28 June 2019

Department of Planning and Environment
Att: Paul Freeman – Team Leader, Resource Assessments
320 Pitt Street,
Sydney NSW 2041

Our ref: 21/25109 218372
Your ref:

Dear Paul

Mount Piper Power Station
Amendment to Development Application DA80/10060-Mod-8 – Water Storage Pond

1 Introduction

EnergyAustralia has identified the need for additional water storage capacity at the Mount Piper Power Station (MPPS) and submitted an application to modify the existing development consent under Section 4.55 (1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The scope of the modification is to include the development of a new double-lined 60 ML pond immediately adjacent to the existing Blowdown Pond B. The new pond will function as a multi-use storage to provide redundancy for a number of process streams. It will receive flows from the existing blowdown ponds, the coal settling basin, the ash repositories and the new water treatment plant.

A description of the proposed storage pond and consideration of potential environmental impacts arising from the proposed development was included in a Modification report dated April 2019 and submitted in the same month to the Department of Planning and Environment . The description of the proposed modification was based upon the level of design detail available at the time of submission and the pond was described as being of an earthbank design with approximate dimensions of 140 metres by 80 metres to be located immediately north of the existing Blowdown Pond B at MPPS as shown on Figure 1.

Detailed design of the pond has identified that the required 60 ML capacity cannot be achieved, without substantial excavation works, between Blowdown Pond B and the existing conveyor running to the north of the proposed pond. The most efficient and preferred design has therefore provided for the pond to wrap around the north-eastern corner of Blowdown Pond B as shown on Figure 2. The revised design will remain in the highly disturbed footprint within the existing operational area of MPPS and better integrate with the existing bunding and earth walls surrounding Blowdown Pond B.

This letter has been prepared to assess any potential environmental impacts that may arise from the minor amendment to the pond design and location. The letter should be read in conjunction with the environmental assessment described in the Modification report (GHD 2019) dated April 2019 for the project.

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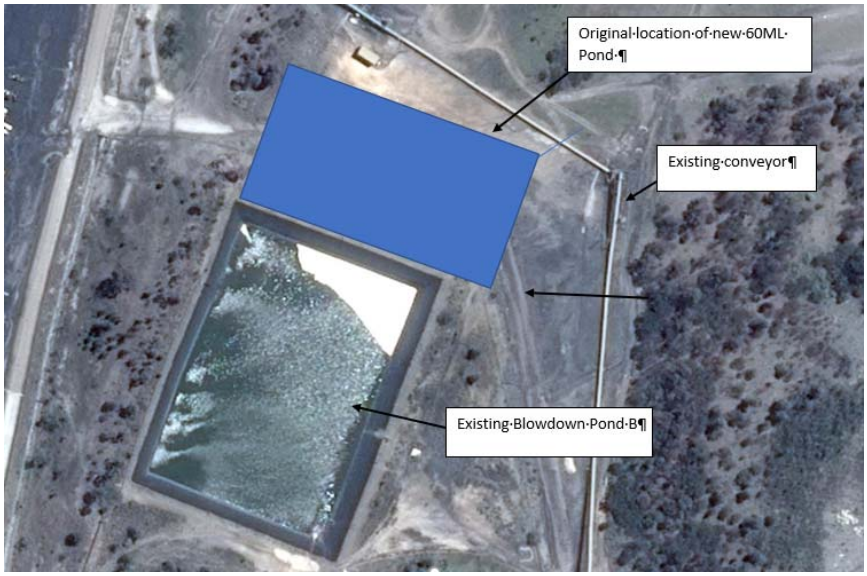

Figure 1 Original 60 ML pond configuration in April 2019 Modification report

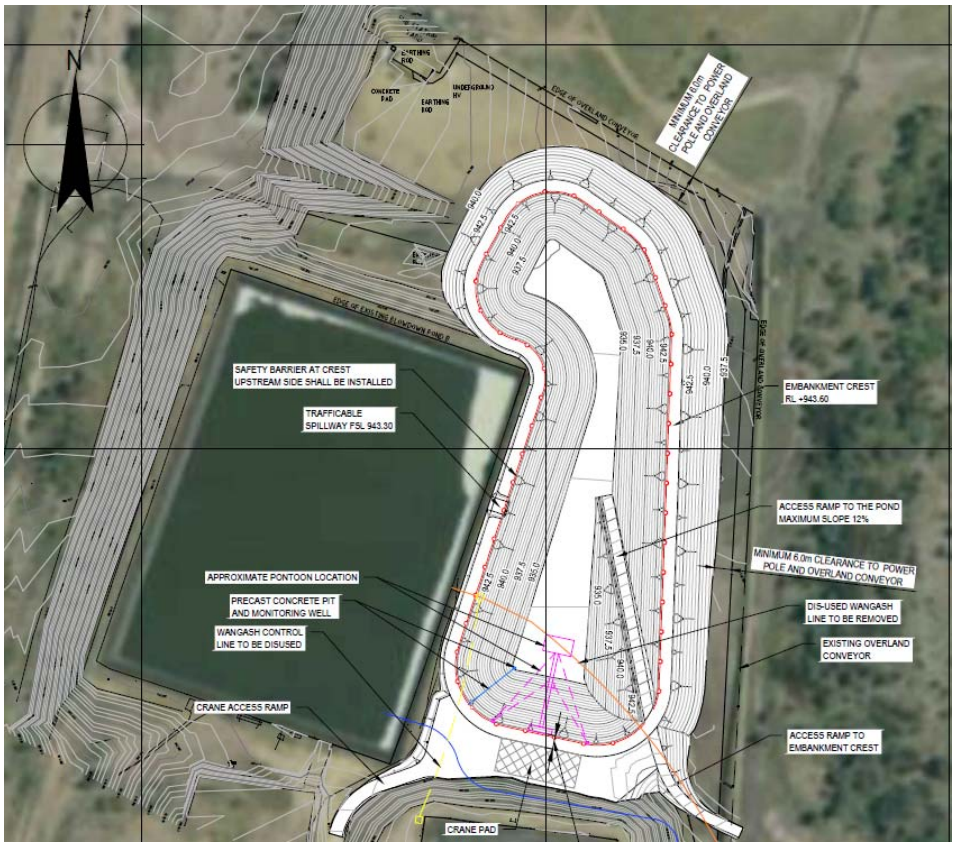

Figure 2 Proposed design and location for 60 ML pond

Photograph 1 Blowdown Pond E looking east

Photograph 2 Area between Blowdown Pond B and Conveyor

2 Environmental Interactions

2.1 Soils and geology

The proposed location of the 60 ML pond will remain in a highly disturbed area of the approved MPPS operational footprint between the existing blowdown ponds and conveyor system. The works will remain in the area of historic open cut coal mining and excavation will remain primarily within the backfilled overburden.

Appropriate construction management including erosion and sediment controls and an unexpected finds protocol for contamination will ensure potential impacts to soils and geology are minimised and in accordance with the environmental assessment included in the Modification report (GHD 2019).

2.2 Water resources

MPPS is located in the Wangcol Creek catchment, which forms part of the Upper Coxs River catchment in the broader Hawkesbury Nepean basin.

The change to the design and location of the 60ML pond will extend the construction footprint further away from the nearest natural receiving waters, the pond site will be located more than 400 metres from Wangcol Creek. The use of appropriate construction management and mitigation strategies as described in the Modification report (GHD 2019) will limit the potential for adverse impacts during construction.

Groundwater is not anticipated to be encountered during excavation and construction activities. In the event that some minor volumes of groundwater are intercepted then this would be managed within the excavation footprint as described in the Modification report.

As described in the Modification report (GHD 2019) the pond will be double lined to mitigate potential seepage to groundwater and include an overflow weir to direct any surplus water to the existing Blowdown Pond B (capacity 100ML). This design will adequately prevent any impacts to surface water and groundwater resources in the vicinity of the proposed pond.

2.3 Biodiversity

The proposed storage pond will be located within an existing approved infrastructure area which is a highly disturbed area of the MPPS site. The pond will be located between the existing coal stockpile, coal conveyors and water management infrastructure. As the area has been lawfully cleared to construct existing infrastructure, there will be no need to clear native vegetation as a result of the amended pond design. There will be no impact on the habitat of threatened species or ecological communities due to the construction of the proposed 60ML pond.

2.4 Heritage

The MPPS site has been highly modified and there are no Aboriginal or historic heritage items predicted to be impacted through development of the proposed pond. There are no known Aboriginal or historic heritage items in the proposed location of the 60ML pond.

The amended pond design will form an extension to the existing water management infrastructure at the MPPS. The ground disturbance will be limited to within a highly modified environment where the soil profile has been completely removed during previous open cut coal mining activities in the area.

There are no known Aboriginal sites or places recorded on the public register in proximity to the proposed construction footprint.

2.5 Traffic and access

The amended pond design will result in negligible change to the number of construction vehicles required for construction of the ponds and the construction vehicles are not expected to impact upon the safety or capacity of the road network.

2.6 Noise and vibration

The amended pond design will not create any additional noise or vibration impacts on sensitive receivers. There is a significant buffer distance between MPPS and the nearest sensitive residential receivers located approximately 2.4 km to the east in Blackmans Flat and 3.5 km to the west in Portland.

Construction noise resulting from the amended pond design will continue to comply with respective construction noise management levels for all surrounding receivers.

2.7 Air Quality

The amended pond design will not create any additional air quality impacts on sensitive receivers. The revised pond design will have a slightly larger footprint and will continue to have potential to result in minor dust generation during dry and windy conditions. Adequate construction management will minimise the potential for impacts to surrounding receivers.

2.8 Visual

The amended pond design will not create any additional visual impacts on sensitive receivers. The new pond will continue to form an extension to the network of existing ponds established at MPPS and will be visually integrated within the industrial setting. The pond embankments will be similar height to the adjoining Blowdown Pond B and are not anticipated to be visible from any key viewer locations in the surrounding area.

3 Conclusion

The potential environmental impacts associated with the design and proposed location of the storage pond are considered minimal. The pond will reduce the risk of uncontrolled surface water discharges from MPPS to Wangcol Creek.

A minor amendment to the shape and configuration of the proposed 60 ML storage pond is required to accommodate the pond within the spatial constraints at the site relating to existing power station infrastructure. The pond will be located in a highly modified operational area within the MPPS site. The potential environmental impacts associated with the proposed design and location will remain within the limits identified and assessed in the Modification report (GHD 2019).

Regards

Karl Rosen