

Tailings and Waste Management

WHY THIS TOPIC MATTERS TO EQUINOX GOLD

Mining activities generate both tailings and waste rock. Tailings are a mixture of ground rock and process effluents that are generated in a mineral processing plant. Waste rock is the material that is displaced by mining but not processed because it contains little to no valuable mineralization. As an industry we must manage our tailings and waste rock with the utmost care to protect both the communities and environment surrounding our operations. Equinox Gold has robust safety and tailings management procedures in place to ensure we are responsibly handling the waste generated from our operations.



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.

MORE INFORMATION

- [Tailings Management Overview Report](#)





Responsible Tailings Management

Equinox Gold has four active TSFs and three legacy TSFs in Brazil, a legacy TSF in Canada, and two new TSFs under construction in Brazil and Canada. Our mines in the United States and Mexico use heap leach processing and do not generate tailings.

Our goal is to achieve 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. As a member of the Mining Association of Canada, we have implemented the TSM Tailings Management protocol at all sites with a TSF. We are also aligning our systems and processes 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 (currently under construction) 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 full 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 the country, each of our operating TSFs is equipped with an audible early warning system that would alert both our team and nearby communities within 10 kilometres downstream of the TSF to any instability issues.

We ensure that our workforce, consultants and contractors are qualified, well trained and aware of potential risks associated with tailings so they can successfully carry out their responsibilities with regard to construction, operations and management of the facilities. 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 breach occur. Our crisis management plans follow the Incident Command System, which is a common international system that allows communication and proper documentation of any potential incident, and each of our sites conducts crisis management training exercises to ensure the team is well prepared to manage any emergency scenario.



Reclaimed TSF at Fazenda

Continuous Performance Monitoring

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 dams would notify us immediately of any potential stability issues. Monitoring data are collected either hourly, daily or weekly, depending on the parameter, and compiled in a monthly internal report.
- Each of our Brazil mines 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 ANM 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 of Technical Services) and Equinox Gold's Chief Operating Officer 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 semi-annually 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.

The Accountable Executive Officer for our TSFs is our Senior Vice President of Technical Services, who reports directly to our Chief Operating Officer and also to the Board. To ensure our stakeholders are also informed, we publish an annual Tailings Management Overview report, which includes technical details of the construction, monitoring and operation of each of our TSFs.

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 to comply with the agreed end land use.

Managing 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. All of our mine sites have recycling programs in place and many of the mine sites also have composting programs. Our environmental management systems, which are aligned with ISO 14001, manage and track the waste resulting from our business activities so we can evaluate our performance and identify areas for improvement.

Our Performance in 2022

0
tailings-related environment or safety incidents

100%
of our TSFs had third-party inspections

17,393t
of hazardous and non-hazardous materials flagged for disposal were recycled

- Achieved TSM Level A rating for 75% of the Tailings Management protocol indicators
- No tailings-related environment or safety incidents
- Published an updated Tailings Management Overview Report
- Reviewed the use of cycloned tailings to optimize storage in existing TSFs and improve water recovery
- Completed a technical review of the potential use of vacuum or pressure filtered tailings at select mine sites
- Initiated permitting for a filtered TSF at RDM in Brazil

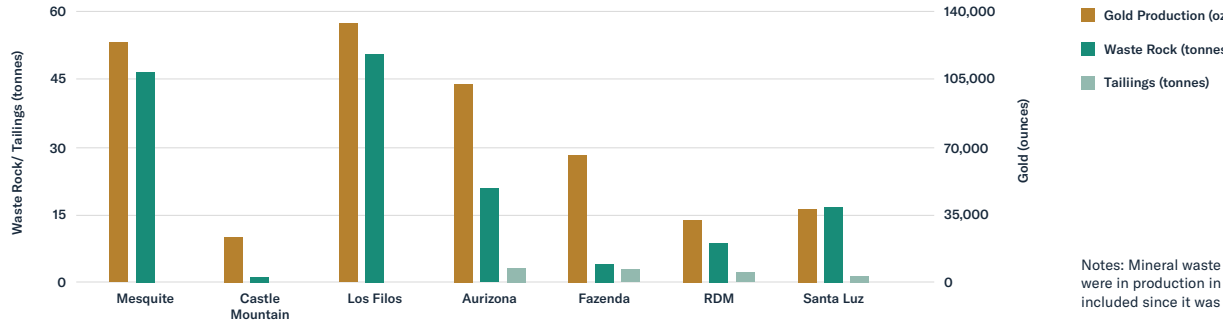
In 2022, we continued to implement the TSM Tailings Management protocol and achieved a Level A rating for 75% of the indicators. We will complete this work in 2023 to achieve a Level A rating for 100% of the indicators, and engage an external group to audit our systems to verify compliance. Longer term, we intend to achieve an AAA rating across our operations.

There were no tailings-related environment or safety incidents at any of our TSFs during 2022. At RDM, the unusually intense rainy season in early 2022 caused considerable water collection to occur within the TSF. Operations were temporarily suspended while water was pumped from the TSF to the

open pit to maintain the necessary freeboard safety limits within the TSF, demonstrating the effectiveness of our TSF safety protocols.

All our operating and legacy TSFs in Brazil underwent several scheduled third-party inspections. We also held on-site meetings with Independent Tailings Review Boards at our Aurizona and Greenstone mines to review plans and progress for construction of the new TSFs at these sites. Reflecting our commitment to transparency, in September 2022 we published an updated tailings disclosure document, which provides an overview of our TSF management strategy and technical information related to our TSFs.

2022 PRODUCTION OF GOLD, WASTE ROCK AND TAILINGS BY SITE



Notes: Mineral waste generated by sites that were in production in 2022. Mercedes is not included since it was sold in April 2022.

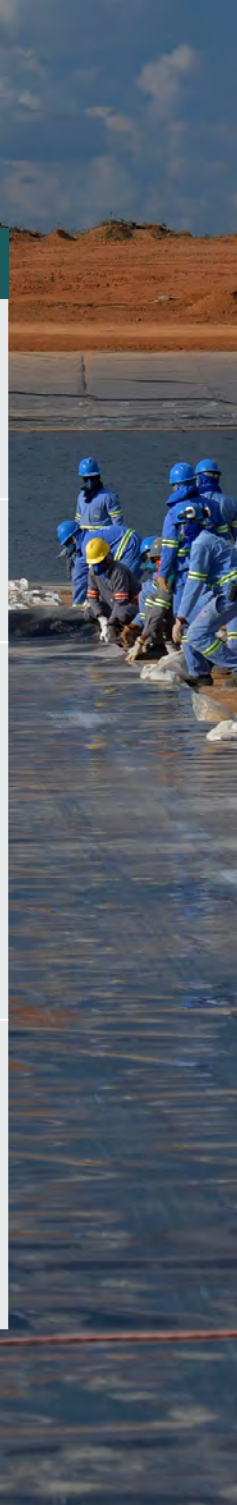
PRIORITIES FOR 2023

- Have zero tailings incidents.
- Achieve Level A rating for 100% of the indicators of the TSM Tailings Management protocol.
- Update Tailings Management Overview Report.



TAILINGS MANAGEMENT: KEY SITE INITIATIVES IN 2022

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| Aurizona | <ul style="list-style-type: none"> Completed the final expansion of the existing TSF, which will be filled to capacity in 2023. Completed detailed engineering and received permits for a new TSF. Construction is underway and will be completed in 2023 to receive tailings once the existing TSF is filled. |
| Santa Luz | <ul style="list-style-type: none"> Restarted tailings deposition in the existing TSF. Received permits for future expansion of the TSF to final design height. |
| RDM | <ul style="list-style-type: none"> Submitted a permit application for a future change in tailings deposition from conventional slurry to a filtered process. This application included a new tailings filtration plant and dry stacked tailings deposition area. Purchased vacuum cyclones for future tailings deposition to prolong the operational life of the existing TSF until the new tailings filtration plant and deposition area can be fully permitted and built. Commissioning of the vacuum cyclones will begin in early 2023. Started construction of a permanent spillway for the existing TSF, which will be completed in early 2023. |
| Fazenda | <ul style="list-style-type: none"> Successfully closed and reclaimed one of the three legacy TSFs, covering the tailings with layers of waste rock, base soil and topsoil to create a foundation for vegetation growth. The area was replanted with grass and native plants and seeds from our plant nursery and seed bank. Equinox Gold will monitor the reclaimed TSF over the remaining operational life of the mine and beyond, and will apply the learnings and experience gained from reclamation and monitoring of this facility to the eventual reclamation of TSFs at our other mines. |



CASE STUDY

Emergency Simulation Drills Help Communities and Equinox Gold Prepare

Thanks to robust tailings facility designs, management practices and a focus on safety, Equinox Gold has not experienced a tailings breach at any of our sites during the Company's history. We believe it is important to educate members of our host communities about our overall approach to tailings management to address any concerns or questions they have regarding the monitoring, stability and operation of our TSFs. In addition, to ensure everyone can remain safe should there be a crisis, we also proactively provide information on how to respond in the event of a tailings emergency.

In 2022, we conducted workshops and tailings emergency simulations at both Santa Luz and RDM. The workshops involved hypothetical scenarios of a tailings mishap and provided information on how to respond.

More than 160 community members participated in the exercises, including police officers, firefighters and members of local government. The workshops and drills were positively received, with community members commenting that they better understand Equinox Gold's practices around tailings management and have greater confidence regarding what to do in case of a tailings emergency.

