

FAQS



HAZELWOOD POWER STATION & MINE

WATER

Partial or full pit lake – where will the water come from?

Morwell River flood flows are seen as one potential source of water to fill the Mine void, along with artesian water, bulk water entitlements, Eel Hole Creek flows and possibly the Hazelwood Cooling Pond (subject to regulatory approval).

What will be the impact on surrounding waterways if you use water from them to help fill the lake?

From the preliminary studies we have completed, we expect that utilising the flood flows from the Morwell River would provide minimal disruption to the Morwell River and broader Latrobe River Catchment. Purchasing water from Gippsland Water via the Power Station's Bulk Water Entitlement, along with the extraction and use of artesian water, to fill the Mine void should have little impact, given these water sources were intended to be utilised until 2033 for Power Station operations.

How will it impact the water table?

There are two confined aquifers below the Mine. ENGIE (together with the other Latrobe Valley mines) pumps out of both to ensure the Mine floor and batters remain stable. It is expected that when pumping ceases and the Mine void is filled, the aquifers will recover (with the extent of recovery to be determined by ongoing groundwater modelling).

What will the impact be on Loy Yang and even the Gippsland Lakes in terms of water?

It is expected there will be some moderate rises in the water table after the cessation of groundwater pumping at Hazelwood. We expect that some of this rise may need to be drawn back down by Loy Yang, i.e. they may be required to increase their pumping. The extent of the recovery, together with the position in regards to the Gippsland Lakes, will be determined through ongoing modelling.

Will the Morwell River be impacted by the rehabilitation of the Mine?

The Morwell River's flood flows are one means of achieving a safe, stable and sustainable filled Mine void. After the Mine lake is filled, there is the possibility to interconnect it to the Morwell River. This is expected to provide benefits to the Mine void and also the Morwell River, but the technical detail is still to be worked through.

Will you need to divert the Morwell River again as the integrity of this river should be protected?

This depends on the Mine fill strategy. If the strategy is to use the flood flows, then a flood diversion structure would need to be constructed. If interconnection was then possible between the river and the Mine void, this may render the 2004 diversion of the Morwell River obsolete, although it could possibly be retained as a wetlands.

What is the timeline to fill the Mine with water?

It is difficult to be exact at this stage. One option is an estimated timeline of 11-12 years, after rehabilitation, with the current proposed water mix, although this will be determined, subject to access being obtained to suitable additional quantities of water and a decision on the partial or full pit lake options.

Why pump out water from the aquifer in the Mine and then return it?

This needs to be undertaken to keep the Mine floor and batters stable during the rehabilitation process. If this is not done, the Mine floor will become unstable and buckle, potentially causing batter instability.

Will you have to keep pumping the aquifers while the Mine is filling with water?

Yes, to maintain safe and stable Mine floor and batter conditions.

What is the water quality of the aquifer?

Water temperature for the M1 aquifer in the Hazelwood Mine area varies from 25 to 40 degrees centigrade and average total dissolved solids (TDS) is 500 mg/L. Water temperatures for the M2 aquifer in the Hazelwood Mine area vary from 45 to 60 degrees centigrade and average total dissolved solids (TDS) 400 mg/L. The aquifer water has CO² concentrations of 90-175 mg/L that are corrosive of mild steel.

What will happen to Eel Hole Creek if the Pondage is emptied?

Again it is too early to be definitive but Eel Hole Creek could be used in full or partly to fill the Mine void.



If you use the Hazelwood Pondage water to help fill the Mine, when will it be empty?

There are two possible scenarios:

- Two to three years into the Mine void filling (i.e approximately 2023); or
- Close to when the Mine void is filled.

What will be the water quality of the new lake be in the future?

This will depend upon the water source used to fill the lake. It will also be the subject of significant future modelling and technical analysis.



What is leachate and will it affect water quality in any lake?

Any possible leachate sources will need to be understood and managed. Part of the remedial strategy involves achieving signoff on ash landfills by the EPA. The EPA has rigorous rehabilitation criteria and aftercare requirements which will assist ENGIE to deliver a landform which has very little risk of leachate generation.

Will there be full public access to the lake?

This detail hasn't been determined as yet. The discussion on future lake and land use by the public will need to involve the Government or other future owners/managers of the site.

Can we expect to build our houses on the lake's edge?

Certain areas surrounding the Mine void need to be assessed for the risk of future movement. These areas will have 'suitable' uses identified that take into consideration the local stability conditions. Once this piece of work is done, a meaningful conversation can begin on land uses around the Mine void.

Why can't you use the water in the aquifer to run hydrothermal businesses?

This is not ENGIE's focus. ENGIE is focused on achieving a safe, stable and sustainable landform, not on future land use. In saying that, the water temperature of the aquifer is not hot enough. A temperature of more than 75 degrees is required for hydrothermal activities/generation to be efficient. The aquifer temperature is only 50 degrees.