

## Our Approach to Responsible Production

### Which Teck sites does this document apply to?

This document summarizes our management approach to responsible production and waste management. This document applies to all Teck sites and projects. This does not include operations in which Teck has/had an ownership interest but is not the principal operator.

**Responsible Production performance information:** See our **Annual Sustainability Report**, available for download on our website.



Employee at Trail Operations, Canada, 2019.

## Governance and Accountability

### Background

In the circular economy, waste and pollution are reduced, materials are kept in use and, ultimately, natural systems are regenerated. This means increased demand for reusable and multi-use materials such as metals and minerals. Teck is supporting the global move towards an economy focused on reducing waste and keeping products in use by providing key commodities required for sustainable products and infrastructure: copper, zinc and steelmaking coal.

Teck supports responsible production by providing products that contribute to sustainability while also working to minimize environmental impacts. We process urban ore and secondary sources at our Trail Operations, and we track the products we sell to direct customers through our Materials Stewardship Committee. In addition, we have implemented measures to reduce waste and deleterious elements associated with our products.

### Accountability and Resourcing

The Board of Directors, through its Safety and Sustainability Committee, broadly oversees health, safety, environment and community policies, systems, performance and auditing, including implementation of our Health, Safety, Environment and Community (HSEC) Management Standards. Waste-related incidents are reported as they occur, in monthly company-wide performance reports and on a quarterly basis to the HSEC Risk Management Committee, which is made up of several members of our executive management team. The

following senior leaders are involved in implementing the management of responsible production at the corporate level:

- The Senior Vice President, Sustainability and External Affairs reports directly to the President and CEO and is responsible for sustainability, health and safety, environment, community, and Indigenous affairs, including waste management
- The Senior Vice President, Base Metals—North America and Peru, who reports directly to the Executive Vice President and Chief Operating Officer, is responsible for monitoring and meeting customer expectations for our products, and is an Advisory Committee member for both the International Lead Association and the International Zinc Association
- The Vice President, Environment oversees compliance with environmental standards for projects, operations and our legacy properties, and regularly reviews environmental performance risks and strategic issues, including tailings, biodiversity, water, air, energy and waste
- The Vice President, Risk and Security, who reports directly to the Senior Vice President, Commercial and Legal Affairs, is the Chair of our Materials Stewardship Committee and oversees our materials stewardship strategy

### Policies and Standards

Teck's approach to responsible production and waste management is addressed through several Teck policies and guidance documents, listed below.

## Teck's Policies and Standards relevant to Responsible Production

Our [Code of Sustainable Conduct](#) outlines our commitment to sustainable development, efficient and responsible use of energy, water and other resources, and to responsible material use in our supply chain.

Our [Expectations for Suppliers and Contractors](#) were established to clearly communicate Teck's expectations for suppliers of goods and contractors performing services for or on behalf of Teck. Our HSEC Management Standards and Guidance give general guidance on materials stewardship and mine waste management. Teck's HSEC Management Standards, which put our Charter and Codes into practice, were modelled after the International Organization for Standardization (ISO) management standard 14001, OHSAS 18001 standards and EPA compliance-focused EMS guidance.

We also implement appropriate accreditation schemes to ensure Teck products meet and exceed market access requirements. Teck's Responsible Mineral Sourcing Policy outlines our program for ensuring responsible sourcing of mineral concentrates from mines for our Trail Operations. This program is in compliance with the London Bullion Market Association (LBMA) Responsible Silver program and the London Metal Exchange (LME) Responsible Sourcing program, which are also aligned with the Organisation for Economic Co-operation and Development (OECD) programs for Responsible Supply Chains for Minerals.

All of our operations have waste management aspects in their permits, and several operations have waste-specific policies aligned with their permit requirements.

## Memberships, Partnerships and External Commitments

We work with various industry associations to support responsible materials production and waste management.

- **The Copper Mark:** An assurance framework developed by the International Copper Association in 2019 to promote industry-wide responsible production practices and to demonstrate the industry's commitment to green transition
- **International Council on Mining and Metals (ICMM):** ICMM is a global industry association that represents leading international mining and metals companies who are dedicated to a safe, fair and sustainable mining industry; as a member company, we are required to implement the 10 Sustainable Development Framework Principles, including Principle 8: facilitate and support the knowledge base and systems for responsible design, use, reuse, recycling and disposal of products containing metals and minerals (Performance Expectation 6.4—Pollution and Waste; 8.1 and 8.2—Responsible Production)
- **International Copper Association:** The International Copper Association (ICA) brings together the global copper industry to develop and defend markets for copper and to make a positive contribution to society's

sustainable development goals; the ICA's Joint Due Diligence Standard is applicable to copper, lead and zinc, and ensures compliance with OECD standards for responsible supply chains for minerals

- **International Zinc Association (IZA):** IZA is a non-profit organization that promotes the role that zinc plays in product applications, human health and crop nutrition; we participate in IZA's programs that have a strategic focus in the areas of environment and sustainable development, technology and market development, and communications
- **International Lead Association:** The International Lead Association is dedicated to encouraging the responsible use of lead and its compounds
- **ResponsibleSteel:** A not-for-profit organization, ResponsibleSteel is the steel industry's first global multi-stakeholder standard and certification initiative to support traceability of materials from the mine site through to steel manufacturers; ResponsibleSteel's first Standard was published in November 2019

## Approach to Managing Responsible Production and Waste

Teck is supporting the global move towards an economy focused on reducing waste and keeping products in use by providing key commodities required for sustainable products and infrastructure, which are durable and naturally recyclable.

Teck has long worked towards reducing waste and pollution, keeping products in use and helping to improve the natural environment where we operate.

## Minimizing Waste: Our Approach to Waste Management

We recognize that our activities can generate waste as a result of geology, extraction methods and process efficiencies. While most waste generated through mining is inert, mining waste can include constituents that can have environmental impacts. See the Managing Product Impacts through Materials Stewardship section of this document for information on how these impacts are managed. Teck's Materials Stewardship Committee ensures that Teck products, including potential substances of concern to stakeholders, are marketed to responsible business customers and end users. This includes supporting the development of end-of life schemes to keep such materials from waste streams.

Teck is committed to continually improving our waste management practices so that we can avoid waste at source wherever possible, minimize waste by adopting best operational practices and circularity measures, increase traceability of our products and ensure responsible disposal. A key component to how we manage waste at each operation is ensuring compliance with applicable standards, regulations and permits for treating and recycling waste.

We define waste into two main categories: mineral and non-mineral waste. These are each further divided into several subcategories:

## 1. Mineral Waste:

Based on volume, mineral waste is the most significant type of waste generated by Teck. We characterize mineral waste as waste rock, coarse coal refuse, fine coal refuse from processing ore and raw coal, and tailings. We use internal and external subject matter experts to design our mineral waste storage facilities, based on site-specific conditions and industry good practices. Teck is committed to transparency in reporting, through continual collection and monitoring of mineral waste-related data.

- **Waste Rock:** Waste rock, which is material that is removed to access ores, coal and oil sands, typically contains trace amounts of naturally occurring metals and other constituents. The bulk of waste rock from our operations is placed in areas that are specifically designed to contain the rock. The remainder of the rock that may still have some geochemical concern is placed within tailings storage facilities or used to backfill open pits and underground workings.

Waste rock that is not susceptible to geochemical instability such as oxidation processes, which can lead to metal leaching, is also used for reclamation activities and to construct dams, roads and similar structures. Long-term storage of waste rock is conducted in accordance with closure plans and approved by regulatory authorities. These plans most often include contouring, covering and revegetation to achieve established land use objectives.

- **Coarse Coal Refuse:** Coarse coal refuse is a coarse fraction of raw coal that is separated during processing; it is not currently an economic product. Coarse coal refuse is placed in designated engineered facilities or, if determined to not be susceptible to leaching, it may be used as a construction material. Coarse coal refuse can also be mixed with dewatered fine coal refuse within engineered structures; Teck carries out this practice at several of our operations for storage efficiency and optimal geotechnical performance. Long-term storage of coarse coal refuse is conducted in accordance with regulatory approved closure plans, which most often involves contouring, covering and revegetation to achieve established land use objectives.
- **Tailings and Fine Coal Refuse:** Tailings and fine coal refuse are the finer fractions of the processed mined material that have no economically recoverable commodities. These materials are typically stored in tailings storage facilities. See [Our Approach to Tailings Management](#), as well as our [website](#) for more information.

## Acid rock drainage (ARD)

ARD, also known as acid mine drainage (AMD), is the outflow of acidic water from mining operations, including waste rock, tailings and exposed surfaces in open pits. Teck

has in place a Source Control Program, with a mandate to collate best practice information, assess innovative technologies, and provide our practitioners with an evaluation framework and toolkit to prevent and minimize our impact on water quality, including metals leaching and ARD from mined materials. Where prevention is not possible, we collect and treat ARD in a responsible manner that protects human health and the environment. For details on how we are managing the releases of selenium and nitrate from waste rock in the Elk Valley, please see [Teck's Approach to Water Stewardship](#).

## 2. Non-Mineral Waste:

Non-mineral waste includes waste generated from overall activities such as construction, packaging, maintenance and office activities, but excludes waste generated from extraction and processing, which is further categorized as non-hazardous and hazardous waste. Our strategic intent is to eliminate or reduce the generation of non-mineral waste, to explore long-term viable alternatives, and to divert waste from disposal through reuse and recycling whenever possible. Hazardous and non-hazardous wastes are segregated and disposed of in accordance with material-specific waste management plans and regulatory requirements, to ensure potential impacts on environmental and human health are minimized. For non-mineral wastes, storage and/or disposal is determined based on regulatory requirements, product information provided by vendors, and requirements from waste management suppliers specific to each site's applicable factors.

- **Hazardous waste:** At Teck, waste is considered hazardous if it is defined as such by jurisdictional regulatory regimes. The primary industrial hazardous wastes produced at our operations include waste oil, solvents, antifreeze, paint and batteries. We collect and store hazardous waste in accordance with regulatory requirements in a responsible manner, and licensed contractors recycle or dispose of this waste off-site in line with legislative obligations.
- **Non-hazardous waste:** The most significant types of non-hazardous waste streams include contaminated solids, scrap metal, wood waste, glass, tires, e-waste, cardboard and paper.
- **Industrial Waste:** Industrial waste is a subcategory of non-mineral waste, which includes types of waste generated by industrial processes, and does not include municipal/domestic waste streams. Significant industrial waste streams at Teck include metallurgical waste, sludges, process residuals (i.e., water treatment), haul truck tires, construction and demolition debris, equipment and contaminated soil. We have set a target to dispose zero industrial waste by 2040, and we are working towards establishing site-based industrial waste inventories and plans to turn waste into useful and appropriate products by 2025. Based on these inventories and plans, we will set the final goals for each industrial waste stream aligned to the waste mitigation hierarchy.



Recycling facility, Andacollo, Chile. 2017.

## Teck's Recycling Methods and Definitions

Recycling Definition	Recycling for Value Recovery	Industrial Waste Processing	Domestic Recycling
Teck's Method	Treating materials to create a renewed value for Teck in their new form	Treating end-of-life materials generated from our own operations and from other sources	Recycling of household items such as newspaper, bottles, cans and organics

Recycling is an important aspect of our everyday lives, as it conserves scarce natural resources, reduces the amount of waste that must be burned or buried, and helps to sustain the environment for future generations. We recycle in accordance with international, national, provincial and local requirements, and we aim to exceed these requirements. Continually improving recycling at our operations by identifying and sharing best practices throughout the company is our goal—including ongoing assessments of our recycling and reuse practices.

### Keeping Products in Use and Managing Product Impacts

We process urban ore and secondary sources at Trail Operations, manage deleterious elements, and track metals to direct customers through our Materials Stewardship Committee.

### Processing Secondary Sources at Trail Operations

Our Trail Operations, one of the world's largest fully integrated zinc and lead smelting and refining complexes, is located in southern British Columbia. The metallurgical operations produce refined zinc and lead, a variety of precious and specialty metals, chemicals and fertilizer products. Trail Operations takes in several end-of-life materials and urban ore feeds (lead batteries, alkaline batteries, cathode ray tube glass, zinc ferrites, Waelz oxides) that represent about 20% of the new feed to the lead circuit.

### Managing Product Impacts through Materials Stewardship

In accordance with the ICMM guidance on materials stewardship, we recognize that the value of minerals

and metals to society is maximized when the various stakeholders along the value chain undertake activities that minimize risks, improve efficiency and optimize the life cycle of these products.

We know our products have the potential to impact employees, communities and the environment. That's why we remain committed to stringent product and materials stewardship, and transparency on product impacts. We employ life cycle thinking to understand the potential risks and impacts of our products, beginning with the extraction of raw material from the earth, through to processing, transportation and customer use.

Materials stewardship at Teck is a risk management process to minimize the impact of our products throughout their life cycle on employees, communities and the environment, and to ensure our products satisfy or exceed regulatory and societal needs. This work is conducted primarily by our Materials Stewardship Committee (MSC), who defines and oversees our efforts and is responsible for:

- Understanding the actual or potential risks and impacts of our products
- Making recommendations on approving new product applications
- Managing labelling and packaging requirements
- Monitoring product regulations and technical, transportation and legal issues
- Establishing and evaluating policies and procedures related to materials stewardship

All Teck products are listed on the Master Product List, which is owned and managed by the MSC. For products to be added to the list, a detailed application is submitted to the MSC. Products are assessed on their whole product life

cycle, and include customer assessments, legal jurisdiction reviews, logistics and form of transportation, hazardous materials and emergency response, contracts and financial rate of return.

The MSC also commissions and conducts customer assessments to help ensure that products are handled safely by smelters, refineries and other end users. The assessments allow us to uphold business ethics, regulatory requirements, sustainable management practices, and external expectations. We draw on ecotoxicity expertise developed by various commodity associations and other experts to bring sound science into our management approaches and decisions. Our materials stewardship program is also actively engaged with collective industry efforts, including those of the ICMM, towards continuously improving materials stewardship practices.

### **Responding to Regulatory Requirements and Responsible Sourcing Expectations**

Our materials stewardship efforts have expanded in recent years to meet growing regulatory pressures on mineral concentrates. These are manifested, for example, in the International Maritime Organization bulk cargo requirements, Chinese import restrictions and the Minamata Convention for Mercury. These requirements and restrictions now affect mining companies and smelters globally, and Teck specifically, in the same way that Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations have defined chemical management programs for refined metals, alloys and compounds in the European Union since 2006.

There are increasing expectations from customers, investors and civil society that products are responsibly produced and sourced. With the rise of new product certifications and standards—from the International Copper Association’s Copper Mark, to ResponsibleSteel, to the London Metals Exchange (LME) position on responsible sourcing, which applies to LME-listed metals—it is anticipated that this trend will only amplify across the commodities.

Teck already has several assurance practices in place related to responsible production, including the ICMM Sustainable Development principles, the Mining Association of Canada’s Towards Sustainable Mining Program at our Canadian operations, and ISO 14001. Responsible sourcing practices continue to be in place for our operations; since 2018, these include London Bullion Market Association (LBMA) Silver. Teck’s certification for these practices is posted annually on our [website](#). We are actively monitoring new certifications and standards and evaluating them as they arise.

### **Regenerating Natural Systems**

Our work in regenerating natural systems includes securing a net positive impact on biodiversity, reducing greenhouse gas emissions, using renewable energy, improving access to fresh water and reclaiming land at the end of mine life to

meet post-mining land use objectives mutually defined by our communities of interest.

Waste reduction and promoting the role of metals in a circular economy are the two most significant opportunities, but it is important to bear in mind that, as we improve our environmental performance, we also improve our role in the circular economy.

Learn more about our approach to these topics on our website at [www.teck.com/sustainability](http://www.teck.com/sustainability).

### **Our Targets and Commitments**

Teck is committed to continually improve our practices to avoid or reduce pollution and inefficient resource use. As such, we have in place a strategic priority and goals related to responsible production to maintain our leadership in providing the metals needed for a transition to a low-carbon economy.

#### **Strategic Priorities:**

- Be a leader in responsibly providing the metals and minerals needed for the transition to an economy focused on reducing waste and keeping products in use
- Work towards disposing zero industrial waste by 2040

#### **Goals:**

- By 2025, establish site-based industrial waste inventories and plans to turn waste into useful and appropriate products; based on these inventories and plans, set goals for industrial waste reduction
- By 2025, develop and implement a responsible producer program and “product passport” that is traceable through the value chain
- Be a leader in product stewardship by continuing to implement our Materials Stewardship program and produce secondary metals at our Trail Operations

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 Responsible Production on an annual basis in our [Sustainability Report](#).

### **Assurance Related to Responsible Production**

At Teck, we conduct four types of assurance. This includes 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; and 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.

## Assurance Related to Responsible Production

Type	Organization	Items Reviewed
External	International Council on Mining and Metals: Sustainability Report assurance	<ul style="list-style-type: none"> <li>• Total hazardous waste sent off-site but not recycled</li> <li>• Principle 6: Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change</li> <li>• Performance Expectation 6.4—Pollution and Waste</li> <li>• Principle 8: Facilitate and support the knowledge base and systems for responsible design, use, reuse and disposal of products containing metals and minerals</li> <li>• Performance Expectation 8.1 and 8.2—Responsible Design</li> </ul>
External	ISO 14001 External Audit	<ul style="list-style-type: none"> <li>• Components of the environmental management system at each site</li> </ul>
External	Risk-based Health, Safety and Environment audits	<ul style="list-style-type: none"> <li>• Adherence to regulatory and permit requirements</li> <li>• Effectiveness of controls based on risk profile</li> </ul>
Internal	Mining Association of Canada: Towards Sustainable Mining	<ul style="list-style-type: none"> <li>• TSM Responsible Sourcing Alignment Supplement: Criteria 20: Pollution Prevention and Waste Management</li> <li>• TSM Responsible Sourcing Alignment Supplement: Criteria 26: Circular Economy</li> <li>• TSM Responsible Sourcing Alignment Supplement: Criteria 9: Supply Chain</li> </ul>
External	The Copper Mark	<ul style="list-style-type: none"> <li>• Issue area 31—Due diligence in mineral supply chain</li> <li>• Issue area 18—Waste Management</li> </ul>