

# Boliden’s Tailings Governance Commitment

Tailings are the solid material remaining after the recoverable minerals have been extracted from mined ore. Together with process water and runoff, tailings are handled in a tailings storage facility (TSF).

## Boliden believes in:

Safety is the highest priority during the whole TSF lifecycle. Boliden has zero tolerance for human fatalities and strive for zero harm to people and the environment by minimizing the risk to “as low as reasonably practicable (ALARP)” for TSF failure.

## Boliden recognizes that:

- Tailings production is inherent to mining and mineral processing. These materials require engineered solutions for their long-term safe storage and sustainable management.
- TSF failures are unacceptable, and owners and operators of such facilities should ensure that systems, standards, and resources are in place to ensure safe management.
- Emergency preparedness and planning is an integral part of tailings management.
- Potential for TSF failures must be considered and addressed through a facility’s lifecycle through a risk informed approach. This includes planning, design, construction, operation, and closure.
- Each TSF has unique features. Site conditions, mineral characteristics and other aspects of each mine site require tailored, appropriate tailings technology and storage solutions. Although no single design or operating practice can be applied universally, the industry continually seeks to improve, develop techniques, and apply new technologies where appropriate.

## Boliden is committed to:

### 1. Accountability, Responsibility and Competency

Accountabilities, responsibilities, and associated competencies are defined to support appropriate tailings management, meaning:

- 1.1. Accountability for the overall governance of tailings facilities resides with the owners and operators.
- 1.2. Organizational structures and roles are established to support management of TSF risks and governance accountability.
- 1.3. Communication processes are maintained to ensure that all personnel have access to relevant information for their role and understand their responsibilities. Training is conducted to maintain the currency of knowledge and skills.
- 1.4. Role competency and experience requirements are defined for critical roles within the established organizational structures and purchase of external services.

### 2. Proper Planning and Resourcing

The financial and human resources needed to support continued TSF management and governance are maintained throughout a facility’s life cycle, meaning:

- 2.1. TSF operating and capital costs, and human resource needs, are included in relevant business planning processes.
- 2.2. Resources necessary to implement and maintain activities within this governance framework are provided.

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Anna Brandhorst-Satzkorn	Tailing Governance Commitment	2021-12-01
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### 3. Effective Risk Management

The identification, control, verification, and mitigation of risks associated with the TSF is essential for the integrity of the facility, meaning:

- 3.1. Risk controls and their associated verification activities are identified based on failure modes and their associated consequences and evaluated on a TSF specific basis considering all phases of the TSF life cycle. Risks can be both technical and organizational in nature.
- 3.2. Suitably qualified and experienced experts are involved in TSF risk identification and analysis, as well as in the development and review of effectiveness of the associated controls.
- 3.3. Performance criteria are established for risk controls and their associated monitoring, reporting and verification activities.
- 3.4 Identified risks are prioritized and mitigated to reduce the risk of failure as low as reasonably practicable (ALARP).

### 4. Effective Change Management

Risks associated with changes are assessed, controlled, and communicated to avoid inadvertently compromising TSF integrity, meaning:

- 4.1. Processes are applied that involve the identification, assessment, control, and communication of risks to TSF integrity arising from both internally and externally driven change, to avoid introducing uncertain, unacceptable, and/or unmanaged risks.
- 4.2. Documents and records that support TSF planning, design, construction, operation, surveillance, management, and governance are maintained and kept suitably current and accessible.

### 5. Comprehensive Emergency Preparedness and Swift Response

Processes are in place to recognize and respond to potential failure of TSFs and mitigate the potential impacts arising from a TSF failure, meaning:

- 5.1. Action thresholds and their corresponding response to early warning signs of potential catastrophic failure are established.
- 5.2. Emergency preparedness and response plans are established to commensurate with potential failure consequences. Such plans specify roles, responsibilities, and communication procedures.
- 5.3. Emergency preparedness and response plans are periodically tested.

### 6. Regular, Competent Review and Assurance

Internal and external review and assurance processes are in place so that controls for TSF risks can be comprehensively assessed and continually improved, meaning:

- 6.1. Internal performance monitoring and inspections and internal and external reviews and assurance are conducted at regular intervals to commensurate with consequences of TSF failure to evaluate and to continually improve the effectiveness of risk controls.
- 6.2. Outcomes and actions arising from TSF review and assurance processes are recorded, reviewed, closed-out and communicated.
- 6.3. Performance of risk management programs for TSFs is reported to executive management on a regular basis.

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**Boliden will:**

- Apply ethical business practices, sound corporate governance, and promote transparency to support sustainable development.
- Integrate sustainable development in corporate strategy and decision-making processes.
- Implement effective risk-management strategies and systems based on rational science and account for the stakeholder perceptions of risks.
- Pursue continuous improvement in health and safety performance with the goal of zero harm.
- Pursue continuous improvement in environmental performance issues, such as water stewardship, waste management, energy use and climate change.
- Contribute to the conservation of biodiversity and integrated approaches to land-use planning.
- Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner.
- Effectively report and independently verify progress and performance.

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