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Dear Professor Galvin

## **Independent Expert Panel for Mining in the Catchment: Initial Report on Specific Mining Activities at the Metropolitan and Dendrobium Coal Mines**

### ***Introduction & Understanding of the Report Findings***

Council would like to thank your Independent Expert Panel for producing the “Initial Report on Specific Mining Activities at the Metropolitan and Dendrobium Coal Mines” as the first part of your Terms of Reference.

Council notes the report indicates that “Cumulative impacts are the combined effects of a development such as mining and other proximate land uses and activities on the environment. The cumulative impacts from past and continuing mining needs to be considered as a potential factor impacting water supply from the Special Areas”.

The report indicates that the Dendrobium Mine was granted approval two decades ago and expressly allows mining in Areas 1, 2, 3B and 3C. The Wongawilli seam is currently being extracted by longwall mining to a height of 3.7 to 3.95 metres at an average depth of around 360 metres in Area 3B in the Catchment Special Areas, adjacent to Avon Reservoir. The Panel concluded that performance measures for Dendrobium Mine complemented by a provision for offset impacts to swamps provide considerable scope for maximising mining dimensions. This is reflected in 305 metre wide longwall panels, 87% areal extraction, vertical surface subsidence of typically 3.5 m to 3 m and a total mine water of about 3 ML/day that responds to rainfall. The Metropolitan Mine is currently longwall mining the Bulli seam to a typical height of 3 metres at an average depth of around 460 metres in the Special Areas adjacent to Woronora Reservoir with future longwalls planned to pass under Woronora Reservoir. The performance measures for this mine were approved 9 years ago. The mine plan is based on 163 metre wide longwall panels on the flanks of Woronora Reservoir, reducing to 145 metres beneath the Reservoir but with potential to increase this width. The influence of the greater depth of mining, the narrower longwall panels and the lower extraction height compared to Dendrobium Mine are reflected currently in 78% areal extraction, around 1.1 to 1.2 metres of vertical surface subsidence and a total mine water inflow of about 0.5 ML/day that does not respond to rainfall.

Council also notes the report considers that groundwater, surface water and subsidence issues are very complex and previous modelling has been imperfect. The report notes that the knowledge of the contribution of swamps to water supplies is also particularly undeveloped due to lack of integrated monitoring, targeting swamp water balances.

The report suggests that advances have been made in the knowledge bases underpinning subsidence, groundwater and surface water since the approval of both the Dendrobium and Metropolitan Mines. However, some deficiencies and gaps in these knowledge bases have also emerged that are relevant to mines operating in Catchment Special Areas.

### **Council Comments**

Council is concerned about the loss of water to our reservoirs due to mining, especially water losses to Cordeaux, Avon and Woronora Reservoirs. Council does not want to see any further losses to our creeks and reservoirs as a result of poor mining practices. In this regard, our reservoirs in the Catchment Special Areas are currently under stress, due in part to the water demands of the population of Greater Sydney and the Illawarra / Shoalhaven and the relatively prolonged dry climatic conditions. It is vitally important that any future mining proposals do not cause any further loss of water resources in the catchment given the growing population of Greater Sydney and the Illawarra / Shoalhaven.

Council supports the findings of the Term of Reference 1 Report and agrees that the findings of the report require further thorough analysis and investigation as per the second and third stages of the Terms of Reference.

Council supports the Panel's recommendation that mine design methodologies and procedures that underpin critical aspects of future mining should be supported by robust independent peer review and/or a demonstrated history of reliability when applications are submitted for approval. All future applications to extract coal within Catchment Special Areas should be supported by independently facilitated and robust risk assessments that conform to ISO31000.

Council also supports the full Terms of Reference of the Panel. Any further applications for mining in the Catchment Special Areas should not be determined until such time as the second and third stages of the Terms of Reference are completed and fully understood. This will hopefully ensure that the potential impacts and consequences of mining with respect to the protection of water resources are properly assessed and managed.

Should you have any enquiries or wish to discuss this matter further, please contact Mr Ron Zwicker, Special Projects and Planning Support Manager on (02) 4227 7111.

### **This letter is authorised by**

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