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Water

Why it Matters to Orla

From exploration drilling to mineral processing, water is required for many aspects of a mining operation. Yet water is possibly the most critical ESG challenge for any mining company simply because water is interconnected with other pressing material issues. For instance, water scarcity and frequent storm events are linked to climate change and can impact a mining operation. Water flows from rainfall can come into contact with mining areas, such as waste rock, potentially mobilizing contaminants that affect soil and end up in nearby water bodies. Activities involved in the mining lifecycle can also degrade water quality, which in turn may impact biodiversity as well as public health.

Water risks to our business include those related to the quantity of water used for our operation and the impact our mining activity has on local water quality and availability.

Our Approach: Demonstrating Water Stewardship

At Orla, we understand that to maintain our social licence, comply with water-related permits, and be a sustainable business, it is critical that we manage water responsibly. Our water management strategy focuses on minimizing our withdrawal of water from the surrounding environment, while maximizing reuse of water during operations.

Prior to commencing mining activities, we conduct assessments that consider our water needs and our potential impact on water quality and quantity. These studies inform our action plans and operating practices, including mitigation measures. An important part of our approach is to understand the water-related challenges and opportunities with other users that share the catchment with us, and to provide data transparently to decision-makers so that we positively contribute to the water management of the region, even beyond the boundaries of the mine.

Our current production site, Camino Rojo, is situated in an area of high to extreme water stress as defined by the World Resources Institute. Baseline water stress measures total annual water withdrawals by users. Higher stress indicates more competition among users including ecosystems where relevant. Camino Rojo requires water for dust control for mining and crushing activities, makeup water for the heap leach, process plant and laboratory activities, main camp and administration uses, and fire water.

Currently, the mine water supply is sourced from production wells located within the property boundary. Pumping from production wells will likely be reduced commensurate with the amount of additional produced water from dewatering operations that will eventually replace the pumping.

Reuse and Management, our focus

A key focus of our approach is water reuse through a closed-circuit system. Orla extracts gold using the heap leach method, which features a closed loop for the



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solutions used in the process and is a very efficient way to use water. Once water enters the process, it is reused over and over again until it either evaporates during the addition of barren solution to the heap leach pile or is bound to the ore. New water is added to maintain a constant inventory within the process. The processing area of our Camino Rojo operation is the main water consumer, using over 90% of the water extracted. Camino Rojo is Zero Liquid Discharge (ZLD), which means that no contact or potentially contaminated water leaves the site.

Potable water is treated by a reverse osmosis water treatment system from the raw water tank and stored in a storage tank to ensure that the water remains acceptable for domestic uses. Water is then distributed by pumps to the camp and other facilities.

Two sewage treatment plants of a total of 70 m³/day capacity were constructed next to the Camino Rojo operations camp. This plant handles the sewage from all camp rooms, kitchens and laundry rooms. Sludge volume generated in the treatment plant is collected and utilized for compost production and sent to the growth media stockpiles, while the treated water is utilized for dust suppression and reused into the heap leaching process, reducing the use of fresh water. Waste from the septic systems of the process area, administrative buildings, and laboratory is collected in septic holding tanks and removed from the site by sanitary services. In 2022, Camino Rojo treated 4,349m³ of used water, which was reused in dust control activities.

Water Monitoring and Evaluation

As another layer of due diligence to ensure Orla doesn't impact local water quality, we operate a monitoring program in which we take water samples from community water sources, including wells, near our operation on a monthly basis. The samples are then tested by an independent laboratory against local water standards. To date, no water quality issues have been recorded. The water sampling program is jointly monitored by community members who participate actively in the sampling and are informed about the laboratory results. At our Cerro Quema project in Panama, our environmental team monitors watersheds every month to evaluate flows and quality within the concession and in the surrounding communities.

Accountability

The Chief Executive Officer has ultimate responsibility for our water management strategy and its adoption within the Company. Water-related initiatives, policies, and strategies are approved by the Board-level ESH&S Committee.

Our Chief Operating Officer is responsible for reporting identified risks and opportunities related to water, and ensuring the sites identify and implement practices to minimize water use and maximize efficiency.

2022 Highlights

0.15

freshwater use intensity (volume of freshwater consumed per tonne of processed ore (m³/t))

Zero

water discharged in our Camino Rojo operational mine (all water is recycled and reused)

2022 Highlights

- Total water used to meet our operational demands in 2022 was 976,309 m³, of which 100% was freshwater withdrawn from local water bodies. In 2021, during the construction of the mine, our total consumption reached 438,444 m³ of water. Our water intensity, which is a measure of how much fresh water we use per ounce of gold produced, was 8.91 m³/oz of gold in 2022 and 0.15 m³ water used per tonne of processed ore. As 2022 was the first year of commercial production (while only partial), Orla is establishing a baseline for water use and water intensity that can be used in the future to establish targets and assess our performance. These goals and targets will form part of our next sustainability report.
- Total water recycled, all within our Camino Rojo operation, was 100%. The site had no water discharge to the environment.
- In 2022, we complied with our water permits and recorded no incidents, fines, or non-financial penalties related to water usage or impacts on water quality.

2023 Focus

- Continue to monitor water uses and water quality across the mining life cycle and reinforce our water-saving campaigns across our sites.
- Define a water use baseline and set targets to optimize water consumption and water intensity.
- Explore new technologies, including better-performance sprinklers and drippers, to minimize water intensity in heap leaching.
- Continue to support neighbouring communities with monitoring campaigns to assess quality and availability of communal water sources.
- Provide equipment and technical assistance to communities near our operations to increase rainwater harvesting capacity for consumption and agriculture.