

>> TAILINGS

The mill will process roughly 4,800 tonnes (5,300 tons) of ore per day on-site. We will use traditional crush-grind-float technology and equipment to separate zinc and gold from noneconomic rock. After removal of these valuable minerals, what remains is called tailings. Our tailings consist of particles of rock, water, and residual process chemicals (e.g., lime, copper sulfate, silica), and have the consistency of drywall mud. We will pump tailings to a double-lined tailings management facility (TMF). The TMF will cover a total footprint of 123 acres. During operation, the facility will be a maximum 118 ft tall, and after closure a maximum of 138 ft tall.

>> TAILINGS MANAGEMENT

Water management is crucial to our design. Unlike a conventional TMF, our design is neither a pond nor does it store liquid tailings.

The entire base of the TMF will be compacted and double-lined, consisting of a composite primary liner and a single secondary liner separated by a leak detection system. This lining extends under the perimeter wall and the surrounding berm. The coarse aggregate above the primary liner collects the water (e.g., residual tailings water, runoff, rain, snow) and gravity directs it to an exterior sump. We will also pump water that collects on top of the TMF to the contact water basins or the mill for reuse in the milling process. As a protective measure, if we experience an extreme storm event, an emergency spillway will channel water from the TMF into the open pit.

Once mining ends, the TMF will be capped and revegetated to prevent any oxygen penetration or water percolation into the facility. Also, the tailings will be dewatered after capping. By doing so, the TMF will be near neutral pH and will not require perpetual care or treatment.

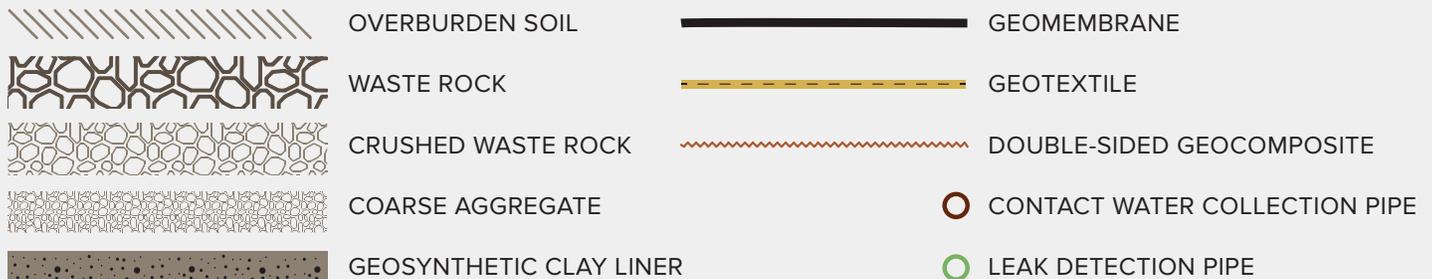
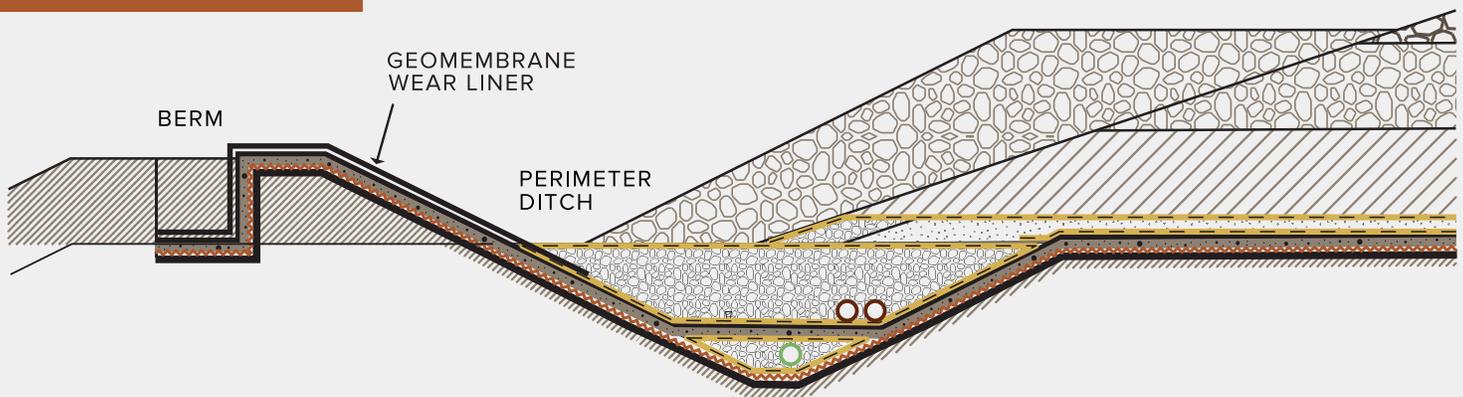
>> PERFORMANCE MONITORING

Our monitoring program includes more than a dozen ongoing studies, including water balance, groundwater level and quality, perimeter wall settlement, and leak detection system analysis. Also, an engineering review by a qualified independent Geotechnical Engineer will take place on an annual basis. The performance of the facility will be reviewed closely during construction, operations, and post-closure to ensure that the design intent is being satisfied, to confirm design assumptions, and to identify any modifications that may be required.

TAILINGS MANAGEMENT FEATURES

- Incorporates modern technologies and mitigates known risks of traditional TMF construction.
- Dewatering promotes tailings consolidation, increases tailings density, and extends strength characteristics of TMF.
- The entire base rests above a double-liner with a leak detection system.
- A competent and free draining perimeter wall roughly 108 ft wide made out of waste rock.
- Thickening tailings to 70:30 ratio of solids-to-water compared to traditional 30:70 ratio of solids-to-water.
- Reducing water in tailings recycles approximately 793M gallons of water back into the milling process on an annual basis.
- An emergency spillway channels water from the TMF into the open pit in case of an extreme storm event.

BASE LINER SYSTEM



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