

# Consultation response

## *Part 1: Your details*

**Original language of response:** English

**Name:** Ann E. Cohen, Senior Staff Attorney

**Country of residence:** United States

**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:** Non-governmental organization (NGO) – National

**If 'Other', please specify below:**

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

**Please give the name of the organization:** Minnesota Center for Environmental Advocacy

**Your level within the organisation:** Other

## *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?**

Partially

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

Comments on the Principle itself

#### **Your comments on Principle 1**

Comment 1-1: We support requirements 1.1- 1.4, but deem it essential that the standard state that information necessary to characterize a site and mine proposal and stakeholders must be gathered before the mine is allowed to start earth-disturbing activities. Comment 1-2: As a corollary of the above, to ensure the adequacy of information about the Tailings Storage Facility (TSF), the miner should be required to assume that all indicated and measured ore is mined over the life of the TSF to avoid mine stages that were not subject to the initial analysis (i.e., to avoid a “starter mine” with subsequent retrofits necessitated by continued mining).

#### *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 2.4, Requirement 2.3, Requirement 2.2, Requirement 2.1, Requirement 2.6, Requirement 2.5

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

Requirement 2.1: We support a standard that would prohibit upstream design dams for all tailings classified as susceptible to liquefaction failure. Requirement 2.2: We fully support the need for independent review. Requirement 2.3: We support requirement 2.3, but believe that a clearer statement of what constitutes "meaningful engagement" is needed. "Meaningful engagement" must be defined to include that all interested persons (1) have the right to review all information developed in relation to the proposed project, (2) opportunities to comment on the adequacy of that information, and (3) opportunities to challenge that information or decisions based on that information in a neutral forum. We believe that the knowledge base for the proposed mine must include information addressing uncertainties arising out of climate change. Without regard to economics, the standard should call for the miner to identify the "least-risk" site/technology for the particular mine. If the miner believes that this least risk option is economically infeasible, the miner should have the burden to establish why the mine should be permitted to proceed with a cheaper more-risky site/technology. Requirement 2.4: We support requirement 2.4, but believe that the best mechanism to ensure that updated impact information is considered is a requirement for regular repermitting of the mining facility on a 5- or 10-year cycle. Requirements 2.5-6: We support requirements 2.5 and 2.6, but believe that updates to financial assurance should be done annually or (at a minimum) upon the mandated repermitting of the mining facility. Financial assurance must cover "contingency action" costs including the cost of tailings basin failure.

## **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**

We support the need to engage affected or interested persons at all stages of the tailings facility lifecycle, but note that the appropriate mechanism is to require the miner to re-apply for the permit on a regular basis. We further note that the "tailings facility lifecycle" must be defined upon first permitting so that the affected or interested persons know how long the facility will be in use and how much material will ultimately be managed in the facility. As noted above, the miner must assume that all indicated and measured resources are mined, so that the size of the facility can be estimated on the basis of reasonable assumptions of future mining operations and growth. The amount of annual processing must be defined. We

support the classification of all tailings facilities as posing “extreme” consequences that the miner must rebut, in particular by demonstrating that alternative tailings technologies are infeasible. We would support a standard that would state that upstream design dams are inappropriate for all tailings classified as likely to be susceptible to liquefaction failure. We would further support a standard that would require lining of any TSF that stores reactive tailings to prevent groundwater pollution. We support the ongoing use “of an updated knowledge base, consideration of alternative tailings technologies, robust designs, and well managed construction and operation processes to minimize the risk of failure.” By requiring that a TSF be re-permitted on a regular basis, the regulatory agency and the miner will have to demonstrate to affected persons that the facility reflects the latest understanding of tailings basin design and risk evaluation techniques. We support the recognition that tailings facilities are dynamic engineered structures that must be updated as they are built. However, to reduce the need for re-engineering TSF that are already in use, the standard must require that the initial design address all probable mining that would occur in the area based on both measured and indicated mineral reserves, at least. By requiring the initial design to address all reasonably identified mineral reserves, the problem created by unanticipated expanded uses, and the need to “retrofit” a TSF to address those uses, is avoided. TSF design must be transparent as to the duration and volume of its likely use.

### **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 support the presumption but do not support the conditions under which a miner can avoid the presumption. Obviously, a TSF's risk grows as its size increases. However, to ensure that a safe design will be employed as the TSF grows, the TSF must be started with the safest design, not retrofitted to that design later. The fact that it might be “feasible” to implement a safer design later does not mean that it is “prudent” to do so or that the retrofitting will be fully as safe as what could have been designed initially.

#### **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?**

Comments on the Principle itself, Requirement 5.1

**Your comments on Principle 5**

As noted above, we support the need for a robust design that integrates the knowledge base and minimizes risk of failure for all stages of the tailings facility lifecycle. We further support a requirement that the design address the volume and duration of the TSF based on reasonably certain mineral resources that are likely to be mined once mining commences, and not simply the starting mine proposal. Any mine design that does not account for likely future mining must be rejected. We support requirement 5:1, but believe that the miner must be required to implement alternative options that minimize the amount of tailings and water placed in external tailings facilities. If such external TSFs are necessary, they must be subject to the requirements in 5.2 – 5.6. Closure design must include elements relating to the return of ecological services. The miner should be required to return ecological services to the extent possible, and the TSF must be reintegrated into the natural landscape to the extent possible.

### ***Principle 6***

**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 6 do your comments relate to?**

Requirement 6.1

**Your comments on Principle 6:**

The requirement in 6.1 should be for the miner to identify design alternatives that will reduce risk for all stages of the tailings facility lifecycle and for all credible failure modes.

### ***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 7.1

**Your comments on Principle 7**

We support the 7.1 requirement, but the phrase “design intent” introduces unnecessary uncertainty. The requirement must be for the facility to be built in accordance with the design. If changes are necessary, the changes should be made through formal amendments, which is the process suggested in requirement 7.5. We support the requirement that the miner hire independent senior technical reviewers, but ensuring independence is difficult. To ensure independence, the miner should pay for the independent senior technical reviewer, but a neutral third party should select the technical reviewer. In the alternative, a technical reviewer should be limited to one term of service, ensuring there is no incentive to please the miner to ensure future work.

### ***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?**

Requirement 8.1,Requirement 8.3,Requirement 8.2,Requirement 8.4

**Your comments on Principle 8**

We support requirements 8.1-8.4, subject to the condition that the performance monitoring program and performance objectives, indicators, criteria and parameters should be made part of the permit, and not developed later. The data required in requirement 8.3 should be available at the time the facility is re-permitted, so that the regulatory authority and the public can review it.

**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?**

**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?**

**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?**

Partially

**Which aspects of Principle 11 do your comments relate to?**

Requirement 11.3,Requirement 11.1,Requirement 11.2,Requirement 11.4,Requirement 11.5

**Your comments on Principle 11:**

We support regular updating of risk assessments and internal audits. We support the requirement that a senior independent technical reviewer conduct a periodic review. This review should coincide with re-permitting so that the information is available to regulatory authorities and the public before continued use of the facility is authorized.

### **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:**

See prior comments regarding methods to ensure the independence of reviewers.

### **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?**

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?**

Partially

**Which aspects of Principle 14 do your comments relate to?**

Requirement 14.3, Requirement 14.1, Requirement 14.2, Requirement 14.4

**Your comments on Principle 14:**

We fully support the elements of this principle, but note that it is also important to ensure that regulatory authorities also have a process for receipt of comments and complaints about a facility.

## **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?**

Partially

**Which aspects of Principle 16 do your comments relate to?**

Comments on the Principle itself

**Your comments on Principle 16:**

As this addresses post-disaster activities, it does not prevent such actions from occurring, except insofar as 16:5 requires post-failure analysis. As post-failure analysis is critical, the standard should place more emphasis and include more detail on this aspect of TSF management.

**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?**

Yes

**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**

**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 standard should include principles applicable to regulatory authorities. The following principle should be included. First, state agencies that perform regulatory functions should be separate from state agencies that promote mining as part of economic development to avoid a conflict of interest. Second, state regulations should provide affected persons with an opportunity to challenge state decisionmakers before a neutral tribunal, either administrative or judicial. Finally, state agencies must have both the professional staff and the authority to carry out a robust and independent regulatory function that is not wholly dependent on the miner for information about mining conditions.

**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:**

Unless state and local governments require these principles to be implemented through a robust permitting (and repermitting process), the improvements that the standards would create will be lost after the facility moves into the operating phase.

*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:**

As noted above, the standard must be implemented in parallel with improvements in regulatory processes.

***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)*