Objection to Mod 14/ MOD 3 proposed coal mine expansion.

This proposed expansion is not minor, it will allow an increase in coal to be burnt amounting to more than the annual tonnage proposed for the Rocky Hill Mine in Gloucester NSW. That proposal was recently refused, in part because of the contribution of new coal projects to the dire risks of climate change. Moolarben Coal Mod 14/Mod 3 is being put forward at a time when all evidence clearly shows how the world's climate is changing. It is now well-established this escalation of global temperature and climate cannot be explained by past natural cycles and without any doubt is due to human actions. This catastrophic process is our creation and is fuelled by our decisions. A 2018 report by the International Energy Agency identifies carbon dioxide emitted specifically from coal combustion as _ the single largest source of global temperature rise. International climate targets are predicated on the fact that continuing past practices by routinely approving ever-expanding greenhouse gas (GHG) emissions constitutes an existential threat to our way of life. In short: the cost of further expansions to mining coal may prove more than the value of the resource.

Equally objectionable is what appears to be an inherent part of this expansion: to produce unknown, probably large quantities of brine waste of unspecified chemical composition and dispose of this waste underground. The proponent's case for acceptable safety depends on the 'stratification' properties observed in undisturbed salty water. The behaviour and mixing of multiple levels of connected groundwater in collapsed highly modified strata is extremely complex, with outcomes impossible to predict or prevent. In the chaotic underground environment MCM is planning to create by longwall mining it is hard to believe that the stable conditions required for salt water stratification can operate effectively or survive for long. There is unacceptable risk that the disposal of RO brine residue within mined UG4 will be a time-bomb legacy for future generations.

There is a self-justifying assumption in this proposal that groundwater beneath UG4 is limited and low quality. The location of this proposed dump site is within underground strata presently containing groundwater of good quality and quantity in close proximity to the Drip and Goulburn River Gorges. MCM justification that they are returning these salts back where they came is not a valid comparison. On the one hand, pre-mining, these salts are safely sequestered. This is supported by available information showing that the associated groundwater and the Goulburn River nearby have always been of good quality. On the other hand we are told that an activated and mobilised mixture of salts, metals and other pollutants will be put back into the broken, collapsed and oxidised landscape created by longwall mining processes. This is not acceptable, achieving a sustainable future depends on the preservation and adequate management our precious water resources.

I first came to the Goulburn River in the early 1970's. On that day Julia showed me the Corner Gorge and for the first time I stood in that ancient place of soaring stone and bright water running over sand, it was a turning point in my life. Over the years that followed our commitment to this place has deepened. We established our farm stay business, building three cottages with the help of family and friends. We learned many hard lessons; providing all services ourselves like water and electricity and trying to find a sustainable way of running cattle and harvesting timber. Through all of this, for our way of life and the business on which we depend, a viable river and groundwater system has been crucial. Without water the land is effectively sterilized, no one can live here permanently and there is no hope to meet the challenges of a changing climate. Recently my daughter had the idea to move back home and try to set up a business such as a winery. Everyone wants to hand on

something of your life's work to your daughters and sons, in our case this is unlikely while there is uncertainty and conflict from the ever expanding coal mining upstream.

I clearly remember the shock of the first mine expansion, before all of the people living near us moved away. Young and naive, we attended a public meeting at Ulan school where I expressed concerns that the proposed river diversion may erode and be unstable. Mr Flannery, representing the new mine, dismissed my concerns and reassured everyone that the diversion would be 'stone lined' and a permanent structure. The many years of clay eroding into the river and the millions of dollars spent trying to fix the worst of the failures of that appalling river diversion are a matter of public record and shame. Here we are more than thirty years later, now we are told that this latest coal mine can safely be allowed to put 7 tonnes of salt a day into the river, that an increase of millions of tonnes in carbon pollution shouldn't concern anyone and we can mine right alongside the river and then store toxic waste down there. It's all within the guidelines, what possibly could go wrong!

Repeated solemn commitments have been made by our leaders, internationally, nationally and at state level: promising real action and commitment to deliver sustainable management of water resources, protection of our rivers and groundwater. Whether these were genuine undertakings, made with real intent to actively prevent degradation of our rivers and aquifers, or just empty words, can be judged by how they are applied. Actions speak louder than words. The outcome of this proposed expansion will show whether the real priorities lie in favour of water security and river health for future generations or the operational concerns of mining companies.

I request that this independent panel consider and honour commitments made by NSW and Australian Government to sustainable water management, to protect and restore rivers and aquifers and that water crises are exacerbated by Climate Change

Yours sincerely

Colin Imrie BA.

