

# **DENDROBIUM EXTENSION PROJECT SSD 8194**

I object to the Dendrobium Extension Project (SSD 8194)

It is unacceptable morally, socially and scientifically to undermine Sydney's drinking water catchments and vital groundwater dependent ecosystems to allow the expansion of this coal mine.

Damage from mining induced subsidence to watercourses and upland, water purifying swamps is well documented and irreversible. The current application that plans to extend the mine's life out to 2048 cannot be justified on economic, scientific or environmental grounds with water resources under increasing pressure from fossil fuel induced climate change.

The NSW Government's Independent Advisory Panel for Underground Mining have emphasised the potential risks of damage to the surface water and groundwater regime, including stream depletion with reductions in overland and groundwater flow that must be assumed will occur over the long term and potentially in perpetuity. In dry years, flow will cease in watercourses in the mined catchment area that drain into Avon Reservoir..

Water NSW has also questioned the reliability of the modelling with the predicted surface water take from the existing Dendrobium Mine since 2014 increasing 5-fold in the 5 years. Mining in the Special Areas will significantly reduce the catchment yield that will peak around 2032 to 2036 at 26ML per day. WaterNSW also expressed concern about the levels of metal contamination with mining induced subsidence, fracturing strata and activating the release of metals and salts that will continue to leach and pollute the freshwater water system over time.

The NSW government cannot and should not approve this unjustified development and leave a legacy for future generations of irreversible permanent water loss and contamination of vital water resources supplying Sydney's population.

Yours Sincerely

Dr Julia Imrie PhD. BSc. Grad. Dip. Water Res.