

Our Approach

This section focuses primarily on Equinox Gold's two biggest sources of mining waste: tailings and waste rock. We have robust procedures in place to ensure our mine waste is safely managed and that our tailings storage facilities (TSFs) are properly designed, physically and chemically stable for long-term storage, and routinely inspected and audited. We are also committed to communicating regularly with local communities to address any questions or concerns about how we manage mining waste.

4

Active TSFs

3

Legacy TSFs

2

New TSFs under construction

1

TSF scheduled for closure

Responsible Tailings Management

Equinox Gold has four active TSFs and three legacy TSFs in Brazil, several legacy tailings piles in Canada, and two recently constructed TSFs in Brazil and Canada. Our mines in the United States and Mexico use heap leach processing and do not generate tailings.

To achieve our goal of zero harm to people and the environment, we uphold high standards and practices for the safe, responsible management of our tailings across their life cycle. For example:

- As a member of the Mining Association of Canada, we have implemented the TSM Tailings Management protocol at all sites with a TSF.
- As a member of the World Gold Council, we have adopted the RGMPs, which include principles related to tailings and waste management.
- We are a signatory to the International Cyanide Management

Code, which provides standards of practice regarding safe disposal of tailings where cyanide is used in mineral processing.

- We intend to review and strengthen, where necessary, our systems and processes through alignment with the International Council on Mining and Metals' Global Industry Standard on Tailings Management (GISTM).

Local and international specialists design all our TSFs based on internationally recognized engineering practices, and Independent Tailings Review Boards oversee the design and construction of our new TSFs and select TSF expansions. We use only 'centreline' or 'downstream' construction methods and conduct regular internal and third-party inspections and audits to ensure our TSFs are built and operated in compliance with all regulatory requirements.

The majority of our TSFs have geosynthetic (plastic) liners throughout their storage reservoirs to minimize the likelihood of any seepage from the stored tailings, and all TSFs have seepage detection systems that are regularly monitored. In compliance with regulations from Brazil's National Mining Agency (ANM), which is responsible for overseeing the safe operation of TSFs in that country, each of our operating TSFs in Brazil is equipped with an audible early warning system that would alert both our team and nearby communities within 10 kilometres downstream of the TSF of any instability issues.

We ensure our workforce, consultants and contractors are qualified, well trained and aware of potential risks associated with tailings storage so they can successfully carry out their responsibilities with regard to construction, operations and management of the TSFs.



Our Commitments

Equinox Gold is committed to upholding high standards and practices for the management of our TSFs including:

- Locating, designing, constructing, operating, decommissioning and closing TSFs so they are structurally stable and safely managed to prevent pollution.
- Using only centreline or downstream methods of construction for new TSFs and all TSF raises.
- Avoiding riverine and submarine tailings disposal in any new mine projects.
- Identifying, assessing and mitigating geotechnical and geochemical risks with TSFs and incorporating the results into the design.
- Embracing tailings disposal techniques and technologies that minimize water use, where feasible.
- Ensuring our TSFs are in compliance with all regulatory requirements and sound engineering practices by conducting regular internal and third-party inspections as well as internal and external audits.
- Engaging an external engineering company, designated as the Engineer of Record, that is responsible for assuring the TSF is designed, constructed, operated and closed in accordance with applicable regulations, guidelines and codes, and works in conjunction with Equinox Gold's Resident Tailings Engineer at each of our mine sites.
- Monitoring our TSFs using standard industry techniques at a frequency that allows for early identification of potential issues.
- Retaining an Independent Tailings Review Board (ITRB) or having equivalent third-party oversight to review the design, construction and management practices of our TSFs and provide recommendations to further reduce risks and optimize TSF structural safety.
- Maintaining early warning alert systems for potential tailings incidents for workers and persons living downstream of the facilities.
- Ensuring our workforce, consultants and contractors understand TSF-related risks so they can successfully carry out their responsibilities with regard to TSF construction, operations and management.
- Ensuring that internal governance of our TSFs includes policies, systems and accountabilities that support TSF safety, such as regular communication with the Board, appointment of a corporate Accountable Executive Officer with direct reporting to the COO, and having a Resident Tailings Engineer at each site who is responsible for TSF operations and expansions and is in direct communication with the Accountable Executive Officer.
- Communicating regularly and openly with local communities to address any concerns regarding our TSFs.

Continuous Performance Monitoring

Equinox Gold has a tailings management process in place at each of our mines with an operating TSF to ensure our facilities are operated appropriately. We monitor our TSFs and conduct regular inspections, including internal and external reviews, to ensure the facilities continue to function in a safe and environmentally responsible way. Key monitoring activities are described below.

- Both our active and inactive TSFs are monitored with instrumentation to measure internal water levels within the dams and foundations, and movement monitors on the TSFs would notify us immediately of any potential stability issues. For example, real-time video surveillance systems continuously monitor the downstream slope of the TSFs. Automated movement detection monitors are installed along the crest and downstream slope of the facilities and automated water level monitors are installed within the TSFs and their foundations.
- Monitoring data are collected either hourly, daily or weekly, depending on the required parameters, and compiled in a monthly internal report.
- A central geotechnical monitoring centre has been established in Belo Horizonte for all of our Brazilian TSFs. This centre's primary purpose is to continually monitor the stability and operation of our TSFs on a 24/7 basis. Instrumentation data that are collected for internal water levels, movement detection, etc. are transferred to this centre and constantly reviewed for any significant changes that could indicate potential instability of the TSFs.
- Each of our sites has a dedicated Resident Tailings Engineer who is responsible for overseeing safe operation of the TSFs. This engineer performs regular visual inspections of the dam(s), reviews the instrumentation data, monitors the water and tailings levels within the facility's reservoir and coordinates with third-party engineers to convey the key operating data to the regulatory authorities on a regular basis.
- We regularly inspect for any seepage from within the dams or their foundations and monitor for any movement of the dams to ensure the facilities are performing as designed. Data are compared against normal operating parameters by our Resident Tailings

Engineer at each site and, in the event of any significant deviation, the design engineer (Engineer of Record) and the federal mining agency (ANM) would be alerted. The Accountable Executive Officer (our Senior Vice President Technical Services) and Equinox Gold's COO would also be notified of any significant deviation and the results of any investigations that are conducted.

- As per Brazil regulations, an independent engineer visits each site twice a year and conducts a dam safety review. In addition, an independent engineer visits each site monthly to observe the performance of the dam(s) and report the instrumentation data results to ANM.

Equinox Gold has an Accountable Executive Officer, designated by the COO, CEO and Board, who is responsible for the development and implementation of the systems needed for responsible tailings management at a corporate level. This position reports on TSF performance to the Board on a quarterly basis, and we publish tailings disclosure information annually to our stakeholders through this report and on our website.



Emergency Response and Crisis Management

Emergency Preparedness and Response Plans are in place for both our operating and legacy TSFs. These plans describe measures to respond to emergency situations and to prevent and mitigate both on- and off-site safety or environmental impacts. In addition, emergency response simulations are conducted at each site in Brazil by operations personnel, typically on an annual basis.

Crisis management plans are also in place to support the site team should a tailings breach occur. These plans follow the Incident Command System, which is a common

international system that allows for proper response, communication and documentation of any incident.

As a part of our commitments to the TSM protocols, which include Crisis Management, our site teams and corporate teams are required to perform desktop exercises annually and full-scale exercises every three years so our teams can practice emergency response protocols and to ensure individual members understand their roles and responsibilities in the event of a crisis.

At each of our mines with operating TSFs, an audible early warning system

has been installed to provide an alert to our team and to people living within 10 kilometres downstream of the TSFs. We have conducted simulation emergency response exercises that incorporate community members and our workforce to ensure everyone that may potentially be impacted downstream from our facilities understands how to stay safe in the unlikely event of a tailings breach. These simulations provide crucial emergency training and also help to improve our emergency response plans.

Responsible Heap Leach Management

Gold from low-grade ore is typically extracted using a process called heap leaching. The ore is stacked onto large pads that are lined with a geosynthetic (plastic) base and collection pipes. A process solution is applied to the top of the heap and the solution percolates down through the ore, collecting gold as it goes. The gold-laden solution is collected at the base of the heap and transferred through piping to collection ponds and then the processing plant for gold extraction.

Equinox Gold has robust safety and heap leach management procedures

in place to ensure we are responsibly handling the leach solution and maintaining the heap leach pads at our operations. We have two active heap leach pads and two legacy pads in the USA, and two active heap leach pads in Mexico. None of our Brazil mines nor our mine in Canada currently use heap leach processing, but we have two legacy pads in Brazil.

Our operations teams perform regular inspections of heap leach pads to ensure any slopes showing local instability can be addressed. Groundwater monitoring wells are installed at all active leach pads and

are checked regularly to ensure early detection of any potential seepage. All our operating and legacy heap leach pads have geosynthetic liners at the base of the pads to minimize the likelihood of any solution seepage into surrounding soil, and all operating pads have double liners in the solution collection ponds. No water is discharged from any of our heap leach mine sites.

More details and a summary of the physical characteristics of our operating and legacy heap leach pads is provided in [Appendix page 137](#).



Last September, our Santa Luz team participated in an “ecological awareness walk” through the nearby Morro dos Lopes area. Guided by local writer and historian, Nelci Lima da Cruz, the event aimed to increase environmental knowledge about the impact of solid waste on the ecosystem and to promote environmental collaboration among employees. During the walk, participants collected 200 kg of litter.



Waste Rock

Each of our operations has waste rock storage facilities. At our underground mines, we use some waste rock as underground backfill to minimize the amount of waste rock brought to the surface for permanent storage. At our open pit mines, we store waste rock in surface storage facilities that are engineered to be both geotechnically and geochemically stable. When the facility is no longer in use, the waste rock facility is rehabilitated based on government approved closure plans to comply with the agreed end land use.

Other Types of Waste

In addition to tailings and waste rock, our day-to-day operations generate other types of waste including hazardous materials (e.g., waste oils, batteries) and non-hazardous waste (e.g., food waste, construction materials). Our goal is to minimize these forms of waste where possible through reuse and recycling.

Guided by our environmental management systems (EMS), which are aligned with ISO 14001:2015, our local teams manage and track the waste resulting from our business activities so we can evaluate our performance and identify areas for improvement. Employees must follow certain rules and procedures for segregating waste at source (by type and characteristic), transporting waste to a temporary storage centre, storing, separating, loading, transporting and finally disposing of waste. We also provide training on safe handling of waste to

demonstrate what actions must be taken daily to properly separate it, and regular inspections are carried out in generating areas to verify separation compliance.

All our mine sites have recycling programs in place and many of the mine sites also have composting programs. The site recycling programs also include the sale of waste steel and obsolete parts and equipment, where possible. We run waste and recycling education campaigns and issue regular communications to encourage employees to make environmentally conscious decisions. To achieve proper treatment and final disposal of waste, our sites engage with specialized third-party companies that are responsible for providing proper documentation to ensure compliance with local waste regulations.