

# Consultation response

## *Part 1: Your details*

**Original language of response:** English

**Name:** David Smirk

**Country of residence:** Australia

**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:** Other

**If 'Other', please specify below:** Mining Services Company

**Are you responding on behalf of an organization?** Yes

**Please give the name of the organization:** Phibion

**Your level within the organisation:** Executive Management

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

### *Topic 1: 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?**

Yes

**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?**

Partially

**Which aspects of Principle 2 do your comments relate to?**

Requirement 2.2, Requirement 2.1

#### **Your comments on Principle 2**

Risk management in the context of tailings management infers the residual water content present in the stored tailings. Therefore, an operator should be required to demonstrate the minimum safe water content. This in turn will define the appropriate tailings technology that can be utilised to satisfy this requirement. This does not

suggest the minimum possible water content is required at any cost but the technology that will deliver the required water content that will satisfy the commercial requirements of the mining organisation. This requirement removes potential conflict of opinion as it transparency defines the minimum performance requirements. This also simplifies the performance audit aspects of the ITRB.

## **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?**

Yes

**Which aspects of Principle 3 do your comments relate to?**

**Your comments on Principle 3**

## **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?**

Requirement 4.1

**Your comments on Principle 4**

The tailings technology selected should permit closure of a tailings facility the moment operations cease. It should not be permitted for an operation to be maintained in a non-operational but not closed status of if this is unavoidable the tailings facility is to be re-classified as being "Extreme". There should be regulatory encouragement to ensure that active interest is maintained in the tailings facility and all efforts directed to minimising the risk until a final acceptable closure status is reached.

### **Principle 5**

**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 5 do your comments relate to?**

Requirement 5.1, Requirement 5.2

**Your comments on Principle 5**

Although there are several phases in the tailings facility particular focus must be brought to the operational phase. This phase may extend over many years, many

key personnel and consultant changes. We would recommend the mandatory development of annual operational plans describing in detail intended actions, goals and operational audits. In essence we would recommend an approach where key personnel develop the tailings management plans and that these plans manage the tailings facility. We have many examples where key tailings personnel manage the tailings facility directly making auditing difficult and opaque. This approach removes key person risk and provides a more transparent operational mode. These plans should also provide for the natural variability in tailings production flows and quality and not be based on flowsheet design data. The plans should encompass not only deposition data but also water management and demonstrate likely achievement of the final tailings water content target.

### ***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?**

Requirement 7.3

**Your comments on Principle 7**

Requirement 7.3 should also include a need for an annual report of tailings facility operations to confirm alignment with the annual operational plan and identify any variances. These variances may allow incorporation of operational learnings into future planning. This will also simplify the audit requirements for the ITRB.

### ***Principle 8***

**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 8 do your comments relate to?**

**Your comments on Principle 8**

## ***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?**

Yes

**Which aspects of Principle 9 do your comments relate to?**

**Your comments on Principle 9**

### ***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?**

Requirement 10.2

**Your comments on Principle 10:**

Requirement 10.2 should also include a need for the Account Executive to demonstrate that the required operational plans for the tailings facility have been suitably resourced (funded) so that financial responsibility sits at the required level, and it is not left to the tailings facility superintendent to manage a facility with insufficient resources.

### ***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?**

Requirement 11.3

**Your comments on Principle 11:**

Requirement 11.3 should be enhanced to include inclusion of suitably qualified tailings facility operations personnel. In our experience a tailings facility designer does not necessarily have the tailings operational experience required to execute a review with complete authority.

### ***Principle 12***

**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 12 do your comments relate to?**

**Your comments on Principle 12:**

### ***Principle 13***

**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 13 do your comments relate to?**

No

**Your comments on Principle 13:**

### ***Principle 14***

**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 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?**

Yes

**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?**

Yes

**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?**

Requirement 17.2, Requirement 17.1, Requirement 17.3

**Your comments on Principle 17:**

We would recommend full public transparency of operational plans and audits to ensure ongoing alignment of company plans, design intents and community expectations. A good example is the annual forward operational tailings plans provided by Canadian oil sands operators.

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

**Your view as to whether the content of the Standard meets your expectations**

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

2: Falls somewhat below my expectations

**Please summarize why you chose this option:**

We are in this position due to the recent tragedies in Brazil. We owe those lost and affected our best efforts. While this standard is a positive change it needs to press harder to drive all involved to better performance through transparent planning and audit accompanied by the harsh light of mandatory public transparency (as described in our comments). Further work is required to achieve this but the authors are to be commended for the steps taken.

**Your view on whether the Standard will create a step change for the industry in the safety and security of tailings facilities**

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

3: Will strengthen some but not all aspects of the safety and security of tailings facilities

**Please summarize why you chose this option:**

The longest phase in the tailings facility lifecycle is the operational phase. Our view is that the standard treats the changes in phases very well but misses on the time within the operational phase. Further rigour is required to ensure the tailings facility is planned and operated as it should be and that this performance is reviewed by experienced personnel on an annual basis.

**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:**

## ***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?**

There are many tailings technologies that can reduce the water content in tailings. However, the industry and academia are fixated on capital expenditure solutions ie filtration, centrifugation. This is not the only way an acceptable outcome can be achieved. There are many operational technologies (Accelerated Mechanical Consolidation, AMC) that can be applied that can achieve a similar outcome but do not incur the high capital expenditure. We would hope the report would include examples of these approaches (identified as best practices in some commodities ie. International Aluminium Institute for AMC operations) as well as capital intensive solutions.

### ***Other information***

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

***Attachment 1 reference (if applicable)***

***Attachment 2 reference (if applicable)***