Teck

Our Approach to Tailings Management

Which Teck sites does this document apply to?

This document summarizes our approach to tailings management. This document applies to all Teck sites and projects, with a focus on operations and legacy sites with major tailings facilities, and on major development projects with proposed large tailings facilities. This does not include operations in which Teck has/had an ownership interest but is not the principal operator.

Tailings Management performance information: See our **Annual Sustainability Report**, available for download on our website. Also see **https://www.teck.com/Tailings/** for further disclosure.

Highland Valley Copper Operations, Canada. 2015.

Background

Tailings and mine waste rock are common by-products of mining practice. They are typically created as mined ore is crushed, ground and/or processed to separate the valuable minerals and create a saleable concentrate product. The waste from this process is called tailings. Due to the nature of the ore separation processes, tailings are commonly in the form of a slurry of fine mineral particles and water. Management of tailings involves storage in a specially designed impoundment called a tailings facility.

Tailings facilities are historically well managed and incidents are very rare; however, a tailings incident has the potential to have a devastating impact on communities, local economies and the surrounding environment. The main focus of management of tailings facilities is on ensuring that failures do not occur.

Tailings storage facilities at all of Teck's operating and closed sites meet or exceed regulatory requirements, and responsible management of tailings and waste rock is critical for our company. We are continually improving the management of our facilities by developing and incorporating best practices.

Teck's overall governance approach to tailings aims to:

- Maintain the capacity of our facilities
- Ensure the qualifications of the people responsible for ensuring safety
- Safeguard our approach from complacency

We use these three framing concepts to evaluate personnel, projects, operations, and legacy initiatives and programs.

Governance and Accountability

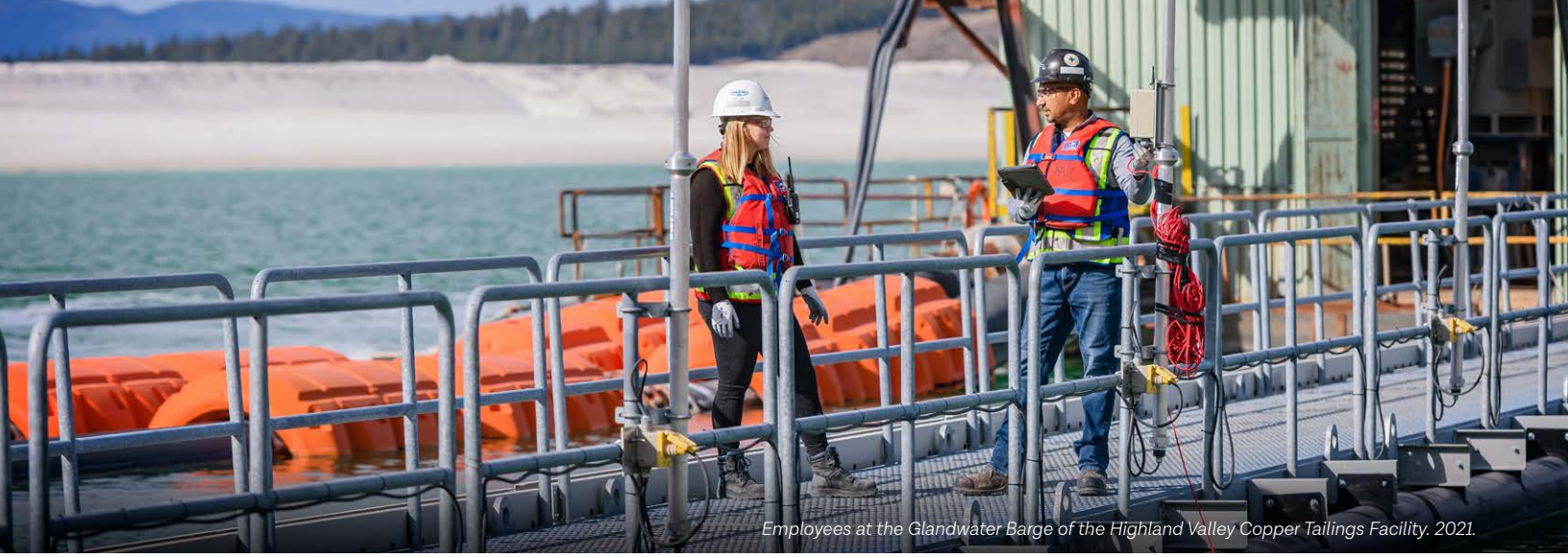
Accountability and Resourcing

The Board of Directors, through its Safety and Sustainability Committee, oversees implementation of our Health, Safety, Environment and Community (HSEC) Management Standards and tailings guidance, including policies, systems, performance and auditing functions. Our activities associated with tailings and waste management are reported to the Safety and Sustainability Committee of the Board and/or to our HSEC Risk Management Committee.

The following senior corporate leaders are involved in implementing the management of tailings and mine waste:

- The Chief Operating Officer, who is also Teck's Accountable Executive for tailings management, reports directly to the Board on issues related to tailings
- The Senior Vice President (SVP), Sustainability and External Affairs reports directly to the CEO and is responsible for sustainability, health and safety, environment, community, and Indigenous affairs, including tailings management
- The Vice President, Environment reports to the SVP, Sustainability and External Affairs and oversees compliance with environmental standards for projects, operations and our legacy properties, and regularly reviews environmental performance risks and strategic issues, including tailings management, biodiversity, water, air and energy

GRI Indicators: 2-23, 2-24, 2-25, 2-26, 2-27, 2-28, 2-29, 3-3, 306, G4-DMA (Mining and Metals Sector Disclosures)



Employees at the Glandwater Barge of the Highland Valley Copper Tailings Facility. 2021.

- The Director, Tailings chairs our Tailings Working Group and reports directly to the Vice President, Environment and advises other executives on emerging issues or governance concerns, per the Global Industry Standard on Tailings Management (GISTM)

The Tailings Working Group includes members of our senior management team and tailings, social performance and emergency management subject matter experts from our operations, corporate functional teams and legacy properties department. The group provides oversight and guidance across the organization and conducts reviews to ensure alignment with Teck's governance framework for tailings management.

Policies and Standards

Our Code of Sustainable Conduct outlines our commitment to continually improve our environmental practices, including the safe operation and closure of tailings storage facilities. Teck is also committed to not discharge tailings to rivers or oceans.

Teck's HSEC Management Standards outline the framework for the identification and effective management of HSEC risks and opportunities, including those related to tailings facilities management and mine waste management, and define a process for continual improvement.

Teck's Tailings and Water-Retaining Structures Governance framework provides a consistent company-wide approach to how we manage the risks inherent with tailings. This framework provides clear guidance on roles and responsibilities related to tailings management across all Teck projects, operations and legacy properties.

Memberships, Partnerships and External Commitments

We work with various local, national and international organizations and programs to support improvements in tailings and mine waste management across the industry:

- The Global Industry Standard on Tailings Management (GISTM): Launched in August 2020, this standard sets a high benchmark for improving the safe management of tailings facilities and supports the ultimate goal of zero harm. Teck's existing corporate tailings program mirrors all key aspects of the GISTM related to this goal. In addition, Teck is committed to implementation of the GISTM across our sites. All of our active tailings facilities will be in conformance with GISTM within three years of the standard's launch. A Teck representative was a member of the advisory group that provided input to develop GISTM.
- International Council on Mining and Metals (ICMM): A global industry association that represents leading international mining and metals companies who are required to implement the ICMM 10 Principles, including Principle 6 on Environmental Performance (Performance Expectation 6.3—Tailings Management). ICMM members have committed to GISTM conformance for extreme or very high-potential consequence facilities by August 2023, a commitment Teck makes for all of its active facilities. The ICMM published two key documents in 2021 related to the GISTM, the Good Practice Guide for Tailings Management and the ICMM Conformance Protocol. Teck's tailings experts supported the development of these documents.
- Mining Association of Canada (MAC): A national association that promotes the development of Canada's mining and mineral processing industry. Through MAC, we are committed to implementing the Towards Sustainable Mining (TSM) program, which aids in improving industry performance. MAC's Tailings Management Guideline has been an industry-leading document for more than 20 years and, along with the ICMM Good Practice Guide, has informed Teck's own best practice guidance and procedures.
- Australian Research Council: Teck, along with four universities in Australia and several other mining companies, is supporting the TailLIQ research program that is focused on improving the prediction and understanding of behaviour of tailings liquefaction to avoid tailings facility failures
- Canadian Dam Association: As a member of the Association, Teck's senior technical leaders have provided input to industry guidance on best practices

- The Copper Mark: An assurance framework developed by the International Copper Association in 2019 to promote industry-wide responsible copper production practices and to demonstrate the industry's commitment to green transition

Approach to Tailings Management

Tailings Storage Facilities Management

Tailings facilities can follow a number of designs, based on factors such as the composition of the tailings being stored, geotechnical considerations, precipitation/climate, seismic activity, community preference and environmental protection. See Tailings Management on our website for more information on methods of constructing tailings embankments.

At Teck, tailings storage facilities at all our operations meet or exceed regulatory requirements, including permit and licence conditions and other relevant or appropriate requirements, and we work to continually improve the management of these facilities. Planning, design, construction, operation, decommissioning and closure are carried out in a manner such that:

- Structures are stable
- Solids and water are managed within designated/approved areas
- Facilities comply with regulatory requirements
- Facilities conform to applicable standards, internal policies, industry best practices and the technical guidelines of the jurisdictions in which we operate

We have comprehensive systems and procedures in place for the safe operation and monitoring of tailings facilities that follow best practices, organized around interrelated activities that include:

1. **Surveillance:** Sites employ surveillance systems such as GPS hubs, piezometers, inclinometers, pressure gauges, remote sensing and other technologies to monitor tailings dams, abutments, natural slopes and water levels.
2. **Staff Inspections:** Tailings facilities are inspected by trained operators and expert technical staff as frequently as several times daily, with formal staff inspections at regular prescribed intervals.
3. **Annual Tailings Facility Performance Reviews (AFPRs):** Formal performance reviews are conducted annually by fully licensed and qualified individuals—Engineers of Record—who are vetted by our Tailings Working Group. AFPRs are conducted to review the physical performance of the facility against the design intent and detect any conditions that require attention. The AFPR reports and other information about our tailings facilities, both operating and legacy, are available on our website.
4. **Periodic Dam Safety Reviews (DSRs):** Comprehensive third-party dam safety reviews are conducted by qualified independent engineers as frequently as every three years, based upon the risk profile for each facility. DSRs are conducted to evaluate our conformance with international best practices, our internal policy/standards and applicable regulatory requirements.
5. **Internal Governance Reviews:** Teck's Tailings Working Group conducts internal governance reviews of our active and closed tailings facilities as well as our major tailings projects on a regular basis. Tailings Governance Reviews are carried out every second year at our operations and every third year at our legacy properties by internal subject matter experts. These governance reviews include confirmation that we have the personnel and procedures in place to meet our commitments, and that we are addressing recommendations for continual improvement from our external reviews in a meaningful and timely manner. The governance reviews also evaluate the performance of our Engineers of Record and other external reviewers to look for signs of complacency or lack of succession planning by those outside of Teck who we rely upon as part of our overall management processes.
6. **Independent Tailings Review Boards:** Our operations, legacy facilities and major development projects have Tailings Review Boards made up of senior external independent experts who meet regularly, at least annually, to conduct a third-party review of design, operation, surveillance and maintenance of our storage facilities. The results from the Independent Review Board assessments are communicated directly to senior management
7. **Special Reviews:** After significant global events, such as the Samarco or Brumadinho catastrophic failures in Brazil, Teck takes measures to learn as much as possible from those events and employs additional industry experts outside of independent review boards to evaluate our governance program and to assess whether the root causes of those other events are present in Teck's program.

Antamina, a joint venture operation where Teck is not the operator, has a Tailings Review Board in place that meets the requirements of our governance review process. Teck also provides senior experts to Antamina's Tailings Technical Committee.

Teck is committed to integrating new and innovative technologies as part of our overall tailings management process. We make use of established and emerging dewatering approaches for applicable locations, as well as enhanced surveillance to add to our already extensive monitoring and response program across all of our facilities. Teck understands that "one size does not fit all" when it comes to tailings management and its associated technologies, but by working with targeted vendors, academia and a range of industry experts, our in-house team of experts makes sure that any facility is rigorously evaluated and that the appropriate tailings technologies are employed.

Emergency Planning and Preparedness

Each facility also has a regularly updated detailed Operation, Maintenance and Surveillance manual and a Mine Emergency Response Plan, which are both regularly reviewed and updated. We maintain site-specific tailings management systems that conform to or exceed industry standards of practice, including leading protocols established by MAC-TSM and ICMM, which we report upon publicly.

These systems, which demonstrate leadership and commitment to responsible tailings management practices, were developed through consultation with communities. We also review emergency response plans with our local communities and stakeholders, and undertake community meetings and emergency drills to work through these plans and to discuss our approach to tailings management.

For all high-consequence facilities with credible failure modes, a formal inundation study is conducted to identify any potentially impacted communities and waterbodies in the extremely unlikely event of a tailings incident, in order to evaluate design/mitigation strategies and to assist with emergency planning and response. Teck's programs exist to reduce the likelihood of such events to negligible.

In evaluating potential consequence, Teck bases its evaluation upon the potential environmental, safety and economic effects of a failure. This ranking does not reflect likelihood of failure, but rather provides a tool to assist with facility design and emergency planning. See Our Approach to Emergency Preparedness and Planning for further information.

Transparency and Disclosure

We remain committed to being open and transparent with communities and other stakeholders regarding our tailings facilities. As such, we make information on our approach to tailings management, a detailed list of facilities and copies of recent AFPRs available on our website. We have also provided detailed information about our tailings facilities through responses to various investor requests. We are committed to conform with the GISTM, including disclosing information related to our tailings facilities in line with the GISTM Principle 15 by August 2023. We disclose our tailings facility inventory table annually in our Annual Sustainability Report. We also report any significant incidents[1] related to tailings in our Sustainability Report and share learnings from Teck across the mining industry.

For information about Teck's approach to waste management, including tailings and fine coal refuse, waste rock and overburden, coarse coal refuse, and hazardous and non-hazardous waste, see Our Approach to Responsible Production.

Our Targets and Commitments

We are committed to the safe and environmentally responsible development, operation and management of tailings storage facilities. We continually review our facilities and procedures and are committed to maintaining the highest standard of safety and environmental protection at our operations, including standards set by MAC and ICMM. We aim to have zero significant environmental incidents across the organization.

Our sustainability strategy outlines our goals in relation to continuously improving tailings management at our operations.

Strategic Priority:

- Continue to manage our tailings across their life cycle in a safe and environmentally responsible way

Goals:

- Preferentially consider milling and tailings technologies that use less water, both for new mines and any mine life extensions at existing mines
- Expand the use of digitally connected surveillance technologies to assist in monitoring our tailings storage facilities

For more information on our sustainability strategy goals, see the Sustainability Strategy section of our website.

We report on our performance against indicators and goals related to Tailings Management on an annual basis in our Sustainability Report.

Assurance Related to Tailings Management

At Teck we conduct four types of assurance:

- Audits of operations and business units
- Corporate annual HSEC assurance and mid-year effective checks conducted by Teck's HSEC Assurance team
- Corporate annual internal audits conducted by Teck's Assurance and Advisory team
- External assurance by independent auditors for relevant regulatory and voluntary membership requirements

Following each of these types of assurance, applicable management teams use the results to inform future actions and Teck's five-year planning process.

In addition to the formal external review processes involving independent experts and the internal assessments of performance against our own guidelines and practices noted above, we assess our tailings management practices under MAC's TSM Tailings Management Protocol. Achieving a minimum of a

[1] Teck uses a risk management consequence matrix to determine incident severity, which includes environmental, safety, community, reputational, legal and financial aspects. "Significant incidents" includes incidents assessed as Level 4 or Level 5 based on our risk matrix and guidance.

Level A rating under TSM is a requirement of our HSEC Management Standards. A Level A rating indicates that tailings management practices that meet industry best practice, as defined by the MAC Tailings Guidelines, have been developed and implemented. All of our operations meet or exceed this standard. Several of our facilities reached a verified Level AAA, which indicates excellence and leadership in tailings management, through validation by an external, independent evaluation.

Assurance Related to Tailings Management

Type	Organization	Items Reviewed
External	Mining Association of Canada: Towards Sustainable Mining	• Tailings management policy and commitment • Tailings management system • Assigned accountability and responsibility for tailings management • Annual tailings management review • Operation, Maintenance and Surveillance manual • Mine Emergency Response Plan
External	ISO 14001 External Audits	• Components of the environmental management system at each site
External	ICMM Conformance Protocol	• Conformance against the GISTM across the six topic areas of the Standard: ◦ Communities ◦ Integrated Knowledge Base ◦ Design, Construction, Operation and Monitoring ◦ Management and Governance ◦ Emergency Response Disclosure
External	The Copper Mark	• Issue area 19—Tailings Management
Internal	Teck (risk-based Health, Safety and Environment audits)	• Adherence to regulatory and permit requirements • Effectiveness of controls based on risk profile
Internal	Teck's Tailings Governance Reviews	• Assessment of operational tailings management activities relative to Tailings Governance framework