KIM MANWARRING

PROPERTY #144

MANGOOLA COAL CONTINUED OPERATIONS

Application SSD-17_8642

Background

In 1999 my husband, Craig Manwarring (who is now deceased), and I purchased this property from my parents, Noel and Marion Flanagan. The land has been in the Flanagan family since 1866 and formed part of the original Flanagan property on which I grew up.

In 1986, as a 16 year old, I was involved in a serious school bus accident on Mangoola Road. As a result of the accident I am a paraplegic.

I had received a settlement following the accident. The compensation money was intended to allow me to live, as far as is possible, the life that I would have had, if not for the accident.

In 2000 my husband and I constructed a forever home. My compensation money was invested into the building of my home. Having lived in houses that had been modified post construction for my disability both my husband Craig and I were determined that this house would suit all my needs.

In addition to this the environment was pristine and we built an architecturally designed home that met my needs as a person with a disability, not only physically but emotionally and spiritually.

Since purchasing our property my father has passed away and my mother has sold the remainder of the original Flanagan farm to move to town. For my extended family my property is the connector to our shared heritage as well as to the environment.

In 2013 Craig died in a motor vehicle accident. Since then, I have lived here with my two children, Safia (15yrs) and Ella (11yrs). As a family unit our home and surrounds has been crucial in coping with the loss of my husband and the girl's father.

The existing Mangoola Coal mining operation has created distress and uncertainty as to our future for me and my family. The expansion by Mangoola Project with the MCCO Project has added to that distress and uncertainty.

I am on the direct path of encroachment from the MCCO Project and my home is assessed as on the limit for the triggering of the voluntary acquisition rights for all the impact assessment criteria for the project.

Having reviewed the Environmental Impact Statement it is clear that the modelling of impacts, by which my home was assessed contains errors in their assumptions and their methodology.

Furthermore, the cumulative impact of all the encroachments on my home, the noise impacts, the dust emissions, groundwater loss as well as the social impact caused by the MCCO Project are such that the peace and quiet enjoyment of my property is irretrievably impacted.

I request that the approval for MCCO Project is unilaterally rejected or alternatively that my property be afforded voluntary acquisition rights in accordance with Voluntary Land Acquisition and Mitigation Policy.

Executive Summary

My home is identified as Property ID#144 and I am considered as a proximal landowner and included in the Wybong State Suburb.

My home will be located 1.95kms from the Mangoola Coal Continued Operations (MCCO) Project. The MCCO Project reflects a significant shift in mining intensity to an area directly adjacent to my home.

Mangoola Coal ask us to trust that, despite significantly reduced operational buffer zones and their lack of baseline data, that for the next eight years the ridgeline will serve as a noise and dust barrier for my home.

The increase in mining operations increases the noise, the dust, the impact of blasting and the groundwater impacts for my home. Despite 4-5 years of supposed preparation for this project, Mangoola Coal does not appear to have baseline data for many of these impact assessments.

I draw specific attention to the noise model and in particular to the simplistic mining fleet assumptions used in the noise model. The time granularity of the model is deficient and the model lacks the appropriate baseline data. This data could have been provided for with sufficient fixed noise monitoring stations, weather stations and inversion towers for the project.

The simplistic mining fleet assumptions coupled with the conservative static positions adopted for the sound modelling and the lack of granularity in the model does not accurately reflect the mine development and as such the impact that this development will have on my home.

Mangoola Coal are seeking permission from the Department of Planning and Environment and the state of New South Wales to further encroach on my home. They do so despite their poor track record of transparency of their current operation, their derisory modelling of the environmental impacts and their complete disregard for my personal circumstances.

I reiterate:

- **I am on the 40 dB(A) limit.**
- **The noise from the current operations is already problematic.**
- **The MCCO Project will be located within 2 kms of my home.**
- **The noise model lacks rigour in assessing the impact of the combined mining fleet configurations, the worst case scenario, for the MCCO Project.**
- **The sound source positions in the model are biased to the more southern mining locations and do not reflect the intensity of the northern pit activity – which underestimates the noise impact on my home.**

I reiterate my request that the approval for MCCO Project be unilaterally rejected, or alternatively that my property be afforded voluntary acquisition rights in accordance with Voluntary Land Acquisition and Mitigation Policy.

Further to this I have reviewed the Environmental Impact Statement available to me and my major areas of concern are set out in this submission:

a) Noise

The noise impact modelling contained within the EIS is inadequate and as such fails to appropriately consider my home, ID144.

b) Air Quality

The air quality modelling contained within the EIS contradicts the publicly available records for dust emissions Mangoola Coal's current operations and as such cannot be regarded as dependable. In addition, in assessing the impact of dust emissions the EIS has failed to adequately consider my needs as a person with a disability.

c) Blasting

The EIS fails to consider the impact that blasting will have on my use of my home and my associated licenced areas. The MCCO Project is using my

licensed areas, for which I pay and for which I have usage rights, as their buffer zone. That is unacceptable.

d) Groundwater Impact

My 2 private bores, GW201 589 and GW080 507 provide my house with domestic water. The EIS does not effectively consider the impact that the drop in the water table will have on my bores and the consequence of the loss of water access for me and for the value of my property.

e) Loss of Amenity

The aggregation of each transgression by the MCCO Project on my home and my right to the peace and quiet enjoyment of that home has not been considered as part of the EIS.

f) Loss of Property Value

My home is sterilised in the current property market. With the direct impact of the MCCO Project I have significantly reduced options to attract a buyer for my home should I want to sell. In either the short- or long-term period, I have just one option for sale – Mangoola Coal and to date Mangoola Coal/Glencore's behaviour has indicated that they intend:

i. to take full advantage of the diminution in my property value caused by their mine; and
ii. to not recognise that my home is designed for my disability and that the value of my home reflects this customisation.

1. ENM and Noise Impact

I object to the MCCO Project as the potential noise impact of the operations on my home have not been appropriately considered.

The Environment Noise Model (**ENM**) is inherently flawed as to the noise impact and fails to consider the following:

a) the intensity of movement and the location of equipment particularly in Years 1 through to Year 5 of the MCCO Project.

b) the existing acoustic environment and in particular the assumption that the ridgeline mitigates noise propagation.

c) the topography of the local area and in particular the effect of echoing and funnelling through the complex terrain.

d) the effect of the local meteorological conditions on noise and in particular the impact of temperature inversion occurrences.

e) the systemic inability of the current operation to address noise complaints in a considered and pro-active manner.

MCCO Project Noise Impact Assessment

A more rigorous analysis of the location and movement of equipment over the life of the project to determine the true worst case (as compared to the report's 'typical worst-case scenario') is required for my home.

This comprehensive review of the MCCO project would have resulted in my home (ID144) triggering the Voluntary Land Acquisition and Mitigation Policy (VLAMP).

- The MCCO Noise Impact Assessment (**NIA**)[1] claims that the noise impact assessment results are ‘conservative’ in their modelling. I do not agree with their assessment of their model as being conservative and consider it is in fact inadequate. As such, I have retained Dr Darlene Heuff, Advanced

[1] Appendix 8 of the EIS

Environmental Dynamics Pty Ltd to provide comments on the mining – noise impact methodology of the NIA. Dr Heuff's comments inform our response for each year of the operations as set out below.

- In Year 1, on commencement of MCCO Project operations the two largest and loudest 996 Excavators (according to the equipment table and sound power data levels) are positioned within 3 kilometres of my home. As these Excavators and the established truck fleets establish initial surface operations they are encroaching towards my home. In Year 1 my home's noise prediction for night is **40dB(A)**. A noise prediction above 40dB(a) is considered significant and triggers the Voluntary Land Acquisition and Mitigation Policy (VLAMP).

  I consider that the model is inadequate as it pertains to my home, as it relies on a fixed average location of the excavator / fleet sound points[2]. These fixed positions do not reflect the worst-case scenario for mining operation in the more northern area nor the intensity of activity in these early years (Year 1 to Year 3) – the locations are too centralised and too far to the south.

  The model location and depth of the sound modelling source locations is critical to the efficacy of the model[3] and therefore the assessment of the impact on my home.

  The results of a data model are reliant on the variable inputs of that data model. Given the limitations I have identified with the variable inputs, it is not appropriate for the MCCO Project to assess my home as being only marginally impacted by their proposed operations.

[2] Figure B-1 of the Noise Impact Assessment
[3] Dr Darlene Heuff, Advanced Environmental Dynamics Pty Ltd

A true worst-case modelling scenario would include circumstances where the mining fleet is in the most northern locations on the upper mining benches and a second or third mining fleet is in close proximity (reflecting the mining intensity in that area). These noise source locations should then be modelled with worst case wind speed and direction and worst-case temperature inversion occurrences. This is probable to increase the dB(A) reading for my home to between 42-45 dB(A)[4]. The current fleet modelling locations assumption are too simplistic and do not accurately reflect the true variability.

- There is no Year 2 assessment. In accordance with the mine plan detailed in the NIA modelled source locations, between Years 1 and Year 3 there will be frequent periods when more mining equipment will be operating on the upper benches, and for more sustained periods in the northern part of the MCCO pit. These locations are in close proximity to my home and have the most direct impact on my home[5]. In line with my comments above there needs to be additional modelling to capture the true mining intensity during Year 1 to Year 3 period.

- In Year 3 (through to Year 5) there is a significant increase in mining equipment allocated to the new pit areas of the MCCO Project. Over 60% of the mining equipment fleet, largely constituted by the loudest equipment, is now located in the new pit areas of the MCCO Project. Given this concentration of equipment, the location of the sound modelling source locations at average positions in the central part of the MCCO Pit is inadequate.

[4] Dr Darlene Heuff, Advanced Environmental Dynamics Pty Ltd
[5] Figure B-2 Modelled Source Location

In Year 3 to Year 5 my home's noise prediction for night is **39dB(A)**. The very minor drop in the noise prediction (from Year 1 40dB(A)) appears to rely on the noise source points being located on the lowest benches and therefore the noise being shielded by the (only) ridgeline which separates MCCO from my home. The model is inadequate as it relies heavily on assumptions as to shielding effect of the ridgeline. There is no baseline data to support this hypothesis. The coupled assumption of noise shielding by the ridgeline and failing to account for likely variances in the mining operation fleet locations is inadequate for making the determination of 39dB(A) for Year 1 to Year 5.

As this is the timeframe of most concern to me, the model is too simplistic and inadequate as it pertains to my home.

- In Year 5, when my home is assessed **at 39dB(A)** all mining activity for Mangoola Coal is now located in the MCCO Project area and operating at levels of 13.5Mtpa ROM Coal Production. This is the equivalent of all the current Mangoola Coal annual production. Adding to this in Year 5, the MCCO Pit spoil dumps are at full height and are encroaching from the west in the direction of my home. No allowance appears to have been made in the NIA for the increased activity of the trucks in and around the dumps, and particularly with regard to the now predominate dumping by trucks at height and in a progressively easterly direction (the direction of my home). The NIA does not appear to give appropriate weight to the height of the spoil dump. Given proposed production rates, it is likely that the spoil dump height at this time will be significant and will be close in height to the ridgeline and even exceed the ridgeline height. The modelling and the analysis appear to be silent on this consideration.

- Despite assertions that ROM Coal Production will decrease to 6.0Mtpa, the NIA for Year 8 is unlikely to be accurate for a 13.5Mtpa ROM Coal production rate (for which this approval is being sought). According to the NIA, any increase in production or change in production timelines is proposed only to be dealt with by 'reasonable and feasible' mitigation measures. This places me in a position where I am solely reliant on Mangoola Coal's mine management practices during the years of operation of the MCCO Project. I am particularly vulnerable in the years of the project when mining operations intensely concentrated at the base of the ridgeline less than 2km in distance from my home.

- Given that all mining equipment is now located within the concentrated mining area which sits at the base of the ridgeline bordering my home and is less than 2kms from my home, the production rates in the NIA are critical to the assessment of the noise impacts on my home.

  If the variation in the indicated annual production plans as outlined for Year 5 to Year 8 occur, then it is reasonable to expect the noise impact on me would be greater than predicted (39dB(A)). This would then result in full 8 years of significant noise impact on me and my family.

- No allowance has been made in the NIA for the combined operating sound power of multiple mining loader, dozer, drill and truck units. The aggregate of the mining units can have a combined operating sound power of 125dB(A) – 127dB(A)[6], which is far in excess of the stated values for individual mining units. This is further intensified when one to three fleets are concentrated as outlined in all of the MCCO operating assumptions.

[6] Procter T, Tomerini D, Brown A, 'Noise Management in the NSW Coal Industry, Proceeding of Acoustics 2016

The sound power data in the NIA fail to consider this effect which I consider is to be of critical importance in modelling the impact on my home.

- The NIA only refers to a 'typical' worst case scenario. This appears to be an attempt to limit the worst-case scenario that may affect adjacent properties such as my home. Given that the noise levels that impact my home are consistently on the VLAMP limits, limiting the model to a 'typical' scenario appears to be an arbitrary construct that is designed to advantage the MCCO Project at my expense.

- My retained mining - noise expert has advised me that a more comprehensive analysis of the fleet mix, fleet positioning and fleet mining depth assumptions is required. These assumptions need to be matched to the revised combined power estimates. This is particularly critical for Year 1 to Year 3 of the MCCO Project. This comprehensive analysis should also reflect a robust approach to the equipment positioning in locations of 500m – 1,000m further to the north than the positions assumed in Figures B-1, B-2 (and even B-3) Modelling Source Locations Year 1, 3, 5 respectively.

- I am certain that when this comprehensive analysis is matched with the worst case weather conditions that it will demonstrate the sensitivity of mining fleet positioning in the MCCO Project to the increased noise impact on my home.

Existing Acoustic Environment

Given the emphasis that the NIA places on the ridgeline as a "natural barrier that will mitigate noise propagation to the north and north west of the proposed Additional Mining Area"[7] I would consider that as a minimum Mangoola Coal should have been undertaken extensive unattended noise monitoring in these locations to validate the assumption and methodology of the noise model. Noise monitoring locations NC02 and NC10 which are used to obtain the baseline data for the noise model are **NOT** located to the north of the ridgeline.

As no unattended monitoring data is available to the north of the ridgeline, I do not consider that Mangoola Coal should be able to rely on the assumption that the ridgeline mitigates noise propagation in their NIA.

- The NIA states that the unattended monitoring data used to qualify the existing background levels is sourced from monitoring locations NC02 and NC10.

- According the NIA, NC02 and NC10 are considered "representative of all areas east, west, **and north** of the proposed Additional Project Area that may be impacted by noise the proposed mining operations"[8].

- We do not consider that NC02 and NC10 are representative of the existing noise levels for areas north of the ridgeline and in the direction of the advancing MCCO Project's mining operations.

- NC02 and NC10 are located on flat ground, east and west of the existing mine and to either side of the ridgeline. They are not in a position to capture the noise propagation and/or reduction around the ridgeline.

[7] Section 1.2 of the NIA
[8] Figure 8 Monitoring Locations

- Likewise, NC02 and NC10 are not suitably positioned to capture the noise echoing and funnelling that occurs through the complex topography.

- The Sleep Disturbance Assessment clearly shows that the predicted noise level at my home will often be over 40dB(A), with L_{Amax} dB 44db(A) levels recorded in Year 1. This clearly demonstrates the intrusiveness of the noise from the operations during Year 1.

- The Sleep Disturbance Assessment for my home shows that my home is affected, and often to a greater extent than the homes that have triggered the VLAMP acquisition process.

- The level of noise complaints for the existing operations from properties north of the ridgeline would indicate that there are serious flaws in the assumption that the ridgeline mitigates the propagation of noise.

- Mangoola Coal has had ample time to locate noise monitoring stations to the north of the ridgeline over the course of current operations. The fact that Mangoola Coal has chosen not to do so and now seeks to rely on that lack of data to its advantage is cause for concern.

Topography of the local area

The NIA relies heavily on the ridgeline mitigating the noise propagation to the north and north west of the MCCO Project and the methodology provided in the NIA does not adequately address how the complex topography is included in the model.

- The NIA states that the model takes into account barrier and ground attenuation and that the ENM Terrain Category 2 for rural land has been adopted. However, it is not possible to ascertain from the EIS whether Terrain Category 2 is the correct category as no justiciation for this choice

is provided. Given the complexity of the topography surrounding my home there may be a more appropriate category than Terrain Category 2.

- As the NIA relies largely on the effect of the ridgeline on the noise impacts for my property, I cannot determine from the methodology provided in the NIA that the appropriate height data for the ridgeline and the variability of the contiguous ridgeline has been considered. Neither can I see mention or evidence of analysis of noise impact where the mining equipment is operating on spoil dumps that are as high or higher than parts of the ridgeline.

- My lived experience of the current Mangoola Mine is that the worst noise levels experienced at my home occur in association with reflected noise i.e. the echoing and funnelling of mine noise as a result of interaction with local complex terrain. The ridgeline is not a continuous barrier and the assumption that it is erroneous. While a computer model with poor input variables may show it as a continuous barrier, I can attest as someone who has walked and ridden around that ridgeline my entire life, that it is not a continuous barrier.

- The ridgeline dips towards the low point (AHD 220m) and incorporates many lower saddles. This, when coupled with the mining in the shallow areas particularly in Years 1 - 3, wind direction and temperature inversions significantly increase the potential for higher noise impact for my home than is described in the NIA.

- Mangoola Coal's own report highlights the significance of the ridgelines in the noise mitigation of the mining operations. The NIA has made no effort to create a sophisticated and tailored model to improve the accuracy of noise predictions. The NIA has **NOT** accounted for the complexity of the terrain especially under adverse meteorological conditions.

Effect of meteorological conditions on noise

The MCCO Project does not appear to have installed an inversion tower in line with best practice and as such seeks to rely on the averaged meteorological data for the operation of the current mine. This data is not sufficient and fails to capture the effect of the temperature inversions.

This failure can be seen in the current level of noise complaints referenced in the Complaints Register[9] and will only increase with the approval of the MCCO Project.

- Noise levels will increase under inversion conditions as the sound waves are refracted downwards (over and around the ridgeline that is supposed in the NIA to act as a shield to my home which is less than 2km away).

- The NIA relies on the data from the weather station. Best practice would require that this weather station would also include an Inversion Tower. This does not appear to be the case for the MCCO Project and therefore the NIA is not best practice. It is unclear how the temperature inversion occurrences were modelled – one can only assume using averaged data from another location?

  Once again, Mangoola Coal seek to use their lack of data to its advantage.

Failure to address noise complaints from current operations

In 2018/2019 I lodged a total of 44 noise related complaints as a result of the current operations. At no time have my complaints, or my requests for more comprehensive noise monitoring been addressed to my satisfaction.

- Mangoola has been in operation since 2010. Since its commencement noise has been an issue. The complaint register shows that in the last 6

[9]www.mangoolamine.com.au/en/publications/ComplaintsRegister

years there were 874 community complaints. From the data available in the last 2 years it would seem that over 700 of these complaints are likely to be related to noise. This neither reflects compliance to model nor best practice.

- The existing Mangoola Mine is 4 – 6km away (in a South - South West direction) from my home and supposedly shielded by significant ridgeline terrain which is assumed to be beneficial for noise reduction.

- In accordance with the worst case noise contours (Modification 6) my home should be experience a noise level of significantly less than 35 dB(a), and from the noise contours provided be at approx**. 32 dB(A)**. That is a negligible VLAMP Noise impact level. Mitigation measures are currently in place for the sleeping zones in my home. This is tacit acceptance by Mangoola Coal that the current noise impact is in reality higher than models indicate.

- Despite this we regularly experience noise and sleep disturbance. When I measure the noise, I routinely register noise levels of **greater than 40 dB(A**) and sometime in excess of 50dB(A). I have sent such evidence to MC as part of recent noise complaints. I have yet to receive an appropriate response to my complaints.

- I have made numerous noise complaints with regard to the existing operations. The noise complaint register shows that I made 24% of the approximately 200 community complaints in the last 12 months.

- I have made a total of 268 noise related complaints about Mangoola Coal existing operation since 2011.

- Mangoola Mine's current noise impact model is incorrect. These errors have continued to be promulgated in the NIA as it pertains to my home. Given that the Mangoola Mine is seeking consent for their mine to further

encroach to within 2km of my home, the notion that I will be only marginally impacted is frankly absurd.

- The noise from the current operations creates stress and anxiety disturbing me and my two daughters physically and mentally. My children are forced to move their study out of their rooms of an evening so they can concentrate. At times they wake from disturbed sleep because of the night time noise from existing mining operations and subsequently go to school tired and exhausted. This is impacting their schooling and I am concerned that it may impact their mental health if it continues for the 8 years of the MCCO Project.

- I use the Mangoola Coal Community Complaints system. The provision of basic information surrounding the complaints takes enormous amounts of time. I have now involved Planning Compliance to assist, however it still takes weeks to receive a response regarding complaints that I made in the month's previous. Information is presented in technical formats and Mangoola Coal requests me to describe what equipment is making the noise - when I know nothing about mining. I am left bewildered and disempowered by their process and by a mine management that won't even leave their operation / homes of a night time to experience the noise impact they are inflicting.

- Mangoola Coal repeatedly fails in its obligations to me and the wider community to satisfactorily address these concerns.

2. Dust Emissions

I object to the MCCO Project as the adverse impacts of dust emissions from the expanded mining operation have not been appropriately considered for my individual circumstances.

The Air Quality Impact Assessment (AQIA)[10] only considers the impact that the emissions have on a typical member of the community. Given my disability the impact of the dust emissions on me is greater. The threshold level at which an impact is assessed as being severe should therefore be lower.

The AQIA is also inherently flawed as to dust emissions and fails to consider the following:

a) the impact of a range of meteorological conditions on dust emissions.
b) the disconnect between the model and the dust emissions for the current operation.
c) the impact that the proposed mitigation measures have on the lifestyle of my family and the community.

Dust and my disability

I am extremely worried about the future health impacts for me of increased dust emissions.

An increase in the dust level in my environment has a disproportionate increase in my health risks.

- Respiratory concerns are an ongoing issue for paraplegics regardless of the amount of time since their injury.

- The dust emissions from the current operation and its impact on my built environment is considerable and with the expansion of MCCO Project will only increase.

[10] Jacobs (Appendix 9 of the EIS)

- In addition to this, as a person with a disability, maintaining my home is physically more strenuous and yet is required if my daughters and I are to enjoy our outside built environment. My two daughters suffer from allergies and asthma like conditions and their health suffers with increased dust exposure.

Meteorological conditions and dust emissions

The MCCO Project AQIA model does not correlate with the reported dust emission for Mangoola Mine obtained from the National Pollutions Register.

I consider that the veracity of the model is flawed in the air quality predictions (all stages, all years) and that it is likely that the dust emissions for my home will trigger the Voluntary Land Acquisition and Mitigation Policy criteria.

- For 2011/2012 through to 2017/2018 in the National Pollutions Register, Mangoola mining operations reported annual PM_{10} emissions between 2,500,000 kg and 5,900,000 kg.

- The AQIA estimated the PM_{10} emissions from the MCCO Project would range from 656,339 kg (Year 8) to 1,209,436 kg (Year 3).

- Given that the mine plan for the Mangoola Mine shows that the existing operation moves to be located entirely within the MCCO Project area by Year 3 and that the production volume for the mine remains constant at 13.5Mtpa Coal Production. It seems improbable to suggest that the MCCO Project's projected PM_{10} emissions are significantly lower than what the current operation is reporting. Are the PM_{10} estimates grossly underestimated for the MCCO Project? Do the PM_{10} estimates in fact trigger VLAMP provisions for my home which is directly adjacent.

- The MCCO Project Air Quality Impact Assessment (AQIA)[11] only considered a single year of meteorological data (i.e. 2014) which is poor baseline understanding the impact on my home.

- It is my opinion that the choice of a single year, 2014, as 'typical' was subjective.

- Consideration of a minimum 3 consecutive years of varying meteorology would have captured a more appropriate range of meteorological conditions of the local terrain and provided a truer reflection of dust emissions.

Impact of dust emissions on my life

The mitigation measures which are proposed by the MCCO Project to compensate for increased emissions remove my homes connectivity to its surrounds and given my circumstances the impact of this is magnified.

- My home reflects connectivity with the outside environment it has been purpose built for my disability, the layout enables me to access the outside environment with ease and this satisfies my emotional and spiritual wellbeing and is designed to offset my physical limitations.

- My limited mobility means that many outdoor activities are not available to me. My built environment, including my house and landscaping was designed by myself and my husband Craig to allow me to maintain my connectivity to the bush and to the land that I grew up on.

- The mitigation measures that are proposed for my home by the MCCO Project clearly indicate that my family and I will now need to retreat inside like hermits and turn on air conditioners to combat the impact of noise and maintain an 'assumed' healthier air quality. This mitigation measure is the

[11] Jacobs (Appendix 9 of the project EIS)

antithesis of the very principles on which my husband and I designed our home and our built environment.

- Already we live with our home being altered to accommodate mitigation measures to minimise noise, dust and air quality impacts from the current operations. The sleeping quarters' windows and glass doors have been replaced; air conditioning and fans and the sealing of gaps throughout majority of the house, as well as the cleaning of water filters and regular dredging of my drinking water tanks.

3. EIS and Blasting Impact Assessment

I object to the MCCO Project as I do not consider that the Blasting Impact Assessment for the EIS gives sufficient weight to the impact of blasting in the MCCO Project on me.

There is no indication in the EIS that the alert system will be anything other than what is used for current operations.
This is not sufficient for my home (ID144) given my proximity to MCCO and my active use of my licenced areas.
If blasting occurs when my family and I are using our licensed areas for recreation, we will be subject to a harm incident. This further lessens my quiet and peaceful enjoyment of my property.

- My home (ID144) includes a large parcel of licenced land.

  Licence Agreements (LA)

  DP or Folio Identifier 54/750 968 - License Number 315 203;

  DP or Folio Identifier 105/750 968 - License Number 315 204;

  DP or Folio Identifier 145/750 968 - License Number 315 205;

  I have paid substantial yearly license fees for the past 19 years for these LAs and I utilise them for both grazing and recreational purposes.

- My freehold blocks of land are attached to these LAs and further to this two of these LAs adjoin the MCCO Project.
- The LAs are utilised on a continual basis by myself and my family to connect with the bush. Extensive walking and horse riding tracks are established right down to the adjoining MCCO Project disturbance area.
- I contest that my daughters and I, as well as our family members have not been adequately considered in the Blasting Impact Assessment[12] as there is an assumption in the EIS that the LAs will serve only as a buffer zone and are not actively used.
- Blasting Mitigation requires that an alert system ensures safety from fly rock for people as well as the safety of livestock and domestic animals. The EIS is vague as to how the extent of the alert system, stating only that it is in line with current operations. Given my immediate proximity to the blasting events, a notice in the local paper is not sufficient to guarantee my safety, my family's safety and my animal's safety.

- The EIS therefore fails to consider the impact of my use of my LAs appropriately.

4. Environment Risk Assessment

I object to the MCCO Project as I do not consider that the Environment Risk Assessment attached to the EIS gives sufficient weight to the impact of the potential increase in bushfires originating at the MCCO Project on my home (ID144) and in particular on me as an impacted person with a disability.

The EIS fails to consider that the operation of a mine, with blasting, heavy machinery and people, significantly increases the bushfire risk in the Wybong area. The impact of a bushfire on me, with my disability, is potentially catastrophic.

[12] Appendix 10 Blasting Impact Assessment

- The Mangoola Coal Continued Project will be using blasting, hot equipment, and high voltage electrical and maintenance practices, that could easily trigger an outbreak of fire into the nearby surrounds
- My family and I will be residing in close proximity of the Mine and if a bushfire was to come over the surrounding hills I will be exposed to a fast moving fire front.
- I stress once again I am a single parent with a disability and have limited to no capacity to combat a bushfire.
- The Environment Risk Assessment states only that the Mangoola Coal Bushfire Hazard Management Plan will be updated. This is insufficient. I want assurance that my safety and my family's safety will be paramount at all times. At a minimum this would include alternate access points, which must be ramps to accommodate my disability, from my property to the road.
- To reduce the stress of this potential threat to myself and my family I request that a sophisticated bushfire suppressant system be implemented on my home.

5. Ground Water Impact

I object to the MCCO Project as the Groundwater Impact Model cannot be relied upon to accurately assess the impact of the project on my home.

The bores located within 2 kilometres of the MCCO Project are both my bores. Any impact on groundwater levels is catastrophic to my water supply.

The groundwater impact model contains fundamental errors.

The assessment that the impact of the MCCO Project on my home bores is not comprehensive and cannot be allowed to stand given the errors in the modelling.

- The 2 bores that are within 2kms of the MCCO Project proposed footprint are my home's bores (ID144). The impact on groundwater is therefore critical to me[13].
- The groundwater model contains fundamental errors in the location of my bores, identifying GW201 589 as being located closest to the Mangoola Coal mine boundary and GW080 507 as being located closest to my house.
- Given the predicted maximum drawdown in any model layer for my bores is between 5.2m and 4.1m the location of my bores is critical to the efficacy of the model.
- All predictions are theoretical based on an estimated model layer. Given the errors in the base data (both bore location and associated descriptions) these modelled predictions should not be allowed to stand unchallenged.
- Further to this at no stage has the MCCO Project tested my bores for base line data to determine the validity of their assumptions.
- I am reliant on bore GW201 589 and bore GW080 507 for both stock use and for my domestic water. My home is a dry block and has no other access to a permanent water source, nor has it been required.
- The EIS also fails to address the impact of mining on the quality of the bore water. The final void will be approximately 1.5 km of my home Given that my use of bore water includes domestic use this model is profoundly inadequate.
- Mangoola Coal has had ample time to gather long term baseline ground water data and assess the impact of the predicted drawdown estimates on my private bore holes over the life of the mine to date. This has not been done.

[13] Of the 5 bores identified as being within 2kms of the MCCO Project proposed footprint, the other 3 bores are no longer current, being backfilled, acquired and converted to DIPNR monitoring.

- There is no explanation in the EIS as to how the water levels will be monitored following the commencement of the MCCO Project.
- For nearly 20 years I have been entirely self-sufficient for water. There is no acknowledgment of this and no explanation in the EIS as to how my home water supply will be maintained following the commencement of the MCCO Project.
- Constant water deliveries are not an option without my house driveway being upgraded as it is not designed for heavy vehicle traffic. Given my disability, I have serious concerns that any mitigation measures that MCCO will propose will be unacceptable for my home.

6. Loss of Amenity

I object to the MCCO Project as I do not consider the loss of amenity that I will suffer is adequately considered by the EIS. The aggregation of the different environment impacts of noise, dust, water and blasting, and the proposed mitigation measures associated with each of these transgressions results in a significant diminution to the amenity of my home and erodes my peace and my quiet enjoyment of my home.

The EIS fails to adequately consider the loss of amenity for my home and family. **The aggregated impact of each of the mitigation measures proposed by the MCCO Project for their environmental transgressions erodes my peace and quiet enjoyment of my property.**

- Already my girls and I live with our home being altered to accommodate mitigation measures to minimise noise, dust and air quality impacts from the current Mangoola Mine operations. Our sleeping quarters' windows and glass doors has been replaced; air conditioning installed, and the gaps sealed throughout majority of the house. Even with these mitigation

measures in place the noise, the dust and the air quality of our home is impacted.

- The communication and provision information provided by Glencore/Mangoola Coal has not been forthcoming. It has required me to be constantly asking the right question to get information that is of any benefit, and at times information requests can take up to 6-8 weeks. The aggregation of impacts is magnified as any information sought from Mangoola Coal is hindered by what appears to be deliberate obfuscation.
- It has been 2 years since Mangoola Coal representatives raised the possibilities of the MCCO Project with me. During this time I have experienced significant stress around the decisions that I make around my home in particular around repair and maintenance.
- My plans to improve our living conditions such as installing a pool and extending the living quarters to link to the fourth bedroom have had to be put on hold.
- A significant loss in landowners in the local community as a result of the development of Mangoola Coal has resulted in a transient population that are attracted to renting with no connectivity with the local community. This impacts on my daughters who are denied the connection to community that was one of the key motivations of my husband and I buying the land from my parents and building our home.

7. Loss of property value

The aggregation of the environmental impacts, and the proposed mitigation measures from the MCCO Project results in a diminution of my peace and my quiet enjoyment of my property. At the same time the MCCO Project reduces the value of my home and renders my home unsaleable.

This home represents my financial compensation for my accident as well as my connection to my heritage and my husband.

We invested in a pristine block of land that had not been intensely farmed and was surrounded by the Australian bush. We have a family connection to this land that is over 150 years old.

- The development of the existing Mangoola Coal has reduced the value of my home over the past 10 years.
- Even if I wanted to sell, I cannot as the existing operations in addition to the MCCO Project cripples any possibility of selling to people interested in living a rural bush lifestyle. I have had this verified through discussions with many local Real Estate agents.
- The financial compensation I was awarded following my accident reflected the severity of my injury. The compensation was to allow me to live a life as close to the one I would have lived if it wasn't for my accident. The compensation recognised that I was an innocent victim of a tragic accident that shook the Wybong community.
- I invested that compensation in my home, long before Glencore and Mangoola Coal began operations and I expected that it would remain my home.
- The only buyer for properties in this area is Mangoola Coal. Mangoola Coal by its actions, has both driven down the value of my property and sought to be advantaged by that action by offering me a price lower than the market value of my property, and indeed a price which does not reflect the customisation of my home that my disability requires. To sell to Mangoola Coal, at Mangoola Coal's lower price, is to forfeit a significant portion of my initial compensation.