

TOWARDS ZERO HARM

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TAILINGS REVIEW**

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PATHWAYS TO IMPLEMENTATION

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CHAPTER XIX

ESTABLISHING AN INDEPENDENT ENTITY

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1. INTRODUCTION

The completion of the Global Tailings Review (GTR) represents the commencement of another phase of the process. The GTR has produced a Global Industry Standard on Tailings Management ('the Standard'); a Consultation Report, providing an overview of the public consultation process and a summary of the feedback received; and finally, a set of GTR Papers, canvassing a broad set of considerations about the public safety and integrity of tailings facilities.

The next challenge will be to build on the work of the GTR and ensure that the Standard delivers on its promise. The ultimate measure of success will be evidence that the Standard has contributed to a significant and sustained reduction in the number and severity of catastrophic tailings facility failures. For this goal to be achieved, the Standard needs to be widely adopted within the mining industry, and used to drive improved tailings management practices at the operational level. Given the level of public concern about the will and the capacity of the mining industry to ensure the safety of tailings facilities, another important goal must be to ensure that the Standard has credibility in the eyes of governments, affected communities, and wider society.

This Paper has been prepared to inform the three co-conveners – the United Nations Environment Programme (UNEP), the International Council of Mining and Metals (ICMM), and the Principles for Responsible Investment (PRI) – about possible options for implementing the Standard and to put forward one preferred option for consideration.¹

1. This was flagged as a topic of interest by the co-conveners at the time the GTR was launched. According to the 'Scope of Work' summary on the GTR website: '[T]he Chair is empowered to independently propose recommendations both on best practices in the management of tailings and on a proposal for establishing an independent body to manage implementation of the Standard' (<https://globaltailingsreview.org/about/scope/>).

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It draws on the direct experience of the authors in implementing other voluntary schemes and in conducting research about their uptake and effectiveness.

2. OPTIONS

There are at least five different pathways that can support the roll-out the Standard and promote its uptake.

1. **Global guidance:** The Standard is released and promoted as a normative set of expectations to be implemented by interested companies, and for use by any stakeholder group that wishes to hold companies to account against a global Standard. A standardised assessment and/or reporting process is not available; rather, it is left to individual organisations to determine how they wish to use the Standard. An example of this approach would be the UNEP's well-established Awareness and Preparedness for Emergencies at Local Level (APELL) programme.
2. **Industry self-regulation:** Industry organisations such as the ICMM agree to formally adopt the Standard and make it a requirement that member companies agree to follow the Standard. Companies commit to test conformance either via self-assessment, or by hiring external auditors/assessors of their choice. This process is internal and controlled and managed by the company or an industry body. Assessment reports may or may not be released publicly, depending on what the industry body requires. An example of this approach would be the Mining Association of Canada's Towards Sustainable Mining scheme.
3. **State-based regulation:** States undertake to require or promote implementation through legislation, regulations, guidelines or other

Arguably, states will be more likely to pick up the Standard once its credibility has been established via an independent entity. This will also be the case for third party actors such as banks and insurers, who are looking for certification processes that they can have confidence in (Option 4). These other actors have a valuable role to play in promoting industry uptake of the Standard, but they are unlikely to be able to lead the implementation process.

The following sections of this Paper outline a potential pathway towards establishing the independent entity. It also discusses implementation challenges that will need to be addressed, including how the entity would be resourced, how to secure industry participation in such a scheme, and the relationship between – and interface with – other voluntary schemes.

3. THE INDEPENDENT ENTITY OPTION

3.1 ROLES AND FUNCTIONS

Core function

The primary purpose of an independent entity would be to manage an assurance framework for facilities to be audited against the Standard, with certification conducted by qualified, independent third-party assessors (see the section on 'certification' below). This purpose would need to be reflected in an organisational charter, along with other aspects of the organisation's remit.

Other activities

There are a range of other activities that an independent entity could perform, although in general, the more the organisation expands outside its core function, the less focussed it is likely to be. Some of the roles listed below could be considered after a reasonable level of financial stability and participation had been achieved. Initially, however, the focus should be on the core mission of setting up and ensuring a credible and sustainable certification process.

Certification – the provision by an independent body of written assurance (a certificate) that the product, service or system in question meets specific requirements.

Source: International Organisation for Standards (ISO): <https://www.iso.org/certification.html>

One activity that should be regarded as core is to provide or arrange training to promote awareness of and understanding of the Standard. It will be essential that the entity itself hosts this training to ensure that there is consistency in messaging the Standard's expectations and interpretation of its audit protocols and guidance documents. Training should be open not just to the industry but also to other stakeholders, such as states and other interested parties. The independent entity could also, for instance, facilitate a programme of public education about mine tailings and storage facilities.

Other activities which could be considered include:

- advocacy on issues pertaining to management of tailing facilities
- hosting roundtables of experts and key stakeholders on issues of concern
- participation in (or driving) global initiatives
- encouraging innovation
- sharing best practice technologies and approaches for tailings facilities
- presenting at international forums (e.g. the Intergovernmental Forum)
- engaging investors/financers and governments to encourage uptake.

In the longer term, the independent entity may also be in a position to identify and recommend research in priority topic areas. If the financial model provides for a surplus, the entity could itself commission research that the industry or individual companies may not be in a position to support, and that the independent entity or its Board or advisers agree is a priority.

3.2 ORGANISATIONAL GOVERNANCE AND STRUCTURE

Organisational capability

The independent entity would need the internal capability to support its core activities with room for growth. Expertise in different functional areas would be necessary for the entity to fully support core activities. These would likely include the following domains.

- **Technical:** Technical expertise will be essential, comprised of professionals with deep knowledge of tailings management and dam design, and other disciplines as well. This technical expertise whether

regulatory mechanisms (approval or permitting conditions) and hold enforcement power. Each jurisdiction determines which requirements in the Standard will apply and how they will be monitored. An example of this would be the development of National Action Plans by states as an instrument to implement the UN Guiding Principles on Business and Human Rights.²

4. **Third-party regulation:** Other economic actors such as banks, insurers and investment funds make compliance with the Standard a condition for investing in a company, approving loans for projects, providing insurance for tailings facilities, and so on. The basis on which the third-party makes this assessment, and whether this is publicly disclosed, is a matter for the third-party. An example of this approach would be the way in which the finance sector uses the International Finance Corporation's Environmental and Social Performance Standards in the application of the Equator Principles.
5. **Independent entity:** An independent entity is established to host the Standard, test conformance, and report assessment outcomes in the public domain. A certificate of conformance is issued through a process governed by an independent entity, which is not controlled or managed by any single stakeholder group. An example of such an entity is the International Cyanide Management Institute, which manages the International Cyanide Management Code.

Clearly, these pathways are not mutually exclusive. It is possible, for example, to conceive of hybrid models that incorporate elements of two or more approaches (e.g. an industry organisation makes it a condition of membership that a company commits to having its operations certified and reported on by an independent entity). Looking further ahead, it is also possible to envisage a multi-layered system of governance in which several approaches - perhaps even all - are utilised to some extent (e.g. some companies opt to self-assess, some participate in industry-managed processes, and others submit to an external certification process, all within a framework where both governments and third parties impose their own requirements).

Although there are multiple possibilities, our assessment is that Option 5 – the establishment of an independent entity – should be a point of focus for the co-conveners. This would entail establishing a 'home' for the Standard in an organisation with a

multi-stakeholder governing body that considers the priorities of relevant constituencies. The key functions of this entity would be to design, manage and promote a credible certification process. This could include:

- a. developing and quality assuring an audit protocol
- b. approving or accrediting assessors
- c. developing guidance materials for operators seeking certification
- d. testing and tracking conformance over time
- e. regular public reporting on the work of the entity against agreed indicators
- f. updating the Standard where required (e.g. as technology or best practices evolve, or as implementation shows deficiencies in the Standard)
- g. engaging with third parties, including governments, communities, insurers and investors, to promote understanding of, and build confidence in, the Standard.

In our view, the independent entity has several advantages over other models.

First, creating a standing body will provide a mechanism for institutionalising the Standard and will maintain the momentum for change. By contrast, simply releasing the Standard and leaving it to other parties to decide when and how to take it forward (Option 1) presents a risk of dilution and uneven take-up.

Second, such an entity would provide the Standard with a certain autonomy from industry, reduce the risk (real or perceived) of industry capture and build trust and credibility with external stakeholders. It would certainly score higher on transparency criteria. This is a significant advantage over an industry-operated scheme (Option 2) or one that leaves it to individual companies to self-assess against the Standard (Option 1).

Third, such a body could provide a neutral space in which industry and third parties could share views about the operation and effectiveness of the Standard, and focus on the common goal of preventing future catastrophic tailings facility failures.

Incorporating the Standard into a state-based regulatory framework (Option 3) would be a good long-term outcome and should be encouraged, but this is unlikely to happen quickly, or in a uniform way.

2. See https://www.ohchr.org/Documents/Issues/Business/UNWG_NAPGuidance.pdf

preparation of administering the standard and certification process. Preliminary calculations indicate that the initial work of scoping, designing, and standing up an independent body, with appropriate governance arrangements, can be accomplished for a modest sum. The larger expenses will be the staffing, engagement of consultants, establishment of administrative procedures and systems, and the development of the necessary programme documents, including but not limited to, audit protocols, guidance documents for auditors and participants, and a dispute mechanism. Additional work would involve the development of a website, outreach materials, field trials of assessment documents, and the recruitment and vetting of assessors to perform the envisioned certification work. The work described above, we believe, can be accomplished within a two-year period for approximately USD 3.3 million.³

There are several funding models available to support a new independent entity. One option would be to approach a Foundation, or similar body, for a large, multi-year grant to provide the seed capital necessary to establish and sustain the organisation in the early stages. Such grants, however, are difficult to secure, particularly where funders may see this as something that the mining industry should bear responsibility for. Alternatively, one or two of the co-conveners could consider providing the funding for the first year(s) of operation.

Another option is for industry to bear a significant proportion of the costs of establishing and maintaining the new entity. One way of doing this would be through a membership model, where companies pay an annual fee to belong to the entity and support its activities. Other sectors that are likely to utilise the Standard (for example insurers and investment funds) could also be invited to become members.

Given the controversy around tailings facility management practices, an industry-only membership model would be likely to raise concerns amongst stakeholders about the independence of the entity. It may be possible to overcome this, but it would require extensive thought and consideration to be given to governance processes. For example, the independence of the governing board would have to be guaranteed, the board would need to include several non-industry members, and the appointment

of CEO would need to be endorsed by both non-industry and industry members.

A further possibility is for the entity to rely primarily (or partly) on income earned through the charging of fees for participating companies, based on a formula that considers the number of facilities to be included in the programme. In this model, companies are effectively customers, rather than members. The entity would still need to be attuned to the interests and concerns of companies, given that their participation is voluntary, but the entity would not be subject to their control.

3.4 THE ASSESSMENT FUNCTION

Selection of assessors

To fulfil its core purpose, the entity would need to accredit a cadre of qualified and experienced assessors to assess facilities against the Standard. Our assumption is that these assessors would be self-employed consultants or employed by a professional services firm, rather than being employees of the independent entity. Companies applying for certification would contract accredited individuals or firms to assess conformance against the Standard.

Criteria for assessors will need to be established. Rather than the new entity accrediting assessors, it may rely on professional accreditation by other bodies. The entity could set minimum qualifications and note that accreditation by certain bodies would be acceptable.

The issue of auditor or certification liability will require consideration. It will also be imperative to have a process for managing conflicts of interest, particularly given that there are likely to be only a limited number of available professionals who could competently assess conformance with the Standard. In time, market forces may help to expand the pool, though this may depend on the criteria developed for accrediting assessors and the level of participation by companies.

Given the broad scope of the Standard's requirements, audits will likely need to be conducted by teams of assessors from different disciplinary backgrounds. Having non-engineers review, evaluate, and pass judgement on the sufficiency of engineering design criteria or construction documents, or management practices, will not be acceptable. Likewise, an

³ In estimating costs we assume that initial staffing will be small, with support from contractors, and augmented through secondees. After the first year, staffing increase as work commences and revenue becomes apparent. Over time, costs will be gradually covered through revenue and earnings.

internal or contracted will support the development of the assurance procedures, protocols and criteria for implementation. As participating companies move to certify facilities, technical expertise may also be needed to provide guidance and interpretation of Standard on matters as they arise.

- **Communications:** The communications arm would focus on establishing the brand, publicising the organisation and the scheme, promoting the benefits of certification, and profiling facilities that achieve certification. This function could either be outsourced, in whole or in part, or established as an in-house, dedicated resource.
- **Administrative:** Programme administration would likely include managerial, administrative and accounting functions. Additionally, this arm of the organisation would monitor and report to other parts of the organisation on interest in the scheme and uptake of certification.
- **Executive:** This arm would include a President (or Chairperson), a governing Board of Trustees or Directors, and a Chief Executive Officer who is answerable to the Board (see below).

Governance arrangements

As with other organisations, it would be the role of the executive arm to provide strategic direction. It is envisaged that the board would comprise representatives from across the stakeholder spectrum to provide different constituencies with a voice in decision making, but with a 'super majority' having a working knowledge of mining and tailings facilities. The board may wish to appoint advisory groups to provide advice on specialist matters as they arise.

This proposed configuration bears some similarity to the arrangements for managing the International Cyanide Management Code; where it differs is that it also includes a multi-stakeholder Board of Directors. The Mining Association of Canada has appointed a multi-stakeholder Advisory Group to provide advice on community-related issues but does not include non-industry representation on its Board. What is envisaged here is the inclusion of non-industry, multi-stakeholder perspectives within the core governance structure. The benefit of this approach is that it builds relationships of trust amongst different stakeholder groups, and addresses stakeholder concerns about the potential of the independent entity to be 'captured' by industry interests.

Start-up cost estimates over two years (USD 3.3 million):

- Working group support (travel, secretariat) – 175,000
- Legal services (document review, trademark, anti-trust compliance, bylaws, dispute resolution, registration and incorporation of entity) – 300,000
- Technical consultants (drafting audit protocols, guidance documents, internal procedure and process documents, field testing) – 420,000
- Outreach and communications (website, promotional materials, webinars, meetings/conferences) – 315,000
- Training seminars (travel, facilities, materials) – 220,000
- Translation services (10 documents in six languages) – 280,000
- Staffing (including benefits for one-year) – 1,080,000
- Rental, furnishings, utilities (one-year) – 200,000
- Director and officers liability insurance (one-year) – 65,000
- Audit by external accounting firm (one-year) – 15,000
- Board support (travel and accommodations for one-year) – 230,000

3.3 RESOURCING AND FUNDING MODEL

Experience has shown that the development of assurance schemes can be both lengthy and resource intensive. Nonetheless, the establishment of an independent managing entity could occur within a 6-12 month period. It will be important to the ultimate success of the scheme that commitment and support by the co-conveners and stakeholders be maintained in the establishment phase, and then throughout the development of the entire scheme and, which may take up to two years.

Seed capital will be needed to establish the independent entity and fund its initial work in

Communicating the outcome

Communicating the outcome of certification would need to be formalised under the schemes' audit procedures and protocols. It is envisaged that an operator would be notified of the outcome first, with agreed protocols for the public communication of a successful outcome, alongside an announcement by the independent entity.

The level of public disclosure and transparency across all elements of the programme would need to be carefully considered by the organisation's executive and governing board. If the focus is safety, in particular public safety, then not disclosing failed assessments and informing potentially affected people of the failures and the reason for the failure seems contrary to the purpose of the programme. Similarly, whether pre- or post-certification conditions or opportunities for improvement over and above the minimum requirement would be disclosed is another matter to be clarified. Given the Standard's emphasis on transparency and public disclosure, it is envisaged that any conditions for certification would be publicly disclosed. If an operator is not comfortable with this level of disclosure, they would have to close out any gaps prior to certification.

The International Cyanide Management Code posts on its website summary audit reports for each certified operation in its programme. This allows stakeholders to read for themselves what the auditors found during their inspection. This high level of transparency sets the programme apart from other certification schemes. Furthermore, the auditors' credentials are posted along with summary audit reports so that the public can see who audited the operation, and their experience and qualifications.

Finally, assessment and audit reports are an important source of data for understanding the overall impact and effectiveness of a scheme, and where industry practice sits across assessed facilities. The entity would therefore need to monitor, evaluate and report on the uptake and impact of certification on a regular basis. The entity would also serve as a repository of data from the assessments, providing a source of evidence about industry changes in global tailings management, over time. The International Cyanide Management Institute also reports annually on findings, assessment trends and so forth. The disclosure of information would contribute to the stock of publicly available knowledge about tailings facilities globally.

Period of certification

At this stage, it is envisaged that certification would stand for a defined period, after which a follow-up assessment would be required. A shorter certification period for facilities that hold the potential for loss of life might be considered appropriate, with a longer period for facilities that have no potential for loss of life. This would reflect the goal of zero tolerance for human fatality and avoid low consequence facilities having to be subject to burdensome certification renewal processes. Likewise, the period of certification should also consider changes in a facility. For example, a tailings facility that has had multiple lifts or a facility that is approaching capacity may warrant a shorter recertification period. Change in ownership might also be a consideration, as these may substantially change resources and management focus.

A possible way forward is to require re-certification every three years for higher consequence facilities (i.e. 'Extreme', 'Very High' or 'High'), and at five year intervals for lower consequence facilities (i.e. 'Significant' and 'Low'), but this would need further discussion. Given a shortage of experienced professionals available to assess against the Standard, differentiated time periods for certification could be a practical approach. Likewise, it may be prudent to calibrate a renewal process based on risk.

3.6 NON-COMPLIANCE AND CORRECTIVE ACTION

Addressing issues of non-conformance while under certification would be important for upholding the credibility of the scheme, while at the same time encouraging industry uptake. Most existing schemes are able to withdraw certification to sanction an identified or reported non-conformance. The Responsible Jewellery Council, for instance, applies a 'suspension' procedure and a five-stage re-certification process. Other schemes can trigger a corrective action procedure that does not involve suspension, but rather, provides a defined period for the operator to correct the non-conformance before moving to suspension.

Most certification schemes have a complaints mechanism for stakeholders to lodge complaints or issues. The Responsible Jewellery Council, for example, has a formal mechanism that aims to resolve complaints related to non-conformance with certification and accreditation of members.

assessment that only involved engineers, and focused solely on the facility, would be contrary to the scope and intent of the Standard. It may not be necessary, however, to include community specialists in all instances, for example, where a facility has no proximate population or downstream community. Assessment teams could be calibrated to match the profile of a facility. In all cases a lead assessor will need to be appointed, and qualifications for that role would have to be defined.

Assessment process

Once the question of the composition and qualifications of assessment teams is resolved, it is likely that the mechanics of the certification would be much the same as with other voluntary schemes.

The process would commence with assessors examining documentation, conducting interviews with corporate and site-based personnel and local stakeholders, and visiting the facility and nearby and downstream communities as appropriate. Having considered the evidence, assessors would submit a report to the independent entity indicating whether certification is warranted, and, if not, the corrective actions needed to achieve certification.

The role of the independent entity would be to determine whether the assessors made clear findings to warrant certification and specify whether conditions are to be applied before certification is granted (such as a corrective action plan). Any follow-up process, including specified actions and deadlines for implementation, would involve assessors in agreeing to the corrective action plan. This entire process would need to be outlined in a series of audit procedures and protocols.

3.5 THE CERTIFICATION FUNCTION

Unit of certification

Certification schemes vary in terms of their 'unit' of certification. The Standard was written with the intent of certifying individual facilities – not operations or companies. While the wording of the Standard was drafted this way, it is the case that some operations will have multiple storage facilities, while others will be located some distance from a mine.

The new entity would need to establish greater precision as to the unit of certification in a wide variety of operational circumstances. It may be prudent, for instance, to certify two adjacent facilities in the one assessment, particularly if they are governed by a

common operator, management framework, or set of systems.

Likewise, the entity would need to define the process for follow-on certification where the unit of certification was a new facility (i.e. a facility in the pre-construction phase), given that many elements of the Standard would have been assessed in the initial assessment (e.g. alternatives analysis, consequence classification, and design criteria). The draft Standard has provided an indication of which requirements would apply to new and existing facilities, but this will need further refinement from a 'unit of certification' perspective.

Mechanics of certification

The purpose of an independent entity would be to provide assurance that the unit of certification (i.e. the facility) conforms to the requirements of the Standard. A simple model of assurance would conclude that a facility was either 'compliant' or 'non-compliant' with the Standard and would answer the question in a 'yes' or 'no' format. It is rare, however, that industry certification schemes that are geared towards performance improvement proceed on this basis. Instead, most industry certification schemes have a graduated model to encourage initial uptake, and to encourage continual improvement over time.

To balance the need for a high bar and to encourage uptake, some schemes nominate a 'core' set of criteria judged by compliance/non-compliance and a threshold of performance with room for improvement for all other requirements. Some schemes have, in addition to this, a graduated level of achievement, such as the Mining Association of Canada's Towards Sustainable Mining scheme that allows for recognition at upper and lower ends of the performance curve. A graduated process is envisaged for the Global Industry Standard on Tailings Management, with a period for operators to address non-core gaps either before certification is granted or as part of a conditional certification.

In terms of encouraging certification, the entity could consider establishing an online platform for private self-assessment, as a 'confidence-builder' for operators interested in certification. The Mining Association of Canada's Towards Sustainable Mining scheme and the Aluminium Stewardship Initiative offer self-assessment tools for companies interested in testing their level of conformance before commencing the formal certification process.

with hundreds of facilities should proceed with certification.

It is, of course, up to individual companies to sequence the certification of their facilities in the manner that they deem appropriate – the Standard is not prescriptive in this regard. Nonetheless, companies should be encouraged to reflect on the risk-based orientation of the Standard, and to seek certification of the highest risk facilities as a matter of priority. These are the facilities that most concern the market, external stakeholders and project-affected communities.

4.3 LOCATION OF THE NEW ENTITY

The issue of which jurisdiction the entity should be located in would also need to be considered as part of a full design proposal.

5. SUGGESTED NEXT STEPS FOR THE CO-CONVENERS

In this Paper we have provided an initial sketch of matters to be considered in designing and establishing an independent entity to drive the work of the GTR forward. How best to implement the Standard is an issue of critical importance, but this was not within the brief of the Independent Chair or the Expert Panel and, in any event, it is not a task that these parties are equipped to undertake.

Rather, we see this as a matter that falls within the purview of the three co-conveners. This group proactively initiated the GTR to develop the Standard, and it is also the group that can drive the next phase. Without an effective implementation strategy, the time, effort and resources invested in building the Standard could dissipate and the problems which gave rise to the GTR persist. Involving all three co-conveners will also help to ensure that the Standard continues to be viewed as a multi-stakeholder initiative that represents a broad range of interests.

Below are five recommended actions which we believe will maintain the momentum for change and ensure that the return on the work and effort that has been put into developing the Standard is maximised.

1. *Once the Standard has been formally endorsed by the co-conveners, the parties should actively promote the Standard to their respective constituencies, and other interested parties.*

The ICMM is ideally placed to promote the Standard to mining companies and industry bodies; the UNEP has an opportunity to engage with State actors as part of the implementation of the UNEA4 resolution on Mineral Resource Governance; and the PRI can provide a valuable conduit into the investment community. The co-conveners are also encouraged to present on the Standard at professional forums, such as researcher and practitioner conferences, and to groups of other interested stakeholders.

2. *The co-conveners should formally launch the Standard and announce that: (a) a small working group will be formed to develop a design proposal for the establishment of an independent entity; and (b) the intention is for the new entity to be established within a 6-12 month time frame.*

The design proposal should address the matters that have been raised in the preceding discussion, including: the role and scope of the new entity, governance arrangements, location, resourcing requirements, and how the entity will be funded in the start-up phase, and over the longer term. The working group should comprise people with experience in designing and administering voluntary certification schemes, or who have extensive knowledge about the operation of such schemes. The proposal should map out a plan of work for the first 6-12 months, and define key performance indicators.

3. *Other bodies that have developed standards and/or are engaged in certification processes relevant to tailings should be encouraged to begin exploring equivalency issues between these schemes and the Standard.*

This will be key to maximising uptake of the Standard and minimising duplication. Relevant initiatives include Mining Association of Canada's Towards Sustainable Mining Tailings Management Protocol, the Initiative for Responsible Mining Assurance, and the World Gold Council's Responsible Gold Mining Principles.

4. *Establish a multi-stakeholder reference group to provide input and feedback to the co-conveners and the Working Group on the design of the new entity.*

The reference group could include representatives of key stakeholder groups, including the mining industry, insurers and investors, civil society, and government representatives. This would reflect the multi-stakeholder architecture of the first phase of the GTR work and provide confidence to all stakeholders as the next phase of work moves forward.

The process of lodging a complaint is clearly articulated, and available to the public. Likewise, the Cyanide Code has a multi-tiered dispute resolution process that allows stakeholders to challenge audit findings. Any new independent entity should consider similar processes, particularly given the Standard's requirements that relate to the reporting of concerns and complaints.

3.7 FAILURE EVENTS

The Standard includes requirements for emergency planning and local-level preparedness, and pre-emptive engagement about long-term recovery in the event of a failure. However, in the immediate aftermath of an incident, certification could be 'suspended' while facts are established. If necessary, it is envisaged that certification could be revoked. A corollary would be that the entity would want to review the most recent audit report to determine if the assessors missed anything or if the Standard or any of the protocol or guidance documents were deficient.

To uphold a commitment to suspend certification after a major failure event, the certifying organisation would have to define a threshold for 'catastrophe'. It is possible, for instance, that a facility experienced a failure, but that control measures prevented catastrophic outcomes. Such an incident may result in a suspension and corrective action, rather than a revocation. The procedures and protocols for dealing with both catastrophic and non-catastrophic failure events would need to be carefully and thoughtfully developed.

3.8 INITIAL PROGRAMME OF WORK

Once established, a first task of an independent entity would be to prepare audit procedures and protocols for the purposes of implementing the certification scheme. Amongst other things, this would include defining:

- a. indicators for each requirement
- b. rankings or weightings of certain requirements
- c. minimum standards of evidence
- d. criteria for accrediting assessors
- e. how often, and under what circumstances, certifications need to be renewed
- f. consequences for non-conformance
- g. data collection, reporting and archiving.

There are many voluntary schemes and standards, and the new entity would need to ensure that its

scheme takes priority place for tailings management in the evolving landscape of voluntary schemes available to the global mining industry.

In order to encourage certification, the independent entity would need to publicise the scheme, and communicate information about the certification process, including the 'value proposition' for why companies should submit to this process. It would also be beneficial for the entity to engage with other organisations that may utilise the results of audits: such as insurance companies, banks, investment funds and regulatory agencies. If these organisations see the certification process as credible and are willing to use the outcomes to inform decisions (e.g. about whether to invest in or insure a company, or approve a licence application), this will be a significant incentive for companies to participate in the scheme.

4. OTHER MATTERS TO RESOLVE

4.1 RELATIONSHIP TO OTHER SCHEMES AND THE ISSUE OF 'EQUIVALENCY'

Once the entity is established and develops implementation protocols, there will need to be consideration of 'equivalency' with existing voluntary schemes and standards – where operators seeking certification are relieved of having to demonstrate conformance if this has been demonstrated under a cognate scheme.

Industry concerns about adding to the audit and assessment burden were a prominent theme during the public consultation and would need to be addressed. The degree to which existing standards cover the specific requirements associated with the safe management of tailings facilities – and can therefore be considered equivalent – will need to be forensically analysed and carefully calibrated.

It is logical to first construct a standard that covered all necessary requirements – both general and specific – and then for the independent entity to consider equivalency as a high priority matter. It is only after finalising the Standard that this question can be fully interrogated.

4.2 PRIORITISING FACILITIES FOR CERTIFICATION

The scope of the GTR was focused on large facilities and does not discern on the basis of whether those facilities are owned or operated by a company with one, or many facilities. The Standard does not, therefore, address the question of how a company

5. *Co-conveners should explore the potential for tracking the immediate and organic uptake of the Standard, in all its forms, prior to the establishment of the independent entity.*

In the 6-12 months before the entity is formally established, the Standard will take on a life of its own. Already, elements of the Standard are being referred to in public presentations, policies and standards; referenced in academic papers; discussed at industry forums; incorporated into policies and standards; and considered for incorporation into law or regulatory guidance in several jurisdictions globally. A university research centre, or similar entity, could be supported to track uptake in this intervening period, which would help to validate the utility of the Standard, and build confidence that the work is relevant and important. Once established, the independent entity would formalise a monitoring and evaluation programme as part of its core programme of work.

6. CONCLUSION

This Paper has elaborated a potential pathway for establishing an independent entity to house the Standard, and to support its evolution. Reflecting the urgency of the challenge, the Standard and accompanying GTR Papers were completed through a rapid and concerted effort. To maintain momentum, we encourage the co-conveners to initiate the next phase of work and to continue the process with the same sense of urgency. This way, the Standard can be deployed globally, to full effect, as soon as possible.

Co-convened by the International Council on Mining and Metals (ICMM), United Nations Environment Programme (UNEP) and Principles for Responsible Investment (PRI), the Global Tailings Review has established a robust, fit-for-purpose international standard for the safer management of tailings storage facilities.