## **Consultation response**

#### Part 1: Your details

Original language of response: English

Name: Lars-Åke Lindahl

Country of residence: Sweden

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: Mining Industry

If 'Other', please specify below:

Are you responding on behalf of an organization? Yes

Please give the name of the organization: SveMin (Swedish Association of Mines, Mineral and Metal producers)

Your level within the organisation: Executive Management

## 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? Yes

#### Which aspects of Principle 1 do your comments relate to?

Comments on the Principle itself

#### Your comments on Principle 1

There is a need to define scope and introduce the principle of proportionality early in the standard. Requirements under Principle 1 are in line with established good practice within the metal mining sector but would not seem proportionate for low consequence facilities and e.g. quarries. A general concern here and for the whole standard is how to get it implemented outside the limited number of "companies" that are members of ICMM or other similar international, regional or national associations with competence, capacity and ambitions.

#### **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, Requirement 2.2, Requirement 2.6

#### Your comments on Principle 2

We are concerned that the way criteria are defined in the consequence classification matrix (Annex 2) and the requirement (4.1) to have a default classification as "extreme" will lead to a loss of focus. This may become a serious issue considering the fact that the number of experts in the area globally will simply not be sufficient to meet the requirements of the standard (here

requirement 2.2 with Independent Review Board) at all sites falling within the proposed definition of "tailings facility" and therefore it is critical that the system is not bogged down by spending expert capacity on low consequence facilities. The concept of Financial Assurance as introduced in Requirement 2.5 should not be mixed up with insurance according to 2.6.

## **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? Comments on the Principle itself

#### Your comments on Principle 3

This is just to note that disclosure of information and consultation with stakeholders is a matter that is regulated by legislation in some jurisdictions (e.g. Sweden).

## 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, Requirement 4.1

#### Your comments on Principle 4

We are concerned that the way criteria are defined in the consequence classification matrix (Annex 2) and the requirement (4.1) to have a default classification as "extreme" will lead to a loss of focus. This may become a serious issue considering the fact that the number of experts in the area globally will simply not be sufficient to meet the requirements of the standard (Engineers of Record, Review Panels etc) at all sites falling within the proposed definition of "tailings facility" and therefore it is critical that the system is not bogged down by spending expert capacity on low consequence facilities.

#### **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?

Your comments on Principle 5

#### **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?

Comments on the Principle itself, Requirement 6.2, Requirement 6.3, Requirement 6.4

#### Your comments on Principle 6:

The use of global Factors of Safety is subject to debate regarding the best approach to treat uncertainty in the design. Eurocode 7 is specifying the use of partial factors as the most appropriate way to ensure a safe design (6.2 and 6.3). We would suggest that the standard should avoid national/regional concepts. The role and responsibilities of an Engineer of Record (EOR) has a legal definition in some jurisdictions but not in others (e.g. Sweden and the rest of Europe).

#### Principle 7

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 7 do your comments relate to?

Requirement 7.2,Requirement 7.1,Requirement 7.3,Requirement 7.4,Requirement 7.7,Requirement 7.6,Requirement 7.8,Requirement 7.5

#### Your comments on Principle 7

Please avoid introducing too many abbreviations, those will impact negatively on the readability of the standard. Under this principle only we find TMS, ESMS, CDIV, EOR, OMS, RTFE, DAR and DBR. We take the opportunity to repeat the need to apply proportionality. Not only to avoid requirements on low consequence facilities that go far beyond what is relevant. As stated before, it is also critical that the system is not bogged down by spending expert capacity on low consequence facilities.

#### 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?

Requirement 8.1, Requirement 8.3, Requirement 8.2

#### Your comments on Principle 8

Requirement 8.1 introduces the Observational Method and Requirements 8.2 and 8.3 are basically outlining the steps of the method. We want to raise awareness to the fact that as with any other approach to monitoring, the Observational Method itself is no guarantee against failure, e.g. a sudden failure caused by liquefaction. Whilst it should help to detect e.g. if conditions become more conducive to liquefaction, it is only efficient in so far as all relevant failure modes have been identified and corresponding indicators and criteria have been incorporated.

## **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?

Comments on the Principle itself

#### Your comments on Principle 9

We would like to offer word of caution regarding Principle 9 of elevated decision-making

responsibility. It may seem an unnecessary comment, but it should be noted that a higher organizational level does not necessarily equal higher technical competence. There is a real risk that information is filtered and competence diluted when issues and decisions are "moving up the ladder".

#### Principle 10

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

Which aspects of Principle 10 do your comments relate to?

Your comments on Principle 10:

#### Principle 11

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 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:

We would suggest that the standard should avoid national/regional concepts. The role and responsibilities of an Engineer of Record has a legal definition in some jurisdictions but not in others (e.g. Sweden and the rest of Europe).

#### 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?

## 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?

Comments on the Principle itself

#### Your comments on Principle 15:

This is another area that is regulated by legislation in some (most) jurisdictions (e.g. Sweden). If the standard is to prescribe both ERPs and EPRPs there should be a clearer distinction/differentiation.

#### 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?

Which aspects of Principle 17 do your comments relate to? Comments on the Principle itself

#### Your comments on Principle 17:

Disclosure of information and consultation with stakeholders is a matter that is regulated by legislation in some jurisdictions (e.g. Sweden).

#### 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:

The draft standard as it has now been published is longer and goes significantly deeper in detail than what we expected (contacts with other stakeholders show that others have made the same observation). It should be considered if the standard has the chance of a greater potential impact if it stays more focused, with more emphasis on "what" rather than details on "how". We note that many words and requirements in the proposed standard are open for interpretation. This may be illustrated by the fact that we have heard experts say that no mining company exists that complies with all requirements of this draft standard and that meeting them will be extremely difficult and costly, while other experts state that serious operators are already fu

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 main challenges will be the broader uptake across the sector globally, including e.g. China and Russia, and the issue of capacity and available expertise. There is a real risk that the companies that are least dependent on external support will absorb available resources (e.g. for their ITRBs and EORs).

## 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)?

No

#### Please explain why and/or what is missing:

In addition to comments on specific Principles/Requirements we would like to comment on Annex 2 and the classification matrix. The weighting of consequences does not correspond to how we (Swedish mining sector and authorities) evaluate consequences, specifically "loss of life" vs economic and social consequences. In contrast to the draft standard, 10 people dead would in Sweden be considered a more serious consequence than 1000, or even 5000, people losing their job temporarily. We think that this is an additional reason why there is a need to review the criteria in the matrix.

## 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 was not in response to one of the questions above)

Attachment 1 reference (if applicable)

Attachment 2 reference (if applicable)