

FAQS

ENGIE

HAZELWOOD POWER STATION & MINE

WATER

When do you envisage work will start on filling the Mine with water and how long will it take to fill?

We have approximately three years of Mine rehabilitation work ahead of us, prior to filling. We are looking at a range of different water sources. These include using water from the underlying aquifers, some surface water from the Morwell River (only flood flows) and the Morwell Main Drain, along with water from the Hazelwood Cooling Pond and Eel Hole Creek, and our Gippsland Water Bulk Entitlement, noting we are yet to go through the detailed water sourcing technical studies. We think that conceivably it will take approximately 11 years to fill completely or approximately 14 years from now.

You're talking about a huge area of water - won't a lot of it be lost through evaporation? If so, how do you intend maintaining the water levels?

We don't have all the technical answers at this stage and there is still a large amount of detailed studies to be done. We have done some limited work on interconnecting with the river; this interconnection would act to keep the water level high and make up for any small losses in evaporation.

How will taking a large amount of water from the aquifers affect the water table?

We are still to model this. It is expected there will be some moderate rise in the water table after the cessation of pumping at Hazelwood. We expect that some of this rise may then need to be drawn back down by other users although the detail is still to be worked through.

Will there be any impact on the Gippsland Lakes system?

The detailed modelling hasn't been completed at this stage. When we have completed the detailed studies, there will be a time set aside to discuss the findings of the detailed studies with the community.

You have said you will use flood flow from the Morwell River - won't this affect its integrity?

The interconnection of the Morwell River to the Mine lake is still the subject of ongoing technical studies. We want to develop a rehabilitated Mine void that can take care of itself - be 'sustainable'. By interconnecting a river, we believe this will act to improve the quality of the river and provide a better quality final Mine lake.

What about backfilling into aquifers and rebound?

Coal has been mined for more than 50 years at Hazelwood. During Hazelwood's early development, it was determined that water underlying the floor of the Mine, contained within aquifers, would need to be removed, i.e. pumped out to ensure the Mine floor did not heave. Heave occurs when the pressure contained in the aquifer is high enough that it can actually push the Mine floor upwards. To address this, the Mine has pumped water from the aquifers for close to 50 years. This pumping will need to continue while the Mine is being filled, with water from the aquifer being redirected to assist filling. This is necessary to prevent any heave until the Mine is full. When this weight has been distributed across the floor of the Mine and the Mine void is filled - the 'safe and stable' state - the pumps will be turned off. This will result in the aquifers building up in pressure over time and their levels will rise. The level of the rise is yet to be determined.

Are there pumps located in the bottom of the Mine to pump out water?

Yes, the bulk of our aquifer pumps are in the lowest area of the Mine, located on the Mine floor. In order to fill the Mine, these pumps will need to be relocated or new pumps purchased for new surface bores in the near future.

Do you have any pumping stations?

Yes, there are two pumping stations, the dirty water pumping station and clean water pumping station, both within the Mine itself. One assists in providing water to the fire service system and suppresses dust the other assists in the management of artesian waters pumped from artesian bores within the Mine to manage artesian pressures. These pumps will be decommissioned once the Mine has been filled.