point for the mining industry. Following the disaster, investors led by the Church of England Pensions Board made a public call for a different approach to the issue of tailings management, recognising that such tailings failures continue to occur (e.g., Jagersfontein dam collapse in 2022). On 26 February 2019, ICMM made a public commitment to develop a new Standard for the safer management of tailings facilities. This was followed by a public announcement to jointly develop the Standard co-convened by ICMM, the United Nations Environment Programme (UNEP) and the UN-backed Principles for Responsible Investment (PRI), with each party having an equal stake and say in decision making. This marked the launch of the Global Tailings Review (GTR) that was independently chaired, developed by an independent expert panel and informed by a multi-stakeholder advisory group.

3. Who created the GISTM?

The Standard was developed through the Global Tailings Review (GTR), co-convened by ICMM, the United Nations Environment Programme (UNEP) and the Principles for Responsible Investment (PRI) – represented by the Church of England Pensions Board and the Council on Ethics for the Swedish AP Funds. The GTR was led by Dr Bruno Oberle, who acted as Independent Chair, supported by an independent expert panel. The co-convened model of equal representation from industry, investor and government stakeholders was designed to give civil society and the public confidence that the initiative would have the necessary level of independence. It was also an acknowledgement that no single stakeholder can solve the problem and that community and investor trust in the mining sector needed to be restored in the wake of such high-profile disasters. The figure below shows the steps and timeline for the development of the GISTM.



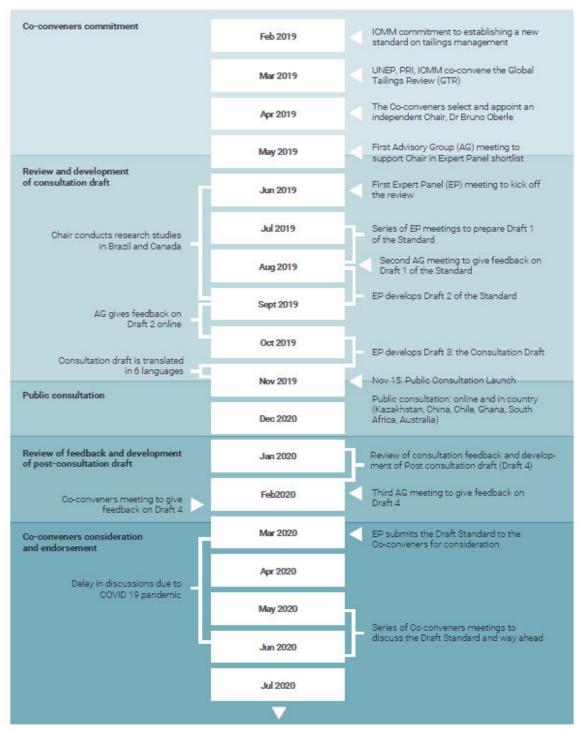


Figure 1: Global Industry Standard on Tailings Management Timeline



4. What is the GTMI?

The Global Tailings Management Institute (GTMI) is an independent institute, which will oversee a process for independent auditing and certification against the GISTM. The purpose of the independent auditing will be to provide an assessment of the level of conformance for a specific tailings facility against all 77 Requirements of the GISTM. A Certificate of Conformance will be issued for those tailings facilities found to be in conformance with the GISTM. It is planned that the process of auditing will include public disclosure of a summary of the audit findings.

Overseeing the assurance programme will be the core function of the GTMI. In addition, the institute will also:

- Promote awareness, understanding and adoption of the GISTM.
- Facilitate the sharing of experience to improve overall knowledge in tailings management across a range of stakeholder groups.
- Provide transparency by affording stakeholders access to tailings facility details (from disclosures related to Principle 15 of the Standard) and a summary of auditing outcomes.

5. What is meant by conformance?

Conformance means that an operator conforms with the Requirements of the Standard (not in conflict with other provisions of law) and has systems and processes in place to demonstrate conformance with all requirements of the Standard. Where conforming to specific Requirements may result in the implementation of engineering measures (e.g. for existing facilities requirements 4.7 or 5.7 which might include remedial engineering measures), the expectation is that these shall be carried out as soon as reasonably practicable. It is not necessary for such measures to be complete in order for a tailings facility to be in conformance, but both the measures and associated timelines should be clearly documented by an Accountable Executive.

6. How is the GISTM and GTMI linked to the Church of England Investor Mining and Tailings Safety Initiative and the Global Tailings Portal hosted by GRID-Arendal?

The Investor Mining & Tailings Safety Initiative was separately established by the Church of England Pensions Board and the Council on Ethics of the Swedish National Pension Funds shortly after the Brumadinho Tailings Facility disaster. It was a vehicle for investors to consolidate their approach to the industry on this issue. The Initiative sought world leading expert input at a series of investor roundtables, and identified the following five issues:

- There was a trend of increasing catastrophic dam failures combined with a failure to implement past recommendations.
- There was a lack of a global industry standard on tailings management.



- There was an unknown number of tailings dams in the world and no global record of where they were.
- No disclosure standard existed for company reporting on tailings dams.
- Fundamentally, waste has been treated as an externality with the cheapest storage options in many instances.

This prompted investors to seek disclosures from companies on the tailings dams they had and the standards to which they were operating. Resulting from these disclosures with funding support from the United Nations Environment Programme (UNEP), the Church of England Pensions Board and the Swedish Council on Ethics for the AP Public Funds, GRID-Arendal compiled the disclosure data provided by companies into a database for analysis. A searchable online database of the disclosures was published by GRID-Arendal on the 24th of January 2020, as the Global Tailings Portal.

7. How is the GISTM and GTMI linked to the work of the UN Environment Programme?

In 2022, the United Nations Environment Assembly (UNEA) adopted <u>resolution 5/12</u> on environmental aspects of minerals and metals management.

The resolution welcomed the launch of the GTMI as an important milestone towards the ambition of zero tailings dam failures and the protection of human health and the environment from tailings facilities and encouraged the effective implementation of the global standard.

The resolution also mandated UNEP to develop a <u>report</u> compiling knowledge gaps in relation to environmental aspects of tailings management.

8. How is ICMM linked to the GISTM and GTMI?

ICMM was one of the co-conveners of the GTR. At the point of launch of the Standard, ICMM members committed to implementing the GISTM across all members' tailings facilities within a 3-to-5-year period. To help members meet these ambitious timeframes, ICMM produced a Tailings Management Good Practice Guide and Conformance Protocols for the GISTM in 2021, to help operators and independent third parties assess implementation of the Standard's requirements, and ultimately to demonstrate conformance. ICMM has since indicated its support for the formation of the GTMI by becoming a founding partner. ICMM requires all of its members to implement the GISTM as a condition of membership. It also encourages its members to support the GTMI, but such support is not a condition of ICMM membership. Support for the GTMI is not limited to ICMM membership and engagement with non ICMM companies is a critical part of the GTMI setup process to ensure the Institute is accessible to, and representative of, the mining sector more broadly.



9. What does becoming a Signatory to the GTMI involve?

Mining companies that have operational responsibility for tailings facilities will be invited to join the GTMI as a Signatory. By becoming a Signatory, a company commits to the implementation of the GISTM with conformance assessments being conducted at intervals determined by the Consequence Classification of the particular tailings facilities. Details of the tailings facilities, along with summary findings from the conformance assessments is to be made publicly accessible via the GTMI website.

10. What does becoming a Supporter of the GTMI involve?

Participation in the GTMI as a supporter will also be open to stakeholders that do not have operational responsibility for tailings facilities. Becoming a Supporter to the GTMI will provide opportunities for other stakeholders to contribute to improved tailings management practices through:

- Facilitated stakeholder engagement on issues of concern (e.g. recurring issues raised for Board consideration) through – for example – hosting roundtables of experts and key stakeholders.
- Knowledge sharing with stakeholders, such as community representative groups, insurance professionals, investor groups, regulators, and others to continually improve their understanding of tailings management practices.

11. Is becoming Signatory to the GTMI only valuable for companies with tailings facilities classified as very high/extreme consequence??

No. The GISTM is equally important for all Tailings Facilities. ICMM members who committed to implementing the standard agreed to focus their initial efforts on their Extreme and Very High Consequence classification tailings facilities but are continuing with the implementation for all of their remaining facilities, with a target of disclosing conformance progress against GISTM for all remaining facilities by August 2025.

12. Why does the GTMI have Signatories rather than Members?

In order to maintain the independence of the Institute, the preferred model for the GTMI is:

- For mining companies and government owned enterprises who have responsibility for managing tailings facilities to become Signatories to the GISTM (which emphasises a commitment to implement the Standard)
- But to also accommodate Supporters (which allows for involvement and participation by stakeholders other than mining companies).

13. Where does the GISTM sit in relation to other standards?

The GISTM is specially focussed on the safety of tailings facilities, through all phases of a facility's lifecycle, including closure and post-closure. Broader mining related guidelines and



standards such as Mining Association of Canada's (MAC) Toward Sustainable Mining (TSM) and Initiative for Responsible Mining Assurance (IRMA) may cover aspects of tailings management, and where this is the case, the GTMI will be working to acknowledge and recognise equivalence where applicable.

14. If I meet standards such as TSM (MAC) or IRMA, do I meet the requirements of the GISTM?

Where the company being audited can demonstrate that an aspect of an existing standard meets or exceeds a particular Requirement of the GISTM, meeting this existing standard may be offered as evidence of conformance with the particular GISTM Requirement. If this existing standard is independently audited, then accreditation to this aspect of the standard may be accepted as conformance with the GISTM Requirement. This matter will be further explored by the GTMI, in consultation with members of the GTMI Technical Committee.

15. If implementing technical guidelines, do I meet the requirements of the GISTM?

It is not intended that the GISTM replace existing technical guidelines such as the Australian National Committee on Large Dams (ANCOLD)'s Guidelines on Tailings Dams Planning, Design, Construction, Operation and Closure or the International Commission on Large Dams (ICOLD)'s Tailings Dam Safety Bulletins. Rather, the GISTM is intended to complement these technical guidelines, encompassing (and standardising) expectations on, for example:

- Stakeholder engagement.
- Ensuring capture and maintenance of key knowledge of the facility.
- Strong governance covering all aspects of the facilities lifecycle.
- Transparency in reporting and emergency preparedness.

These technical guidelines remain critical but as indicated above, meeting these technical standards is not equivalent to implementing the GISTM.

16. How do I become an accredited auditor

The GTMI will develop specific criteria for GISTM auditor accreditation and will implement procedures for review of auditor credentials as part of the assurance programme. Accredited auditors will need to have requisite levels of experience, along with certification as a professional auditor, have completed specific training related to the GISTM facilitated by the GTMI, and be able to demonstrate lack of conflicts of interest with the company to be audited.

17. Why are independent auditors required to verify conformance with the GISTM?

Given the level of public concern and issues of trust as a result of recent disasters, an important goal of the GTMI will be to ensure that the Standard has credibility in the eyes of governments, affected communities, and wider civil society via independent auditing of conformance with the Standard.



18. Who covers the cost of conducting the audits?

The GTMI will accredit auditors who will be able to audit conformance. However, it will be up to the companies to engage an accredited auditor to undertake audits of their tailings facilities at their expense.

19. What is planned for auditor training?

Auditors will need to undergo specific training related to the GISTM, facilitated by the GTMI, with the focus primarily on the audit protocols and the way the GTMI would like the audit results and findings to be presented.

Auditors will need to be certified as a professional belonging to a recognised auditor association. The credentials of the auditor, along with a no-conflict of interest declaration, must be included in their audit report and will be published (disclosed) along with their summary audit report.

20. Why do we need to have independent auditors when we already engage an independent Engineer of Record (EOR) and Independent Tailings Review Board (ITRB)?

The technical support and oversight provided by the EOR and ITRB remain integral to the overall internal Governance structure under the Standard. The Standard is, however, much broader than the traditional purview of EORs or ITRBs, covering stakeholder engagement, establishing and maintaining a knowledge base for the facility, strong governance covering all aspects of the facilities lifecycle, transparency in reporting and emergency preparedness. The GTMI facilitated independent audits will assess conformance against all the requirements of the Standard, including whether EORs and ITRBs have been appointed/established and are operating as expected.

21. Is it intended that the independent audits replace the role of the ITRB?

No. The ITRB or Senior Independent Technical Reviewer provide independent technical reviews of the design, construction, operation, closure, and management of tailings facilities as an integral part of the overall governance of tailings facilities, but this is only one element of the governance requirements under the GISTM. The GISTM audits will be assessing conformance with this governance structure and its effective implementation.

22. Do I need to be fully conforming to the GISTM before becoming a Signatory to the GTMI?

No. However, the GTMI Board will need to establish timeframes for conformance for signatories that don't have a prior public commitment to implement the GISTM within a specific timeframe. During this time, the GTMI will be available to provide technical advice on interpretation and implementation of the GISTM.



23. Who initiates and manages each assurance process - Company or GTMI?

Initiation of an audit and selection/management of independent third-party auditor will be the responsibility of the company. The auditor will provide a detailed conformance report that will remain confidential with the company. The auditor will also prepare a summary report that will form part of the company's overall disclosures and be published on the GTMI website.

24. What level of transparency will be provided to Signatories as to the GTMI's operation (annual reports, auditioning of accounts)?

The GTMI will be operating in accordance with the published Memorandum of Incorporation and Board Charter. These will outline the Institute's responsibilities in terms of public reporting/disclosures.

25. Is there an opportunity for the fee structure to consider a lower fee for small companies with say 1 to 2 tailings facilities?

The final fee structure is yet to be set. There has been considerable feedback for a lower fee for those companies who manage only a few tailings facilities. This feedback will be taken on board when finalising the overall fee structure and will endeavour to accommodate those smaller companies through the inclusion of a lower fee.