

Sustained Operations Project update

The Fosterville Gold Mine Sustained Operations Project aims to ensure the ongoing life of the Fosterville Gold Mine. Previous project updates have described the

EES process. This project update focuses on a more detailed description of the Project components and provides a graphical representation of the components.

Underground exploration and mining

Underground mining development is proposed to extend the existing Harrier and Phoenix declines to the south and the Robbins Hill decline to the north. Exploration is also proposed to continue to the south and to the north. All proposed mining and exploration activities are within MIN5404.

Open pit mining cutbacks (extensions)

The Project includes a proposal for open pit cutbacks at the existing O'Dwyer's North Pit, O'Dwyer's East Pit and Farley's Pit. The cutbacks would involve the removal of predominantly waste rock to access the ore. Conventional open-cut mining techniques would be used for the cutbacks.

In-pit tailings storage facilities within existing pits

It is proposed to establish and use O'Dwyer's North Pit, O'Dwyer's East Pit and Farley's Pit for flotation tailings storage following the open pit cutback operations.

Harrier Waste Rock Dump (WRD)

Fosterville Gold Mine Pty Ltd already has the approval to place waste rock to surface level in the existing Harrier Pit. The Project includes the placement of waste rock across the Harrier Pit footprint to a maximum elevation of 5190 RL which is approximately 30 m above ground level.

Tailings Storage Facilities (TSF)

Flotation tailings is predominantly barren rock from which over 95% of the sulphide minerals have been removed by the flotation circuit in the processing plant. Flotation tailings are stored in above-ground tailings storage facilities and in-pit tailing storage facilities. Two new above-ground flotation TSFs, (TSF5 and TSF6), are proposed to provide additional tailings storage capacity. TSF5 and TSF6 would be located in the existing tailings precinct in the northern area of MIN5404 and would be designed in accordance with current guidelines regarding the design and operation of tailing dams, including DEDJTR's Management of Tailings Storage



The final scoping requirements have been released for the Sustained Operations Project EES and can be accessed by visiting planning.vic. gov.au and typing "Fosterville Gold Mine" into the search box.

Facilities and the Australian National Committee on Large Dams (ANCOLD) Guidelines.

Carbon-in-leach (CIL) tailings hardstands (HS)

Carbon In Leach (CIL) tailings are produced as a part of the process of extracting gold from ore within the processing plant. This produces CIL tailings containing cyanide-bearing leach residue, which is stored separately to flotation tailings, in a specially designed and lined storage facility - the CIL tailings storage precinct. Two new CIL hardstands (CIL Hardstand 5 and CIL Hardstand 6) are proposed to provide additional CIL tailings storage capacity into the future. These are proposed as an extension to existing CIL Hardstands 1 to 3, and the approved CIL Hardstand 4.

Brine evaporation pond

The reverse osmosis (RO) component of the mine water treatment plant produces a brine concentrate. The brine concentrate is pumped to the brine storage and evaporation pans in the northern area.

The Project includes a new brine evaporation pond to replace the existing brine evaporation which would be displaced by the proposed TSF6. The design includes three smaller ponds, which collectively make up the brine evaporation pond, namely: Evaporation Pond, Crystalliser Pond and Bitterns Pond. Each pond would be lined with plastic and designed to promote evaporation.

Aquifer recharge within the bedrock aquifer

The aquifer recharge (AR) component of the Project involves the injection of mine water into the fractured rock aquifer in the northern area of MIN5404 via five boreholes. The mine water will be treated before injection to remove heavy metals and sulphates to meet the water specifications of the host aquifer.

General ancillary works

These include upgrading existing haul roads, an infrastructure corridor for energy supply and water reticulation, a borrow pit, topsoil stockpiles and two new vent shafts – one to the south and one in the infrastructure precinct in the north.



The excavation of the CIL tailings, loading and transporting off-site to an external facility.

The CIL tailings currently stored in Hardstands 1 to 3 (pictured left/right/below) are known to have a residual concentration of gold that was not able to be recovered with the on-site processing. Third parties have expressed interest in receiving the CIL tailings and processing them themselves to recover the residual gold content. Excavation and transport of the tailings would occur during the day shift only and would be determined by the final treatment facility capacity for storage and treatment of the tailings material.

Hunt's Pit embankment

Hunt's Pit currently receives decant water from the existing TSFs. It is proposed, as part of the project, to increase water storage capacity through



the construction of a 1m embankment around Hunt's Pit. This will provide additional freeboard to accommodate water decanted off the TSFs. It would be constructed of compacted earth fill and have rock fill on the water side to prevent erosion.

Components of the SOP

