Consultation response

Part 1: Your details

Original language of response: English

Name: Gord Leavoy

Country of residence: Canada

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: Kirkland Lake Gold

Your level within the organization: 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?

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?

Which aspects of Principle 2 do your comments relate to?

Your comments on Principle 2

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?

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?

Which aspects of Principle 4 do your comments relate to?
Requirement 4.1, Requirement 4.2

Your comments on Principle 4
Requirement 4.1
This rebuttable presumption is likely to have a chilling effect on projects. Placing the onus on Engineers to rebut the “Extreme” presumption will discourage them from doing so for liability concerns. Over designing tailings dams will add cost and could prevent otherwise viable projects from proceeding. Principle 6 addresses the classification and design requirements. If Operators follow Principle 6 there is no need for requirement 4.1.
Requirement 4.2
Given our comments on Requirement 4.1, Requirement 4.2 would not be required.

**Principle 5**

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 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?

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?

Which aspects of Principle 7 do your comments relate to?
Requirement 7.3

Your comments on Principle 7
Requirement 7.3
We suggest limiting the report to whenever there is any change to the tailings facility, its infrastructure or its monitoring system. On lower throughput facilities, there may be no construction or change required for up to 5 years. An annual Construction Records Report where nothing has changed adds no value and needlessly creates administrative burden and costs. Under the Standard all dams would be reclassified every 3 years in any event.

**Principle 8**

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 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?

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?

Which aspects of Principle 10 do your comments relate to?

Requirement 10.3, Requirement 10.4

Your comments on Principle 10:

Requirement 10.3

We do not believe this role needs to be an Engineer, and suggest instead that the Standard mandate a Responsible Tailings Facility Employee with appropriate qualifications, encompassing experience, knowledge and training, compatible with the level of complexity of the tailings facility. For instance, in smaller processing plants where the rate of rise is low due to lower throughput, the role could be filled effectively by a non-engineer. Mandating that the person be an engineer limits the pool of qualified candidates and increases costs unnecessarily.

Requirement 10.4

We do not agree with this proposal, as bonuses or monetary incentives tied to compliance have the potential to produce the opposite result to the one desired. It would run the risk of incentivising employees to overlook or cover up issues for personal gain instead of identifying issues that could result in the loss of the incentive.

**Principle 11**

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 11 do your comments relate to?

Requirement 11.1, Requirement 11.4

Your comments on Principle 11:

Requirement 11.1

Risk assessments should also be transmitted to the Accountable Executive.

Requirement 11.4

We believe the timeline should be 3 to 5 years, not 3 to 10 years.

**Principle 12**

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 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?

Which aspects of Principle 13 do your comments relate to?

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?

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?

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?

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?

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):

Please summarize why you chose this option:

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):

Please summarize why you chose this option:

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)?

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?

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)
ref:0000000967:Q83

Attachment 2 reference (if applicable)
Overview of Standard

Pg. 3- Roll of the State: Good oversight requires a comprehensive understanding of the planning and engineering necessary to build, operate, maintain, and ultimately close tailings facilities. Inspectors with the credibility and authority to issue citations and to mandate appropriate corrective actions must share an understanding of these issues and possess the capacity to identify solutions to reported problems.

The commentary correctly notes that, “Not all States currently have the capacity to carry out these tasks.” We believe regulators will have difficulty competing for talent with the private sector. Furthermore, the suggestion that regulators “possess the capacity to identify solutions” runs the risk of encouraging the regulator to second guess the expertise of all of the other responsible roles identified in the Standard. We don’t believe it is productive to create a situation of competing experts, where the regulator will de facto always have the determinative voice, regardless of whether the regulator is in fact the most knowledgeable. As well, there is a risk of regulators handing out citations, or delaying permits or construction at the expense of the mines based on a competing opinion about appropriate actions. Delays in construction or permits, while experts debate the “right” action to take, will be detrimental to Operators and all stakeholders, and in worst case scenarios could result in dam failures while companies are prevented from taking their proposed actions. We agree the regulator requires appropriate knowledge and experience, but it should be directed at assessing whether the Operator and its advisors have proposed actions that meet appropriate standards and are supported by accepted industry and engineering practices, not reassessing the problem and potential solutions.

Pg. 4- The Role of Other Stakeholders: Local communities and civil society organizations have a strong interest in ensuring that tailings facilities are managed so as to protect public safety and the environment. These stakeholders can best protect this interest if they are given a meaningful role in key decisions that affect them as proposed in this Standard. They are also in a strong position to demand transparency from Operators regarding tailings facility plans, management plans, and other data and information relating to the tailings facility. Insisting on strict compliance with the Standard can also support positive relationships and help foster trust.

While we agree that stakeholders should be able to demand transparency, but we are concerned about giving them too much power to make further demands. Communities in under developed countries, communities opposed to mining, or communities and
groups simply looking for leverage, could seek to use the Standard for political or
financial gains. We believe clarity needs to be added around what constitutes
“meaningful” engagement wherever that term is used in the Standard, or the word
“meaningful” should be deleted. Operators should be able to read the Standard and
know what they need to do to comply, without being exposed to subjective assessment
by parties with particular agendas.

**Requirement 4.1:** Presume the consequence of failure classification of all new tailings facilities
as being ‘Extreme’ (see Annex 2, Table 1: Consequence Classification Matrix) and design,
construct, operate and manage the facility accordingly. This presumption can be rebutted if the
following three conditions are met:

a) The knowledge base demonstrates that a lower classification can be applied for the near
future, including no potential for impactful flow failures; and

b) A design of the upgrade of the facility to meet the requirements of an ‘Extreme’ consequence
of failure classification in the future, if required, is prepared and the upgrade is demonstrated to
be feasible; and

c) The consequence of failure classification is reviewed every 3 years, or sooner if there is a
material change in any of the categories in the Consequence Classification Matrix, and the
tailings facility is upgraded to the new classification within 3 years. This review should proceed
until the facility has been safely closed and achieved a confirmed ‘landform’ status or similar
permanent non-credible flow failure state.

This rebuttable presumption is likely to have a chilling effect on projects. Placing the
onus on Engineers to rebut the “Extreme” presumption will discourage them from doing
so for liability concerns. Over designing tailings dams will add cost and could prevent
otherwise viable projects from proceeding. Principle 6 addresses the classification and
design requirements. If Operators follow Principle 6 there is no need for requirement
4.1.

**Requirement 4.2:** The decision to rebut the requirement to design for ‘Extreme’ Consequence
Classification, shall be taken by the Accountable Executive or the Board of Directors (the
‘Board’), with input from an independent senior technical reviewer or the ITRB. The Accountable
Executive or Board shall give written reasons for their decision.

Given our comments on Requirement 4.1, Requirement 4.2 would not be required

**Requirement 7.3:** Prepare a detailed Construction Records Report at least annually or whenever
there is any change to the tailings facility, its infrastructure or its monitoring system. The EOR
shall sign this report.
We suggest limiting the report to whenever there is any change to the tailings facility, its infrastructure or its monitoring system. On lower throughput facilities, there may be no construction or change required for up to 5 years. An annual Construction Records Report where nothing has changed adds no value and needlessly creates administrative burden and costs. Under the Standard all dams would be reclassified every 3 years in any event.

**Requirement 10.3:** Appoint a site-specific Responsible Tailings Facility Engineer (RTFE) who is accountable for the integrity of the tailings facility, liaises with the EOR, the Operations and the Planning teams and who either reports directly to the Accountable Executive, or via a reporting line that culminates with the Accountable Executive. The RTFE will have a dotted reporting line to mine management to represent the delivery of services to the site.

We do not believe this role needs to be an Engineer, and suggest instead that the Standard mandate a Responsible Tailings Facility Employee with appropriate qualifications, encompassing experience, knowledge and training, compatible with the level of complexity of the tailings facility. For instance, in smaller processing plants where the rate of rise is low due to lower throughput, the role could be filled effectively by a non-engineer. Mandating that the person be an engineer limits the pool of qualified candidates and increases costs unnecessarily.

**Requirement 10.4:** For employees who have a role in the TMS, consider implementing a performance incentive program to include a component linked to the integrity of tailings facilities.

We do not agree with this proposal, as bonuses or monetary incentives tied to compliance have the potential to produce the opposite result to the one desired. It would run the risk of incentivizing employees to overlook or cover up issues for personal gain instead of identifying issues that could result in the loss of the incentive.

**Requirement 11.1:** Conduct and regularly update risk assessments with a qualified multi-disciplinary team using best practice methodologies. Transmit risk assessments to the ITRB for review, and address with urgency all risks considered as unacceptable.

Risk assessments should also be transmitted to the Accountable Executive.

**Requirement 11.4:** A senior independent technical reviewer shall conduct an independent DSR periodically (every 3 to 10 years, depending on performance and complexity, and the Consequence Classification of the tailings facility). The DSR shall include technical, operational and governance aspects of the tailings facility and shall be done according to best practices. The DSR contractor cannot conduct a subsequent DSR on the same facility.
We believe the timeline should be 3 to 5 years, not 3 to 10 years.

**Glossary and notes**

There are references in the Standard to “closed” facilities but no definition. We believe the addition of a definition would add clarity to the distinction from an Existing Facility.

**Designer of Record:** Another professional engineer designated by the Engineer of Record to design the tailings facility.

We suggest revising to “Another professional engineer designated by the Operator or Accountable Executive and approved by the Engineer of Record to design the tailings facility.”

**Responsible Tailings Facility Engineer:** An engineer appointed by the Operator to be responsible for the tailings facility. The RTFE must be available at all times during construction, operations and closure. The RTFE has clearly defined, delegated responsibility for management of the tailings facility and has appropriate qualifications compatible with the level of complexity of the tailings facility. The RTFE is responsible for the scope of work and budget requirements for the tailings facility, including risk management. The RTFE may delegate specific tasks and responsibilities for aspects of tailings management to qualified personnel.

We suggest revising to **“Responsible Tailings Facility Employee:** An employee appointed by the Operator to be responsible for the tailings facility. The RTFE must be available at all times during construction, operations and closure. The RTFE has clearly defined, delegated responsibility for management of the tailings facility and has appropriate qualifications compatible with the level of complexity of the tailings facility. The RTFE is responsible for the scope of work and budget requirements for the tailings facility, including risk management. The RTFE may delegate specific tasks and responsibilities for aspects of tailings management to qualified personnel.”

**Consequence classification**

Pg.30: *This Standard requires that tailings facilities be designed for the most severe level in the Consequence Classification Matrix, unless it can be demonstrated that a lower classification is appropriate. If this is demonstrated, it is also required that the design and construction be such that a future upgrade of the facility to a higher classification remains feasible. This approach recognizes that, given the longevity of tailings facilities, and the potential for population growth, in-migration and economic development downstream of a tailings facility, the consequences of a potential failure are likely to increase over time. Downstream development is*
not within the exclusive control of Operators, and in some cases is accelerated by the economic opportunities that the mine brings. The Standard addresses the fact that an adequate design and construction at one point in time may be rendered inappropriate and it could be difficult and/or costly to upgrade later if that is not considered during initial planning and design.

As stated earlier in reference to Requirement 4.1, we disagree with the rebuttable presumption. While we agree that point in time assessments may become outdated, there are robust requirements in the standard for design, operation, monitoring, review and responsive action, that adequately address potential changes over time and make the presumption unnecessary.

**Consequence Classification Matrix**

We suggest adding another column that includes the impact on the Operator. For instance, if the failure of a dam could bankrupt an Operator, this should be taken into consideration in the design regardless of the consequence classification relative to the public.

Gord Leavoy  
Vice President  
Mineral Processing