Department of Planning and Environment Major Projects 7 September 2019 **RE: Dendrobium Mine Extension SSD - 8194** 8 September 2019

Dear Sir/Madam,

I object strongly to the mine extension project SSD - 8192.

The project is not in the public interest because of the significant increase in greenhouse gas emissions it will create over the proposed 30 years of its operations. These emissions make their individual irresponsible contribution to an already quickly warming planet resulting in damaging changes in our atmosphere and oceans.

Also I understand that the Natural Resources Commission and the Chief Scientist are undertaking independent but separate reviews on matters that affect the whole of Sydney drinking water catchment. A whole of catchment review captures the cumulative impacts of water use and mining in the catchment that a specific environmental planning and assessment process cannot do. I urge that SSD-8194 be considered within the context of these important reviews. Any recommendations in the final reports, when released, must form part of the assessment considerations.

Like all coal mines, Dendrobium is thirsty and wasteful of water. It is especially disturbing that this water waste is occurring within the drinking water catchment area of Sydney at a time Sydney is on water restrictions and the desalination plant in operation.

Curiously, the exact amount of catchment water wasted by the Dendrobium coal mine seems to be unknown. It is estimated to be almost 10,000 ML per year which if correct would seem the equivalent to almost nine years water usage by people living in my area.

The Dendrobium mine has caused documented vertical rock fracturing greater than predicted in the company documents in the previous planning application. Subsidence is causing relatively rapid impacts greater than both predicted and approved. From current operations the post-pressurisation zone extends through to the surface and beyond the footprint of the long wall panels. Every swamp undermined by Dendrobium mine has gone dry and the important ecosystems services provided by these previously functioning swamps lost.

Historically, the models used to predict the impacts on surface and ground waters appear weak and inadequate with serious gaps and uncertainty in the potential effects of mining. It is unclear whether there has been improvement in available models and assessment capacity and whether critical impacts such as how much water is actually being lost from the drinking catchment can be reliably quantified. This would seem a very important matter to get correct.

Given these documented failures and assessment uncertainty, the precautionary principle must be applied as part of the consideration of this application. I do not feel it is sensible and responsible to approve an extension of a mine already identified to have caused such damage to our precious drinking water catchment and urge that SSD - 8194 be rejected.

Yours sincerely Cathy Merchant 9 Glenview Cres Hunters Hill 2110