



HAZELWOOD REHABILITATION PROJECT

**Technical Conversation Session
August webinar Q&As**

1) What alternatives have been or are being considered?

The EES will consider the proposed new mine lake and some feasible alternatives for achieving the objectives of a safe, stable and sustainable site.

It will include an assessment of alternatives options for stabilising and rehabilitating the large Hazelwood mine void, including other options for filling the mine, and different water sources for creating the proposed lake.

2) How will the assessments be reviewed or updated should there be changes to the EES Scoping Requirements?

The studies will address the matters that are listed in the final Scoping Requirements. Considerable work went into the draft Scoping Requirements, which have provided a good starting point for the work that has been done to date to characterise existing conditions for the different topics and to undertake the assessments themselves.

When the Minister for Planning signs off on the final Scoping Requirements they will be published, and we will examine these to see any changes that have taken place and ensure they are addressed in the various studies.

3) Will there be targeted engagement with communities around the Gippsland Lakes who might not currently realise this project could have an impact on their area?

The Technical Conversation Sessions were promoted right down to Lakes Entrance, through Sale, Bairnsdale and around the Gippsland Lakes. We will continue to consult throughout the Latrobe Valley and further downstream in Gippsland. There will be more opportunities to engage with the project and share feedback to inform the EES.

4) Are there any compaction requirements for slope re-profiling? Is the potential of slope erosion due to runoff considered in the final design?

Yes, there are requirements for compaction of the slopes. We cannot create permanent slopes without providing a high level of compaction, and work completed to date has been done under engineering supervision and regulatory oversight by Earth Resource Regulation to obtain the required compaction needed.

Erosion risk and any stability issues are managed on a daily basis through the use of reprofiling, hessian and application of various mulches and diversion of some stream flows where necessary.

5) Will the waterways assessment also consider different climatic variations caused by climate change?

The waterways assessment will assess the flow regimes in the waterways through different points in time, including different climate scenarios. The model we use is consistent with the State Government climate projections and includes over 60 years of climate data, including drought and dry years, on a daily time step. We can use this data to apply a climate lens to the modelling, to see how the flow regime is modified in different potential future climates.

6) Are you confident in a drying climate that there will be enough water to fill & keep the mine filled?

Climate change is fundamental consideration of the EES. There are specific Victorian Government guidelines that set out how different EES studies need to consider climate, including the water studies.

The EES study will consider four climate scenarios: median, a wet, a dry and a drought scenario. These are based on historical data and climate factors which are generated by the CSIRO.

In a dry or drought scenario, water fill of the pit could require scaling back of fill from sources which are more susceptible to climatic influences.

7) Is the impact on the Morwell River upstream of Hazelwood being considered?

The EES will explore potential impacts from diversion of some flood flows at high flow events on the Morwell River both upstream and downstream, and right through the Latrobe River System. These impacts will be tested both for connected and unconnected lake options.

8) What data do you have regarding ecological response to altered flow regimes?

The current model we are using for this project is an extremely robust model that has been calibrated over many years from a variety of data inputs.

Our approach is to apply the hydrologic modelling to the different project scenarios - the base case and the project case - to identify the change in the hydrologic regime that arises as a result of the project. We can then identify impacts of the project on different flow components.

Previous investigations have done a lot of work to identify the ecological values and their environmental water requirements through the Latrobe system.

9) Aerial photography shows the mine is being filled, is there risk to water quality and or salinity levels raising?

The water testing ENGIE has done indicates that for the parameters tested, the lake is already safe for human contact. In fact, the levels of metals and metalloids in the water already in the mine void would satisfy drinking water quality guidelines.

The water quality modelling that has been completed to date has shown that water quality from the proposed water sources will allow for water that is suitable for recreation purposes.

There is some potential post filling in an unconnected pit lake scenario for concentration of some parameters by evapoconcentration, however this is not detrimental and has potential to be managed by water top ups and potential use of some flood flows from Morwell River.

10) What are the expected water quality outcomes of a pit lake on coal?

There has been routine water quality testing of the water that is currently collecting within the pit and that water is safe for human contact.

The EES will look at potential effects to water quality in the pit lake as a result of the project.

To date, we have completed geochemical testing in the field and lab to understand how water quality may be influenced by interactions with the mine walls, and potential leachates.

11) What are some of the potential future uses being considered for the site?

The Hazelwood Rehabilitation Project will deliver a safe, stable, sustainable and non-polluting landform that enables productive future uses at the site.

Potential future uses will be considered post rehabilitation of the mine. Future development opportunities will be influenced by the outcomes of the EES.

Currently the site has a number of different titles and is used by local farmers to put grazing stock around most of the perimeter of the mine. The site also has environment protection notices around it as a condition of closure.

12) What alternatives are being considered? Could you use water from a nearby desalination plant?

The EES will include an assessment of alternatives for stabilising and rehabilitating the large Hazelwood mine void, including other options for filling the mine, and different water sources for creating the proposed lake.

Several alternatives are being considered, both for the land form and for water sources. There are some alternatives which are simply not viable. Criteria being considered include ground stability, groundwater changes, surface water quality, rivers and wetlands effects, fire risk, cost, community member and future land use opportunities.

13) Has the project also considered lake quality modelling in 25 or 50 years.

We are currently at the methodology phase where we are detailing what methods we're using to assess pit lake water quality. Because we will be using a daily time step model, we will be reporting the water quality results each day for 100 years. With this model we will know the water quality each day up until then, including at 25 years and 50 years.

14) Are provisions for cultural flows being included, as well as environmental flows?

The waterways assessment will look at the sustainable water strategy, which refers to cultural water and the need to allow for it. There is also a separate Cultural Heritage report that involves working with Gurnaikurnai Land and Waters Aboriginal Corporation on water and other cultural values relevant to the project.

15) What is the process to consider end users?

ENGIE are bound by legislative requirements and obligations under an existing mining licence to maintain the site as a safe, stable, sustainable and non-polluting landform.

The EES will assess the possible effects from the Hazelwood Rehabilitation Project. Outcomes of the EES will inform recommendations for future uses, including ENGIE's future involvement in the site.

16) Is there consideration for potential impacts to water sources?

Four of the 16 EES technical studies will examine aspects of groundwater and surface water use, flows and quality. This includes consideration for what water sources may be used, and how they interact within the proposed pit lake.

17) Was the other forum recorded and are the questions online?

The Technical Conversation Session was held in person and wasn't recorded. The session was an opportunity to hear from the same speakers you have heard from during the webinar presentation. Around 50 people attended the session, and questions asked were recorded and responded to at the event. We will be providing a wrap up of the kinds of questions asked and feedback received in the next Community Update.

NOT ANSWERED DURING WEBINAR**1) What is the water quality in the pit lake?**

There has been routine water quality testing of the water that is currently collecting within the pit and that water is safe for human contact. We monitor a range of water quality parameters, and the results are consistent with naturally occurring environmental processes for bodies of still water.

Long term, the EPA will continue to provide ongoing assessment on water quality to ensure it conforms with Victorian and Australian water quality regulations.

2) Is there to be a parallel process for others to consider the final end uses of the pit lake and its water?

The current EES process is focused on assessing ENGIE's rehabilitation plan, including the mine lake which has been proposed as the best option for providing a safe, stable and sustainable site that enables a range of productive future uses.

With such a significant site, these future uses could include areas for recreational activities, cultural purposes, agricultural use, or sale of sections for private development.

Future uses of the mine lake will be informed by a range of factors including government or third-party investment, accessibility, topography and final lake quality, and there will be opportunities once the EES is complete to discuss potential commercial and other uses.

3) Will the connected pit lake option consider flood control of the water outflows, assuming there will be sufficient to warrant this, and the outflow uses/benefits.

In terms of an offtake for a connected system, there is work happening to identify what flood elevation would occur and the exact arrangements for that. A connected pit lake would have a range of potential ongoing uses to do with flood harvesting and flood mitigation. These options are all being assessed as part of the catchments, waterways and wetlands study for the EES.

4) Are there any major issues that have arisen since the filling of coal mine pit lakes in Germany?

ENGIE is not aware of any issues arising from the creation of mine pit lakes in Germany. There are some different geotechnical environments and conditions that exist between the two regions, that are assessed and managed according to their individual engineering requirements.