Consultation response

Part 1: Your details

Original language of response: English

Name: Matthew W Gordon-Watt

Country of residence: South Africa

Are you willing to let us publish your response publicly on the Global Tailings Review website? Yes

Please select which stakeholder group you are representing: Consultant (geotechnical)

If 'Other', please specify below:

Are you responding on behalf of an organization? No

Please give the name of the organization:

Your level within the organisation:

Part 2: Your views on each of the Principles and Requirements in the Standard

Topic I: Knowledge Base

Principle 1

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially

Which aspects of Principle 1 do your comments relate to?

Your comments on Principle 1

Principle 2

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 2 do your comments relate to?

Comments on the Principle itself

Your comments on Principle 2

An effective (sustainable) solution needs to be financially, economically, environmentally and socially feasible (statement). In my opinion, the way to address the holistic solution is to focus on a solution that treats the problem source, not the problem symptoms (as is generally evident within technical and environmental/social impact studies).

Topic II: Affected Communities

Principle 3

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially
Which aspects of Principle 3 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 3
A "'catastrophic failure'" i.t.o affected communities implies loss of life as a result of "'technical failure of the facility'" > remove the technical failure then one removes the loss of life. Address the source issue.

Topic III: Design, Construction, Operation and Monitoring of the Tailings Facility

Principle 4

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 4 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 4
This "'Design, Construction, Operation and Monitoring of the Tailings Facility'" section is the cornerstone of a successful holistic life-cycle i.t.o preventing an "'extreme'" failure. One step deeper would be the design aspect. "'Extreme'" loosely defined = Loss of human life, environmental damage from a toxic/hazardous slurry (material), financial loss (environmental, human, infrastructure) , legacy (costs and on-going environmental readiness & exposure of hazardous materials to human life and consumption) ; Legal Implications (social & environmental damages). Solution = treat the source problem How: 1. Remove or limit the about of water present in the slurry (this is the vehicle that aids slurry mobility) 2. Remove or limit the toxicity / hazardous nature of the material/slurry refer to attachment (Hazard Classification Rating Charts)

Principle 5

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 5 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 5
as per previous comments - this is the critical component.

Principle 6

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 6 do your comments relate to?

Your comments on Principle 6:

Principle 7

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 7 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 7
provided the source is treated and not the symptoms

Principle 8

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 8 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 8
a spin-off from earlier comments

Topic IV: Management and Governance

Principle 9

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 9 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 9
Quarterly and annual technical audits should focus on the well-being of key critical tailings components. Building up a history and a trend will help plan and assess the future.

Principle 10

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 10 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 10:
Good leadership and management structures aligned to simple and effective control and reporting tools all help toward the lowering of risk. Such facilities (conventional wet systems are inherently risk structures - as such one should never rule out a 'zero-fail' approach.)

Principle 11

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 11 do your comments relate to?
Your comments on Principle 11:

Principle 12

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 12 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 12:
again, the term “partially” implies that one by following the prescribed and assertive approach then one can greatly work toward a ‘zero fail’ state.

Principle 13

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 13 do your comments relate to?
Yes

Your comments on Principle 13:
as per previous comment

Principle 14

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 14 do your comments relate to?

Your comments on Principle 14:

Topic V: Emergency Response and Long-Term Recovery

Principle 15

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 15 do your comments relate to?

Your comments on Principle 15:

Principle 16

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Partially

Which aspects of Principle 16 do your comments relate to?
Your comments on Principle 16:

**Topic VI: Public Disclosure and Access to Information**

**Principle 17**

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially

**Which aspects of Principle 17 do your comments relate to?**

Your comments on Principle 17:

**Part 3: Your views on the Standard**

Your view as to whether the content of the Standard meets your expectations (closed question):

3: Meets my expectations

Please summarize why you chose this option:
I expected and understood a 'universal' generic standard to be adopted by a global review committee. This global review committee is therefore the mouthpiece representing global citizens and affected parties that should have a neutral stance on the development and care of such facilities. Primary objective being a social and environmental vehicle for the betterment of humankind and protection of our environment. The intelligence, feedback and data that this global receives (public knowledge) is therefore available to investors and mining houses. As a result, investors and mining houses can no longer ignore or be ignorant of happenings. Further to this, this will place all mining countries, territories and jurisdictions with greater respo

Your view on whether the Standard will create a step change for the industry in the safety and security of tailings facilities (closed question):

4: Will deliver improvements across all aspects of the safety and security of tailings facilities

Please summarize why you chose this option:
Improvements precede step changes and is dependent on territory to territory. Enough improvements will result in a step change.

Does the content of the Standard address all aspects of tailings facility management adequately?

Does the content of the Standard address all aspects of tailings facility management adequately (closed question)?

Yes

Please explain why and/or what is missing:
Such documents should be dynamic in nature. We are human, ever evolving in knowledge, experience and technology. 'Adequately' is the correct term.
Part 4: Suggestions for topics to be included in the accompanying Recommendations Report

On which topics would you expect to have further clarification or guidance in this document?

Other information

Non-fitting response text (text submitted which did not in response to one of the questions above)

Attachment 1 reference (if applicable)
ref:0000000836:Q83

Attachment 2 reference (if applicable)
**THISTLE CONCEPT:**
‘with respect to a tailings dam failure’

“treat the source not the symptom approach”

**RAMIFICATIONS:**
SOCIAL, ENVIRONMENTAL & LEGACY
RISK RATING

**TAILINGS DELIVERY TYPE**

HAZARD CLASS

- INERT
- SEMI-TOXIC / HAZARDOUS
- TOXIC / HAZARDOUS

WET (slurry)
PASTE (thickened)
DRY (tailings)
THISTLE CONCEPT:
‘with respect to a tailings dam failure’

“treat the source not the symptom approach”

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RAMIFICATIONS:
FINANCIAL & LEGAL
RISK RATING*

* Depends on technology and/or deposition system