## Waste Rock and Tailings Management

Two core elements of our responsible mining strategy are to protect the health and safety of our workforce and local communities, and to minimize and mitigate our impact on the environment. That includes ensuring mine waste, such as waste rock and tailings, is safely managed, and that all of our waste rock and 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 and openly with local communities to address any concerns related to our waste rock and tailings facilities.

#### Waste Rock

Mining generates waste rock, which is the material that is displaced but not processed because it contains little to no valuable mineralization. Each of our operations has waste rock storage facilities. At our underground mines, we use waste rock as backfill underground to minimize the amount of waste rock that is brought to the surface. For our open-pit mines, we store waste rock in storage facilities that are engineered to be both geotechnically and geochemically stable. When the facility is no longer in use, the waste rock is rehabilitated to comply with the agreed end land use.

#### Tailings

Tailings are a mixture of ground rock and process effluents that are generated in a mineral processing plant. Equinox Gold is committed to upholding high standards and practices for the management of our TSFs and takes guidance from internationally recognized protocols, including the International Council on Mining and Minerals' Global Industry Standard on Tailings Management and the TSM Tailings Management protocol.

Equinox Gold has eight TSFs in Brazil and two in Mexico. 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. Local and international specialists design all our TSFs based on internationally recognized engineering practices. We use only 'centreline' or 'downstream' construction methods, and we conduct regular internal and third-party inspections and audits to ensure our TSFs are in full compliance with all regulatory requirements.

We regularly monitor water levels within the dams, inspect for any seepage from the dams or around the foundations of the dams, 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 would be alerted. The Accountable Executive Officer (our 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. In Brazil, in compliance with regulations from the National Mining Agency (ANM), which is responsible for overseeing the safe operation of TSFs in Brazil, each of our operating TSFs is equipped with an audible early warning system that would alert both our team and nearby communities to any instability issues.

#### 2021 Performance

In 2021, we reviewed and updated our waste management systems and processes and also started training and implementation of the TSM Tailings Management protocol. We also published our first Tailings Management Overview Report, which includes technical details and other information about each of our TSFs. This report will be updated in the first half of 2022.

We conduct regular inspections of our existing TSFs and have Independent Tailings Review Boards (ITRB) to oversee design and construction of new TSFs that are being constructed at Aurizona and Greenstone. Both ITRBs met during the year to review plans and progress for the new TSFs. In addition, independent engineering reviews were conducted at our Brazil TSFs in 2021. During 2021, we undertook significant stripping campaigns at Mesquite, Los Filos and RDM to open up access to new ore bodies, and as a result generated more waste rock compared to gold production at those projects than at the other mines.

### 2021 Production of Gold, Waste Rock and Tailings by Site



#### What's Next

We will continue implementation of the TSM Tailings Management with plans to achieve Level A rating for 75% of the indicators by year end 2022, and Level A for all indicators by year end 2023. To achieve this we will:

- Ensure all sites have effective processes to communicate our approach and commitments in relation to tailings management
- Ensure our tailings management system conforms with the tailings management framework described in the Mining Association of Canada Tailings Guide
- Ensure all sites have tested emergency response plans and emergency preparedness plans in conformance with the Tailings Guide

We are also undertaking testwork and reviewing alternative disposal techniques, such as thickening or filtering of tailings, which would increase long-term stability of the tailings and also reduce the water used at our operations by increasing water recapture and reuse. At RDM, we are installing a thickener in the process plant to improve water reuse by up to 25%.

# Designing the Path to Safe Closure of a Tailings Storage Facility

At our Fazenda Mine in Brazil, we have begun the work required to permanently close and reclaim one of its legacy tailings storage facilities. The facility operated from 2000 to 2013 but is no longer required for mine operations. We intend to have the facility closed and reclaimed by the end of 2022.

In preparation for closure, engineering and environmental studies were conducted on samples of tailings and potential cover materials, such as mined waste rock, old heap leach materials and geosynthetic plastics, to find the best cover system to be placed on top of the tailings to prevent erosion and provide the best growth substrate for plants.

Based on these studies, we plan to cover the tailings with three layers of rock and soil to create a foundation for vegetation growth. The first layer will be waste rock, which prevents water from within the tailings from wicking up towards the soil cover. Old heap leach materials will be spread next. The material has been tested to confirm that any residual processing chemicals have broken down over the years from exposure to sun and rain, and they are safe for reuse. This design has the added benefit of repurposing waste rock and heap leach material that would otherwise be placed in a waste rock storage facility. The waste rock and soil layers will be sloped to encourage future precipitation to drain off into several collection channels that will remove water from the facility. Finally, the area will be capped with a layer of topsoil, and we will replant with native plants from our nursery and seeds from our seed bank.

Equinox Gold will monitor the reclaimed tailings storage facility over the remaining operational life of the Fazenda Mine and beyond, and will apply the learnings and experience gained from reclamation and monitoring of this facility to eventual reclamation of the facilities at our other mines.