Consultation response

Part 1: Your details

Original language of response: English

Name: PDAC

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: Other

If 'Other', please specify below: Mineral industry association

Are you responding on behalf of an organization? Yes

Please give the name of the organization: Prospectors and Developers Association of Canada

Your level within the organisation: Other

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?

Your comments on Principle 4

**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?

Your comments on Principle 7

**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?

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?

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?

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
PDAC Comments: Global Tailings Standard Draft for Public Consultation

As the national voice of Canada’s mineral exploration and development community, the Prospectors & Developers Association of Canada (PDAC) takes an active interest in various initiatives that shape the landscape within which the mineral industry operates. Canada’s exploration, development and mining industry generates significant economic and social benefits in remote areas, Indigenous communities, and large cities across Canada. The mineral industry employs nearly 634,000 workers across the country, and contributes more than 5% to Canada’s nominal GDP (direct and indirect). Valued at $97 billion in 2017, mineral exports accounted for 19% of Canada’s total domestic exports. The mineral industry is also a proven leader in building relationships and partnerships with Indigenous peoples. It is the largest private-sector industrial employer, on a proportional basis, of Indigenous people in Canada and a key partner of Indigenous businesses. Our country is rich in mineral resources and has been a world leader in the discovery, production and processing of minerals and metals needed to sustain modern society and improve the quality of life of the world’s growing middle-class, and central to enabling the transition to a lower carbon economy. Furthermore, Canadian mineral exploration and mining companies have a significant presence around the world. The Canadian mineral sector operates in more than 100 countries globally and is considered to be a global leader in many respects. Through leading responsible practices, environmental and conservation initiatives, and transformative and lasting economic benefits, Canadian exploration and mining projects have a direct, significant positive impact on host countries and communities.

PDAC supports the objective of the safe management of tailings storage facilities and appreciates the work of the Global Tailings Review. Given that a number of the proposed requirements in the Global Tailings Standard: Draft for Public Consultation (“Draft Standard”) could apply, to some degree, to the planning and design phases of the life cycle of tailings facilities there is the potential to impact the operations of junior exploration companies. On behalf of our 7,500 members, PDAC appreciates the opportunity to provide comments and feedback on the Draft Standard. Following a review of the Draft Standard, PDAC would like to submit the following comments and looks forward to future engagement.

PDAC Comments

PDAC’s comments on the Draft Standard are centred on the potential implications for junior exploration companies and, as such, it is important to consider the contextual realities of mineral exploration and the companies that undertake the bulk of this work in the mineral sector.

Unlike large established mining companies, exploration companies generate no revenue and fund the bulk of their activities primarily by issuing shares. Attracting financing for exploration activities is very challenging and has become increasingly difficult over the last five years. Further, most exploration companies are typically small businesses, with some projects involving only 4-6 employees. Any uncertainty or inefficiency that exists with respect to standards or regulatory requirements is especially amplified for exploration companies. Mineral exploration is the first stage of the mineral development cycle. It is a process by which a prospector or company explores for a mineral deposit and, over many years, evaluates it to determine if there is an economically viable way to extract required minerals.

Mineral exploration involves a high degree of risk: many exploration programs never proceed beyond the preliminary or “grass roots” stage. The probability that a project will become a mine is 1 in 10,000 for an early exploration project and roughly 1 in 1,000 for a drilling program. While major, established mining companies may engage in some exploration work, these larger companies are more focussed on the extraction and processing of ore in an operating mine. Larger companies often purchase advanced or later stage exploration projects from small junior exploration companies. For the most part, exploration activities are conducted by these small exploration companies, which account for nearly 70% of major discoveries in Canada. Engaging
exclusively in exploration activities means that exploration companies do not actually produce anything—leaving them with no revenue to fund their ongoing operations. Instead, these companies rely almost entirely on equity financing to fund their exploration projects. While an exploration project does not involve the extracting and processing of ore, a company with a project in the advanced exploration stage has invested a considerable amount of money in the project over many years—almost all of which is raised by selling its stock. It is with these contextual realities in mind that PDAC presents the following considerations for the draft Global Tailings Standard.

**Application of the Standard**

Throughout the Draft Standard it is difficult to identify the specific responsibilities and requirements for various actors along specific stages of the mineral development sequence. The Principles and Requirements in the Draft Standard currently apply generally and are not tailored to the unique and distinct stages of a project and, subsequently the type of proponent undertaking different types of work, such as scoping studies or pre-feasibility studies, at various stages in the project cycle. This has implications on the ability for proponents—particularly junior exploration companies—to adopt the Standard, uptake and use of the Standard and on the overall success of the Standard.

**Recommendation:**

It is recommended that the Standard more clearly articulate the responsibilities for various actors, including junior exploration companies, along specific stages of the mineral development. In order to achieve uptake and success of the Standard, it is important to identify which of the Principles and Requirements apply at various stages of projects, with consideration of the nature of the proponent.

**Definition of Operator**

The current text of the draft standard defines an operator as, “any person, corporation, partnership, owner, affiliate, subsidiary, joint venture, or other entity, including State agency that operates or controls a tailings facility.” Under this definition, the draft standard excludes junior exploration companies as they do not operate or control tailings facilities. However, the Draft Standard also notes that the Standard would apply to planning phases which would therefore be relevant to exploration companies that are undertaking scoping and pre-feasibility studies and advancing their exploration projects towards future development.

**Recommendation:** As with above, greater clarity is needed on who will be subject to the standard, and how the Standard applies throughout the entirety of a project life cycle. Explicit mention of how the Standard applies to each stage of a project life cycle would be beneficial and help ensure that the Standard is applied appropriately.

**Capacity Challenges for Exploration Companies**

Given the challenges faced by junior exploration companies with respect to raising financing for their projects and the general small size of exploration teams, implementing the Standard as is would have significant capacity-related impacts on junior exploration companies. The Draft Standard as currently written is best suited for mid to major mining companies which possess greater funding and staffing capabilities than juniors.

**Recommendation:** Should the Standard apply during advanced exploration projects and, by extension, to junior exploration companies, as implied by the language regarding the planning phase of a tailings facility, consideration should be given to the impact this would have on these companies, including financial and human resources. Each of the applicable Principles and associated Requirements should outline specific actions that are tailored to junior exploration companies and their position within the project lifecycle. Further, given their capacity constraints, consideration should be paid to supporting exploration companies in executing on the Principles and Requirements through information resources and guidance.

**Clarity on Expectations**
The language used throughout the Draft Standard produces unclear expectations around how companies are to fulfill the requirements of the Standard. Additionally, much of the terms used throughout the document, such as “regularly update”, are open for interpretation; this will inevitably create issues between implementers and reviewers.

**Recommendation:** Greater clarity is needed on who the Standard applies to and how implementers should uphold the Standard. Open ended language should be replaced with clear deadlines, processes, or be clearly defined. In addition, consideration should be paid to identify various information resources and guidance to support companies in their implementation of the Standard.

PDAC sincerely appreciates the efforts of the Global Tailings Review and the opportunity to provide feedback on Global Tailings Standard Draft for Public Consultation and hope that our concerns and recommendations will be given due consideration.

*Attachment 1 reference (if applicable)*
ref:0000000933:Q83

*Attachment 2 reference (if applicable)*
December 17, 2019

**PDAC Comments: Global Tailings Standard Draft for Public Consultation**

As the national voice of Canada’s mineral exploration and development community, the Prospectors & Developers Association of Canada (PDAC) takes an active interest in various initiatives that shape the landscape within which the mineral industry operates. Canada’s exploration, development and mining industry generates significant economic and social benefits in remote areas, Indigenous communities, and large cities across Canada. The mineral industry employs nearly 634,000 workers across the country, and contributes more than 5% to Canada’s nominal GDP (direct and indirect). Valued at $97 billion in 2017, mineral exports accounted for 19% of Canada’s total domestic exports. The mineral industry is also a proven leader in building relationships and partnerships with Indigenous peoples. It is the largest private-sector industrial employer, on a proportional basis, of Indigenous people in Canada and a key partner of Indigenous businesses. Our country is rich in mineral resources and has been a world leader in the discovery, production and processing of minerals and metals needed to sustain modern society and improve the quality of life of the world’s growing middle-class, and central to enabling the transition to a lower carbon economy. Furthermore, Canadian mineral exploration and mining companies have a significant presence around the world. The Canadian mineral sector operates in more than 100 countries globally and is considered to be a global leader in many respects. Through leading responsible practices, environmental and conservation initiatives, and transformative and lasting economic benefits, Canadian exploration and mining projects have a direct, significant positive impact on host countries and communities.

PDAC supports the objective of the safe management of tailings storage facilities and appreciates the work of the Global Tailings Review. Given that a number of the proposed requirements in the *Global Tailings Standard: Draft for Public Consultation* ("Draft Standard") could apply, to some degree, to the planning and design phases of the life cycle of tailings facilities there is the potential to impact the operations of junior exploration companies. On behalf of our 7,500 members, PDAC appreciates the opportunity to provide comments and feedback on the Draft Standard. Following a review of the Draft Standard, PDAC would like to submit the following comments and looks forward to future engagement.

**PDAC Comments**

PDAC’s comments on the Draft Standard are centred on the potential implications for junior exploration companies and, as such, it is important to consider the contextual realities of mineral exploration and the companies that undertake the bulk of this work in the mineral sector.

Unlike large established mining companies, exploration companies generate no revenue and fund the bulk of their activities primarily by issuing shares. Attracting financing for exploration activities is very challenging and has become increasingly difficult over the last five years. Further, most exploration companies are typically small businesses, with some projects involving only 4-6 employees. Any uncertainty or inefficiency that exists with respect to standards or regulatory requirements is especially amplified for exploration companies. Mineral exploration is the first stage of the mineral development cycle. It is a process by which a prospector or company explores for a mineral deposit and, over many years, evaluates it to determine if there is an economically viable way to extract required minerals.
Mineral exploration involves a high degree of risk; many exploration programs never proceed beyond the preliminary or “grass roots” stage. The probability that a project will become a mine is 1 in 10,000 for an early exploration project and roughly 1 in 1,000 for a drilling program. While major, established mining companies may engage in some exploration work, these larger companies are more focussed on the extraction and processing of ore in an operating mine. Larger companies often purchase advanced or later stage exploration projects from small junior exploration companies. For the most part, exploration activities are conducted by these small exploration companies, which account for nearly 70% of major discoveries in Canada. Engaging exclusively in exploration activities means that exploration companies do not actually produce anything – leaving them with no revenue to fund their ongoing operations. Instead, these companies rely almost entirely on equity financing to fund their exploration projects. While an exploration project does not involve the extracting and processing of ore, a company with a project in the advanced exploration stage has invested a considerable amount of money in the project over many years – almost all of which is raised by selling its stock.

It is with these contextual realities in mind that PDAC presents the following considerations for the draft Global Tailings Standard.

**Application of the Standard**
Throughout the Draft Standard it is difficult to identify the specific responsibilities and requirements for various actors along specific stages of the mineral development sequence. The Principles and Requirements in the Draft Standard currently apply generally and are not tailored to the unique and distinct stages of a project and, subsequently the type of proponent undertaking different types of work, such as scoping studies or pre-feasibility studies, at various stages in the project cycle. This has implications on the ability for proponents – particularly junior exploration companies – to adopt the Standard, uptake and use of the Standard and on the overall success of the Standard.

**Recommendation:**
It is recommended that the Standard more clearly articulate the responsibilities for various actors, including junior exploration companies, along specific stages of the mineral development. In order to achieve uptake and success of the Standard, it is important to identify which of the Principles and Requirements apply at various stages of projects, with consideration of the nature of the proponent.

**Definition of Operator**
The current text of the draft standard defines an operator as, “any person, corporation, partnership, owner, affiliate, subsidiary, joint venture, or other entity, including State agency that operates or controls a tailings facility.” Under this definition, the draft standard excludes junior exploration companies as they do not operate or control tailings facilities. However, the Draft Standard also notes that the Standard would apply to planning phases which would therefore be relevant to exploration companies that are undertaking scoping and pre-feasibility studies and advancing their exploration projects towards future development.

**Recommendation:** As with above, greater clarity is needed on who will be subject to the standard, and how the Standard applies throughout the entirety of a project life cycle. Explicit mention of how the Standard applies to each stage of a project life cycle would be beneficial and help ensure that the Standard is applied appropriately.
Capacity Challenges for Exploration Companies
Given the challenges faced by junior exploration companies with respect to raising financing for their projects and the general small size of exploration teams, implementing the Standard as is would have significant capacity-related impacts on junior exploration companies. The Draft Standard as currently written is best suited for mid to major mining companies which possess greater funding and staffing capabilities than juniors.

Recommendation: Should the Standard apply during advanced exploration projects and, by extension, to junior exploration companies, as implied by the language regarding the planning phase of a tailings facility, consideration should be given to the impact this would have on these companies, including financial and human resources. Each of the applicable Principles and associated Requirements should outline specific actions that are tailored to junior exploration companies and their position within the project lifecycle. Further, given their capacity constraints, consideration should be paid to supporting exploration companies in executing on the Principles and Requirements through information resources and guidance.

Clarity on Expectations
The language used throughout the Draft Standard produces unclear expectations around how companies are to fulfill the requirements of the Standard. Additionally, much of the terms used throughout the document, such as “regularly update”, are open for interpretation; this will inevitably create issues between implementers and reviewers.

Recommendation: Greater clarity is needed on who the Standard applies to and how implementers should uphold the Standard. Open ended language should be replaced with clear deadlines, processes, or be clearly defined. In addition, consideration should be paid to identify various information resources and guidance to support companies in their implementation of the Standard.

PDAC sincerely appreciates the efforts of the Global Tailings Review and the opportunity to provide feedback on Global Tailings Standard Draft for Public Consultation and hope that our concerns and recommendations will be given due consideration.