

**Lauren Evans**  
**Resource Assessment**  
**Dept of Planning & Environment**  
**GPO Box 39**  
**SYDNEY NSW 2001**

10 Feb 2020

Dear Ms Evans,

**Mangoola Coal Continuation Operations Project (SSD 8642) RTS Comment**

I refer to the Response to Submissions (RTS) submitted by Umwelt in December 2019, on behalf of Mangoola Coal Operations Pty Limited ("the Proponent") in relation to the Mangoola Coal Continuation Operations Project (MCCO) (SSD 8642). I make the following comment on the RTS on behalf of Muswellbrook Shire Council. The opportunity to comment is appreciated.

Council's concerns were:

- Environmental Issues
- Road and traffic impacts
- Social Impacts
- Impacts on heritage items, places and relics
- Visual Impacts
- Economic outcomes
- Rehabilitation and Mine Closure processes
- Greenhouse Gas Emissions

**Changes to Project**

The RTS notes that two changes have been made to the project in response to matters raised in Council's submission:

- *Change to Overpass Design - the concrete arch structure over Wybong Road is now proposed to be 10 m in width and 6.2 m height to account for OSOM vehicles;*

Muswellbrook Shire Council appreciates the efforts Mangoola Coal has made in relation to this important matter. Council recommends that definitive advice be obtained from Transport for NSW (TfNSW) in relation to the clearance dimensions that will be required for the overpass, so that Wybong Road may continue to be used as an alternative Over Size Over Mass route. Council would also recommend advice be sought from the National Heavy Vehicle Regulator in relation to the required clearance dimensions. The web site of the National Heavy Vehicle Regulator may be accessed at [www.nhvr.gov.au](http://www.nhvr.gov.au).

- *Changes to Final Voids - additional design of the final voids has occurred primarily to remove the highwall sections that occur at the margins of the voids. The changes reduce the size of the final voids. The final void in the north-west of the MCCO Proposed Additional Mining Area will reduce from approximately 82 ha (proposed in the EIS) to approximately 81 ha. The existing approved final void at the Mangoola Coal Mine will reduce from approximately 48 ha (proposed in the EIS) to approximately 46 ha.*

Muswellbrook Shire Council appreciates the reduction, but continues to be concerned that new voids are still being proposed as part of mine projects. There are no voids in the 'natural' landscape, so retaining a void at the end of the project means a permanent impact on the landscape.

Council's feedback on the remaining matters in the Response to Submissions follows (based on the numbering in the RTS):

### **3.8 Cumulative Impact Assessment**

Comments raised in this part of Council's submission relate to the approvals process for mining proposals in NSW, and are matters that Council considers the Planning Authority should take into account when assessing cumulative impacts the planning linked to this application, and matters the NSW Government should contemplate as part of the policy environment regarding mining in the Hunter Valley and climate change more generally.

*....Mangoola would like to reiterate that the MCCO Project EIS has been prepared in accordance with the requirements of relevant Commonwealth and NSW legislation and relevant policies and guidelines. The MCCO Project EIS provides the environmental, social and economic impact assessments required to accompany the applications for the required planning and environmental approvals for NSW and Commonwealth determining authorities. This has included detailed assessments of both site specific and cumulative impacts as required by relevant guidelines.*

#### Council Comment to RTS

Noted. This remains an issue for the Planning Authority.

#### **3.8.1 Social Impact and Community Issues**

Council had noted that a larger and broader mix of stakeholders would provide a more accurate and inclusive range of information informing the Social Impact Assessment. Council also noted that a reduction in population in proximate areas reduces the ability of these areas to attract members to emergency service organisations, such as the Rural Fire Service, and other groups or community events that support people living in rural areas.

The project will remove the social community context of the area, particularly the Wybong Post Office Road area and its intersection with Yarraman Road. Wybong Community Hall is a strong indicator of the social prominence of this locality in Muswellbrook Shire, and that it is still regularly used by the community provides evidence of the area's continuing important social perspective.

Post mining, Mangoola Coal should consider the development of a village around Wybong Hall and intersection of Wybong PO Rd and Yarraman Rd. It is important that the sense of community is regenerated post mining. This needs to be considered as an important component of the closure plan.

*Engagement has been an integral component of the MCCO Project, with a comprehensive stakeholder engagement program implemented as part of the Project. Given that Mangoola Coal Mine is an established operation, and relationships with the community have been developed over time, the engagement approach adopted for the current assessment, builds on existing relationships developed and activities undertaken by Mangoola to date.*

*As part of Mangoola's existing community engagement approach, personal meetings with stakeholders are offered, providing personalised opportunities for engagement and provision of detailed information regarding existing operations and the MCCO Project. This also provides the*

*opportunity for discussion of personalised solutions to the identified issues. Mangoola will continue to implement this approach to ensure that there is a mechanism in place to respond to landholder issues and concerns.*

*In regard to complaints management, Mangoola operates a 24 hour community hotline for receipt of community complaints. As part of the complaint management process, complaints are responded to within 24 hours of receipt, investigated and the results reported to the complainant in a timely manner. This includes any measures implemented to resolve or close out the complaint.*

*Mangoola maintains a complaint register to record all community complaints, investigations and outcomes. Mangoola records all relevant contact with the community even if an investigation concludes that the mine's activities remain in compliance with existing project approval conditions (and other regulatory) limits; or the reported instance is not able to be attributed to the mine (e.g. a contact regarding a blast is recorded as a complaint even if the investigations finds that no blast from the mine occurred at the time reported).*

*While Mangoola seeks to proactively deal with all complaints, it also recognises that response and management of complaints is a last resort and therefore has a range of ongoing stakeholder engagement mechanisms to seek to effectively communicate with the local community. Mangoola is committed to continue to strive for effective communication with the local community and broader stakeholder groups.*

#### Council Comment to RTS

Participants were not asked about the MCCO Project, therefore the original point made by Council stands. The survey results cannot be considered to provide a reliable view of the local community's perception of Mangoola as it relates to the MCCO Project.

On the basis that a number of proximal landholders chose not to participate in the engagement process due to health reasons, what specific consideration was given to ensuring these proximal landholders were involved in identifying any proposed mitigation measures associated with noise, light, and dust management?

Council's point about the ongoing reduction in population remains, the impacts include a reduction in the number of residents available to volunteer in emergency service organisations such as the Rural Fire Service, participate in local community events or provide neighbour support.

Council request that any conditions related to a future Mine Closure Plan include a requirement for planning for replacement housing in the vicinity of Wybong Hall.

Council considered that a deeper, more authentic level of understanding and engagement with the indigenous community was required and sought the introduction of a specific indigenous employment programme

*As noted in Section 6.12 of the EIS, employment opportunities for Aboriginal stakeholders were raised as a potential positive impact of the MCCO Project, that would benefit the Aboriginal community. Mangoola, as part of the wider Glencore community investment program, is considering the development of a trainee or work experience program, with the assistance of a third-party provider in the area of cultural heritage management, biodiversity or land management, ecology, rehabilitation or another appropriately related field.*

*Through the ACHAR and SIA programs undertaken for a number of operations in the Hunter Valley, Glencore has responded to community requests for the development of a work experience program for local Aboriginal youth, with the program to be rolled out across in 2020.*

#### Council Comment to RTS

While Mangoola Coal will consider the development of a trainee or work experience program, this does not adequately address the issue of permanent indigenous participation in Mangoola Coal's workforce.

The Social Impact Assessment does not provide any consideration of the social perspective of the community post mining, and how impoverishment of the local community's social fabric may be avoided.

No commentary is provided on the final social outcomes post mining and what needs to be done to ensure the resilience and heritage of the community post mining. This is of significant importance to the community.

*In relation to opportunities post mining, Mangoola agrees that early planning for closure of the mine is required. As stated in the EIS Mangoola will update the existing conceptual closure plan for the mine to include the MCCO Project upon approval and has committed to progress to a detailed mine closure plan five years prior to closure. The detailed Mine Closure Plan will include the development of a Post Mining Land Use Strategy in consultation with MSC. The mine closure planning process is discussed in Section 6.17.4 of the EIS.*

*Mangoola commits to continue to investigate potential post mining beneficial land uses for the site through the development of a Post Mining Land Use Strategy as part of the Mine Closure Plan. The development of the detailed Mine Closure Plan will commence five years prior to the planned mine closure and include consultation with relevant stakeholders, which is anticipated to include the Resources Regulator, DPIE and MSC. As part of this process Mangoola would welcome the opportunity to further discuss MSC's vision for the future of the Wybong area.*

#### Council Comment to RTS

Noted. Council request that any conditions related to a future Mine Closure Plan include a requirement for planning for replacement housing in the vicinity of Wybong Hall and a program of community building activities that extend into the Mine Closure period after cessation of actual mining activity.

The Social Impact Assessment (SIA) does not consider whether the Mangoola Coal Continued Operations (MCCO) Project will impact upon the community's ability to access and enjoy the Manobalai Nature Reserve and large Crown Land holding to the south of that Reserve.

*The Manobalai Nature Reserve is located approximately 6 km to the north-west of the MCCO Proposed Additional Mining Area. At this distance no significant direct or indirect impacts are predicted that would impact this area or the community's ability to access and enjoy it.*

*With regard to the large Crown land holding that is situated between the Manobalai Nature Reserve and the MCCO Project Area the impact assessment completed as part of the EIS did consider the potential for impact on this Crown land. The two key issues identified as requiring specific assessment with regard to this area of Crown land were noise and blasting impacts. With regard to noise, as noted in the NIA, the Crown land located to the north-west of the MCCO Proposed Additional Mining Area has a recreational land use and impacts were therefore assessed against NPfl recreation area amenity noise levels. This assessment found that model predictions do not exceed recreation area amenity noise levels, indicating noise amenity for recreational land use should be preserved in accordance with the intentions of the NPfl.*

*There is a small area of Crown land that is immediately adjacent the MCCO Project Area to the northwest that for some blasts near the extremity of the mining area will fall within the 500 m blast exclusion zone. Where blasts occur within 500 m of this area, the blast exclusion zones will be managed to ensure there are no blast risks to any users of this area of Crown land.*

#### Council Comment to RTS

Noted. Council requests that any conditions related to a future Mine Blasting Plan include provisions on how public access to public land will be managed so disruption is minimised.

Council has identified that loss of population, and issues of housing availability and affordability, are linked to the acquisition and demolition of homes as part of the expansion of mine operations and development throughout the Shire. To mitigate the loss of housing, a condition of approval is requested that either:

- a) requires a financial contribution to a social housing provider towards the provision of affordable housing in Muswellbrook, to replace the equivalent amount of housing stock permanently or temporarily lost due to the project; or
- b) the construction of affordable housing in Muswellbrook, to replace the equivalent amount of housing stock permanently or temporarily lost due to the project.

*The SIA outlines that there is not predicted to be any further demand for housing by the MCCO Project operational workforce, as a result of the Project. In relation to the construction workforce, it is also unlikely that the influx of the 145 peak construction workforce, given minimal population change, will place any significant negative impact on community services and infrastructure within the Muswellbrook LGA.*

*Construction will occur over a 16-month period, with some construction workers likely to seek temporary accommodation during this time in short-term rental accommodation in proximity to the MCCO Project site within the Muswellbrook LGA. Other construction workers are likely to already reside within the area or live within the region more broadly and drive in, drive out daily or as required during the construction period.*

#### Council Comment to RTS

The RTS avoids responding to the issue raised by Council, that the current mining operation, and the proposed MCCO, have removed a substantial number of dwellings from Muswellbrook Shire's housing stock (approx 30 dwellings). This removal is additive, the other mines in the area have also removed housing stock, and this is placing pressure on housing affordability. In other parts of the NSW, particularly Metropolitan areas, there are requirements to ensure new development doesn't result in a loss of dwellings, and particularly that new development doesn't have a negative impact on housing affordability in the locality.

Key issues of noise, blast vibration, dust, lighting, traffic, fume and odour, as identified on page 36 of the SIA document, are consistent with other mining operations within Muswellbrook Shire. This result demonstrates a cumulative impact that is not readily addressed in the SIA. Cumulative data related to this particular location is not available and therefore it is difficult to assess the social impact of 'mining in general' that elevates the frequency and consequences of each of these key issues

*While it is noted that there is a level of sensitivity regarding the cumulative impacts of mining in the region generally including those impacts on services such as accommodation and health services, as well as labour supply, the assessment of potential cumulative impacts as a result of the MCCO Project did not identify any significant cumulative impact issues. There are a number of operating coal mines within the Upper Hunter Valley. However, the closest mine to the MCCO Project is Mount Pleasant Mine which is located approximately 9 km to the east. Due to the distance from other mining operations, significant cumulative environmental impacts on issues such as noise, dust and blasting, as a result of the MCCO Project are not predicted.*

#### Council Comment to RTS

Noted.

## Economic

Council seeks greater fidelity to predictions of labour requirements for the MCCO Project so that it can adequately assess and plan for social impacts...it is unclear if the new Full-Time Employees are entirely new positions or if they are continuing positions for the existing miners at the current mining site.

*The Mangoola Mine has previously assessed and approved to have up to 540 employees at its peak. The mine currently has an existing workforce of approximately 400 employees. The MCCO Project will provide for continued employment opportunities for the existing workforce with up to an additional 80 workers likely required to achieve the assumed peak workforce of 480. This peak will, however, remain below the currently approved 540 peak employees for the mine.*

### Council Comment to RTS

Noted.

The Proponent has approached Council with an initial offer on the terms of a VPA, however further negotiations are required before a VPA can be finalised.

*As described in the EIS, the MCCO Project will extend the operational life of the existing mine by approximately five years. In line with Mangoola's existing VPA, Mangoola proposes to continue its existing VPA commitments for the duration of the MCCO Project, to facilitate continued and ongoing support for a range of environmental and community projects within the Muswellbrook LGA.*

*This includes:*

- *\$500,000 to fund local environmental management projects – complete and paid in full*
- *\$600,000 to fund council's education and training strategy – complete and paid in full*
- *\$1,200,000 to contribute to the recreation assets renewal fund – complete and paid in full*
- *\$2,200,000 to fund Denman recreation area enhancements – complete and paid in full*
- *\$20,000/year to fund MSC environmental management and monitoring – ongoing and subject to*
- *CPI increases*
- *\$55,000/year to contribute to road maintenance costs for part of Wybong Road – ongoing and*
- *subject to CPI increases*
- *\$220,000/year to contribute to general mine affected road maintenance costs – ongoing and*
- *subject to CPI increases*
- *\$235,000/year to contribute to additional environmental and community projects – ongoing and*
- *subject to CPI increases*
- *\$100,000/year to contribute to additional environmental and community projects – ongoing and subject to CPI increases*

*To this end, discussions with MSC are ongoing with a preliminary meeting held with the MSC Mayor, General Manager and Chief Financial Officer in December 2019. MSC committed to providing feedback on the MCCO Project proposed VPA early in 2020. Mangoola will continue to seek to engage with MSC in order to agree to a VPA for the MCCO Project and would welcome further opportunity to meet and discuss the VPA arrangements.*

#### Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs. Council considers that a contribution should be required for diversification of the economy post mining.

The Environmental Assessment for the MCCO Project notes that "Scope 3 emissions simply acknowledge that products will continue to generate greenhouse gas emissions as they move through the value chain." That acknowledgement is not accounted for in the cost of greenhouse gas (GHG) emissions in the Economic Assessment. In Appendix 7, the assessment measures Scope 1 and Scope 2 only. Consequently, while GHG emissions for purchased goods and services and employees commuting to and from work are not considered (Scope 3), the benefits of the project to workers and suppliers are included in the calculations as net economic benefits.

The Economic impact assessment (Appendix 7) does not account for the cumulative air pollution in the entire Muswellbrook LGA.

*The economic analysis has used a reasonable approach to measure the potential economic impacts of particulate emissions. The assessment has been completed in reference to the 'with project' and 'without project' emissions and this is an acceptable and appropriate approach under relevant guidelines.*

*Just or equitable distribution of environmental impacts is considered in the sensitivity analysis and in particular the discount rate used in the economic assessment. Sensitivity analysis completed by the economic assessment has considered a reduction in the discount rate. Reducing the discount rate from the 7% (assessed by the central case) to 4% (assessed in the sensitivity analysis) will increase the "costs" imposed on future generations, when those costs are discounted back to present values. The economic assessment therefore has considered the just or equitable distribution of environmental benefits and burdens of the mine.*

*The economic analysis has used a reasonable and appropriate approach to measure the potential economic impacts of particulate emissions. The assessment has been completed in reference to the 'with project' and 'without project' emissions and this is an acceptable approach under relevant guidelines.*

#### Council Comment to RTS

Noted.

Council noted that Table 4.3: Location of Suppliers' Main Offices (p. 27) of the EIS indicates only 8.7% of supplier expenditure is paid to companies with offices in Muswellbrook Shire. This appears to be an extremely low percentage and does not provide the level of social benefit that would be obtained from a higher percentage of local spend.

*... the responses from the supplementary survey undertaken with major suppliers of Mangoola, indicates that although a supplier's head office may be located outside of the Muswellbrook LGA, many of these suppliers still have a significant presence in the area. This presence includes:*

- *physical infrastructure such as facilities, workshops and/or offices*
- *employees that are permanent residents of the LGA*
- *those that work within the LGA or the wider region/other LGA's.*

*Approximately one third of businesses who responded to the survey had some level of local presence in terms of facilities. These surveyed businesses account for approximately 28% of the total Mangoola supplier spend in the 2017-2018 financial year (\$28,847,460 of Mangoola's total \$101,596,354 expenditure).*

*The surveyed businesses employ a combined 71 workers with roles based within the Muswellbrook LGA, and 164 of supplier employees are also reportedly living within the LGA boundaries.*

*As outlined in the EIS it is expected the MCCO Project will generate indirect benefits to local suppliers and employees of \$14.1M and \$76.8M respectively and result in the net incremental increase of local council rates totalling \$2.7M in NPV terms over the baseline case. Indirect costs associated with the MCCO Project are minor, including transport impact costs and the loss of agricultural output of \$1.0M.*

*Based on these assumptions, the LEA has found that the MCCO Project is estimated to provide a net benefit on the Upper Hunter region of \$92.6M in NPV terms.*

Council Comment to RTS

Noted.

Council identified that there needed to be a contribution toward diversification of the economy post mining. This is due to mining locking up employment in the LGA, and inhibiting the opportunity for economic diversification, which could supply more varied employment to residents now and into the future.

*The MCCO Project is a continuation of an existing mining operation providing ongoing employment opportunities for the existing workforce for another approximately five years of mining beyond which would occur without the project. It is not considered that this ongoing employment will inhibit the opportunity of economic diversification in the region.*

Council Comment to RTS

Noted. Council still considers that a contribution should be required for diversification of the economy post mining.

Council noted that the loss of surplus to other industries calculation in the EIS quantified the "surplus" rather than the value of the agricultural industry as a whole. In the case of productivity loss, it doesn't consider the loss of veterinary and farm services to the local economy due to reductions in critical mass, and of course, the flow on effects.

*The proposed Wybong Heights offset site is part of a 4,451 ha large property. Management of this property employs 1.5 FTE workers. A veterinarian will, on average, be engaged for seven days a year and a spraying contractor for approximately five days a year. Spraying advice and general soil test advice is paid through purchase of product, such as feed and fertiliser, at the advice provider.*

*While there will be a reduction in total cattle numbers on the Mangoola owned land, there will continue to be agricultural production across much of the Mangoola owned land and ongoing agricultural employment will occur. A change in employment numbers, if required at all, will have a negligible impact on the agricultural workforce in the region.*

*The AIS demonstrated, that a reduction of cattle numbers sold due to the MCCO Project has a small impact to local saleyards (worst case scenario 1% decrease in cattle at the Singleton saleyard). Therefore, a loss of agricultural employment at the saleyards due to the MCCO Project is not anticipated.*

Council Comment to RTS

Noted.



## Noise

Management of noise must be made a high priority, and should be proactively monitored in a manner that is satisfactory to the proximate community. This is not a single solution to this problem, solutions should be tailored to individual stakeholders' needs.

*Mangoola recognises that noise impacts is a key issue for both the existing mine and the MCCO Project and treats this issue as a high priority and puts significant resources into this issue. The mining operations are planned around minimising noise impacts and extensive controls are in place to minimise noise. Noise mitigation is also a major focus of Mangoola's ongoing community engagement program recognising that all individuals have a different perspective on the acceptability of any noise impact.*

*Since operations commenced at Mangoola in 2010 the number of noise complaints received has fluctuated but generally trended downwards with a significant reduction observed since operations first commenced. In response to the concerns raised during this period, Mangoola has implemented a range of mitigation and management measures to reduce noise related impacts on surrounding private residences.*

*Mangoola is committed to managing noise impacts from its mining operations and has a comprehensive Noise Management Plan in place. This plan will be updated for the MCCO Project. In accordance with this plan Mangoola will continue to utilise a range of proactive and reactive noise management strategies informed by real-time noise and meteorological monitoring systems. Proactive strategies will include utilising meteorological forecasting to plan activities in advance of potentially adverse conditions and ongoing day to day planning of mining operations to reduce noise. Reactive strategies will include the modification or suspension of activities in response to a series of triggers due to noise enhancing meteorological conditions.*

### Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

## Blasting

Council requested that the acceptable blasting criteria for heritage items, rock formations and rock shelter sites be amended to match the criteria for residences on privately owned land to avoid damage.

*The blast criteria adopted in the blast impact assessment for managing impacts on residences located on privately owned land are different to those for managing impacts on heritage items and rock formations as they are established to manage different things. With regard to private residences the impacts from blasting are required to be managed to minimise annoyance on residences whilst for other structures and items such as heritage sites and rock formations the impacts are managed to avoid damage.*

*It is noted that the criteria as adopted for the MCCO Project are consistent with the current blast limits that are in place and being managed at the existing Mangoola Coal Mine. The proposed criteria outlined in the EIS are considered appropriate and are therefore not proposed to be modified as requested by MSC.*

### Council Comment to RTS

Appropriate conditions of approval are required for an ongoing regime of inspection of heritage sites and rock formations to monitor the impact of blasts and require modifications to blasting where damage is being identified.

## Water Resources

Hydro Engineering and Consulting notes streamflow gauging station SF01 that the location of the stream depth sensor was for many years above the stream cease-to-flow level. Therefore, estimated streamflow for the period of record has limited accuracy (P19) and have attempted to build a model based on data from Dartbrook near Aberdeen. That a partially operable sensor "was for many years above the stream cease-to flow level" raises concerns over the thoroughness of monitoring data used for other Mangoola activities.

*Gauging station SF01 was installed several years ago to assist in capturing baseline data to assist in the planning and assessment of the MCCO Project. It was installed voluntarily by Mangoola and is not a compliance monitoring site. In 2017 it was identified following a review of the available data and a site inspection that the gauge was sitting above the stream cease to flow level. It is thought that following the installation of the gauge the stream bed in Big Flat Creek in this area has eroded or scoured out further and led to the stream gauge sitting above the base of the creek. Due to the highly ephemeral nature of Big Flat Creek and the very limited rainfall that has occurred in recent years, opportunities to collect stream flow information have been severely limited in any case.*

*It is noted that this situation has not in any way affected the validity of data or assumptions used in the Surface Water Assessment or EIS.*

*Flow in Big Flat Creek is ephemeral and any baseflow is likely to be a low proportion of total flow. Therefore, the use of the flow characteristics of Dart Brook to characterise flow conditions and assess impact to flow in Big Flat Creek is considered to be conservative.*

### Council Comment to RTS

Noted.

In the EIS, Table 9 (P26), records show water samples with Aluminium, Copper, Chromium, Lead, Manganese, Iron, Silver and Zinc exceeding ANZECC guidelines at a number of sites along Big Flat Creek. While these cannot be attributed to current mining operations they do have implications for the water quality in the final void...No modelling of concentrations of metals in the void pit water appears to be evident.

*No water from Big Flat Creek will report into the final voids. In this regard the water quality in Big Flat Creek is not predicted to have any implications for water quality in the final voids. Some water from parts of the upper catchment of Big Flat Creek will flow to the final void, however, diversion drains are proposed to seek to divert water around the void where practicable and appropriate.*

*Final void water and salt balance modelling was undertaken as part of the Surface Water Assessment to simulate the behaviour of the pit lake that would form in each of the final voids. Based on the Geochemical Assessment for the MCCO Project runoff and seepage from overburden is not expected to be acidic and is not expected to contain significant metals concentrations. Therefore, long term salinity is the likely main issue for pit lake water quality. Further details with regard to the assessment of void water quality is provided below in response to MSC's questions regarding water assessment for the final voids.*

### Council Comment to RTS

Noted.

## Biodiversity

Council accepts that the RTS adequately responds to points 52-60 and 64-65 that were raised by Council.

However, though not grounds for rejection, the position presented in points 61-63 remains. Mining operations are to move by a couple of kilometres therefore sources and subsequent impacts will also be moving a couple of kilometres closer, which makes the MCCO statement that 'there will be no substantial change' in impacts disingenuous. Nor does council agree that the MCCO Project will not 'result in any substantial or spatially definable indirect impacts' to biodiversity. In the future, for new projects, this issue will be better dealt with under the Biodiversity Assessment Methodology.

In relation to points 66-69, Council maintains its position regarding the adequacy of the dissimilar methodologies used to determine the scale of the impact to *Diuris tricolor* and *Prasophyllum petilum* and the population size within the propose offset areas. The precautionary principle should have been applied to the impact area based on the outcomes of the orchid expert report, or the expert report outcomes should have aligned with the results of the impact assessment if it were adequate as the habitat is of a similar type and quality and there isn't a significant geographic separation between the sites. Section 6.5 of the Framework for Biodiversity Assessment (OEH 2014) in no way precludes assuming presence of these species in the impact area and subsequently providing species polygons that would align with the assumptions made within the expert report therefore resulting in more consistency between the results. Council supports the Biodiversity Conservation Division's (BCD) request and MCCOs commitment to retire all credits generated within the offset site as a way of addressing this inconsistency. However, council still feels the results are misleading as the population densities are more than likely to be the same between sites, therefore the offsets would not actually be of a greater ecological value than that which has been impacted upon.

In regards to the RTS responses to Council's comments on the rehabilitation and final landform, Council accepts that the RTS responses to points 96, 98-101, 103, 105-108 are meeting the absolute minimum requirements of the relevant acts and policies.

The RTS response to comment 97 states that the proposal will deliver 'the best attainable values of composition, structure and function'. Council does not agree with this statement as the best values that would be readily 'attainable' would be from multiple representative reference sites that should be identified as part of the application process. Council strongly supports the BCDs comments on the adequacy of the performance indicators and completion criteria detailed in the EIS.

The RTS response to comment 102 states that they will consult with the local Aboriginal community regarding future land use. However, the RTS then goes on to say that '*the MCCO Additional Project Area is to be returned to native woodland vegetation to meet part of the biodiversity offset requirements for the MCCO*'. This latter statement effectively predetermines the outcomes of this consultation, as their use for offsets will preclude activities not consistent with biodiversity conservation. Even Aboriginal cultural uses may require consideration and therefore consultation when developing the Biodiversity Stewardship Agreement Management Plan for the mine rehabilitation offsets.

## Historic Heritage

Council's submission noted that while there may be few built items of heritage significance in the area, the village and surrounding properties that constitute Wybong have existed for more than 150 years. The Shire of Wybong was constituted in 1906. There are memories associated with this location and the decline in population living in this locality, due to mining, disrupts the ongoing cultural links for this community and place.

Council also noted that the description of the Millville homestead indicates it is representative of the evolution of homesteads in these early pioneer locations...At minimum there should be a demolition plan prepared, and followed, for the Millville residence, that allows detailed photographic evidence to be taken to document the phases of construction, and a report prepared that captures the important values and themes this residence represents for Wybong and the early settlers of the Valley.

*....in acknowledgement of 'Millville's' historical value to the local area (irrespective of its ability to meet any of the seven criteria for heritage listing), and in response to MSC's submission, Mangoola commits to undertaking an archival recording of the property prior to any demolition works. Archival recording during demolition works will be undertaken if deemed to be warranted as a result of information obtained during the recording prior to demolition.*

*Copies of the archival recording will be provided to Heritage, Department of Premier and Cabinet, and MSC, for inclusion in their respective libraries. A copy will also be provided to the Muswellbrook Shire Local Family and History Society for their records.*

#### Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

### **Traffic and Transport**

The assessment contained in the EIS is an inadequate assessment because it fails to satisfy the requirements of the SEARs. No proper assessment of the likely transport impacts, such as volume of operational traffic, capacity, road condition, safety and efficiency on the road network from the operating phase of the development has been undertaken. The reason given in the assessment is that operational traffic volumes are not expected to increase following construction of the project. However this seems contradictory to the facts contained in the Economic Impact Assessment, page 24 section 2.5.1, which states that an additional 199 FTE workers will be employed.'

Council asks for clarification on the traffic volumes predicted and specifically if these include both operational and construction traffic during the construction phase.

The EIS omits any consideration or reference to Muswellbrook Shire Council's 'Road Asset Management Plan' which identifies mine affected roads such as Wybong Road as having specifically identified functions and hierarchy. Therefore, the information given in the report is not specific to Council's roads and does not align with the class descriptions and required functions of the roads according to Council's Road Asset management plan.

#### Council Comment to RTS

Whilst it may not be a requirement of the TTIA or EIS, it is considered to be responsible practice to carry out independent review of data of this nature, and Muswellbrook Shire Council would encourage Mangoola Coal to consider doing this in the interest of public safety and the safety of Mangoola Coal employees.

Muswellbrook Shire Council considers that recognition and appropriate consideration of the road hierarchy defined in Council's Road Asset Management Plan to be an important contributor to Mangoola Coal's traffic management planning responsibilities.

Muswellbrook Shire Council reiterates that Council's current policy is that it will not approve any closures to public roads and/or changes to Muswellbrook Shire's road network until finalisation and adoption of the reviewed 'Mine Affected Roads Network Plan'.

Although the existing conditions of consent for Mangoola allow employees to use Wybong Road east and Kayuga Road, Council would not permit traffic to use these roads, to maintain consistency with the conditions of consent for other mines. Therefore the assumptions used in section 3.2.3 are not correct. Council also requests that this existing condition be amended.

*As stated in the EIS there are no changes proposed to the operational traffic impacts above what has previously been assessed and approved and the assessment of construction traffic has confirmed that all relevant intersections will continue to operate at appropriate levels of service. Accordingly, Mangoola sees no reason why Mangoola employees should now be restricted from*

*using these roads. Conditions imposed on another project to address an impact associated with that project should not be applied to Mangoola where no impacts requiring management have been identified.*

#### Council Comment to RTS

Council requests that the existing condition be amended to ensure consistency with the conditions of consent for other mines operating in Muswellbrook Shire.

Section 2.1.9 Active Transport and Public Transport, in the EIS, makes no mention of the impacts, if any, to the 'National Trail' which includes part of Wybong Road

*With respect to the location of the MCCO Project Section 9 Ebor to Aberdeen is located to the north of the MCCO Additional Project Area and makes its way through the parcels of Crown land located to the north west. At its closest the trail comes within approximately 1 km of the MCCO Additional Mining Area. At this distance no impacts on the trail or its users are predicted consistent with the findings of the assessment of impacts on Crown land adjoining the MCCO Additional Project Area.*

*Further west in the vicinity of Sandy Hollow the trail does cross Wybong Road. No works or impacts on Wybong Road in this area are proposed that would impede the use of the trail.*

#### Council Comment to RTS

Noted.

Section 2.3 - Crash Data, in the EIS, suggests that there is no significant safety deficiencies in the road network near the intersections of interest. What is this assumption based on and is it based on safety audits conducted on the roads? The report fails to mention the existing conditions imposed by the State Coroner following a fatality which occurred on the road. Therefore Council considers that an inadequate assessment of the impacts to road safety from the development has been undertaken.

*...the assessment of road safety in the road network near the intersections of interest was undertaken based upon a review of crash data provided by RMS for the previous five available years (2013 to 2017). Upon review of this data, GHD identified (as noted in the TTIA) that ten crashes had been recorded during this period along approximately a 35 km length of road, which suggests that there are no significant safety deficiencies in the road network near the intersections of interest.*

*...a copy of the State Coroners report referred to in MSC's submission was requested but not provided and therefore could not be further considered.*

*It is also noted that more recently in September 2019, there has been another fatal accident on Wybong Road and investigations into the accident are ongoing.*

*It is considered that the TTIA has completed an adequate assessment of the impacts to road safety from the MCCO Project, based on the information available when the report was prepared.*

#### Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure the findings of Coroner Reports are implemented when available in the future if there is links to the Mine operation, how vehicle movements and the workforce is managed.

### **Visual Impacts**

The installation of landscaped bund for the full frontage of the project area to Wybong Road is proposed to lessen visibility. The EIS does not provide detail on heights of the bund, the

proposed density/type of plantings or assess the impact this amelioration measure will have. Council requests that conditions be included that require:

- That screen plantings be installed at sufficient density to assist with screening mine components from sensitive viewpoints, including Ridgeland Road and Wybong Road.
- A minimum screen planting canopy density, measured from ground level to a height of 8m above ground level, of 60% (alternatively expressed as a leaf to air gap ratio of 2:1) is to be achieved adjacent to Ridgeland Road;
- A minimum screen planting canopy density, measured from ground level to a height of 6m above ground level, of 60% (alternatively expressed as a leaf to air gap ratio of 2:1) is to be achieved adjacent to Wybong Road; and
- The visual bunding adjacent to Wybong Road is to be removed as part of the closure plan for the site.'

*The progressive rehabilitation of overburden emplacement areas, starting with the outer faces from the early stages of the MCCO Project and shaping of the final landform to conform to the surrounding natural environment is expected to reduce the visual impact from all areas where views are possible. As described in the EIS Mangoola proposes to plant tree screens along parts of Wybong Road, the realigned section of Wybong Post Office Road, and Ridgeland Road and incorporate a visual bund along Wybong Road which will assist in minimising the visual impacts of the MCCO Project.*

*To clarify, visual bunds are not proposed for the full frontage of the MCCO Additional Project Area to Wybong Road. The proposed areas where visual bunds and tree screens are proposed are shown on the staged mine plans (see Figures 3.3 to Figure 3.6 in the EIS). For the areas where visual bunds are proposed to minimise views to the MCCO Project, these are planned to be approximately 3.5 m high and located approximately 40 m from the road. It is noted that in the areas along Wybong Road the visual bund also forms the required flood levee which is required to protect the proposed mining area from inundation during flood events associated with Big Flat Creek.*

*As proposed by the conceptual final landform in the EIS the visual bunds and flood levees are proposed to be removed/incorporated into the final landform as proposed for the MCCO Project (see Figure 6.41 in the EIS).*

#### Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

#### **Rehabilitation and final landform**

Impacts will be ongoing for a long time, for example base flow to Big Flat Creek is predicted to remain impacted for a 500-year recovery period. What mechanisms will Mangoola put in place to take responsibility for ongoing issues after Mine closure?

*With regard to other impacts post closure, in accordance with NSW legislation and policy, Mangoola is required to put a bond in place to ensure funding is available for rehabilitation and closure of the mine. This bond would only be released once the completion criteria agreed with relevant government agencies have been met, ensuring that appropriate arrangements are in place to provide for effective rehabilitation outcomes.*

#### Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

The mine rehabilitation aims to "Establish similar native vegetation communities to those that will be impacted by the MCCO Project." Rehabilitation after seven years is expected to be "trending towards benchmark", without an actual expected and measurable value this term is meaningless.

*As described within Section 6.17.3 of the EIS the rehabilitation strategy for the MCCO Project is*

*consistent with Mangoola's currently approved rehabilitation practices which have been recognised as industry leading. Rehabilitation will be undertaken in accordance with a revised MOP incorporating the Rehabilitation Management Plan that will be reviewed and updated as part of the implementation of the MCCO Project. The MOP will detail performance measures and criteria for specific rehabilitation areas, to be used as benchmarks against which performance of the rehabilitation practices can be measured.*

Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

A working party with participants from Muswellbrook Shire Council, DPIE, Premiers and Cabinet, Mangoola Coal Operations P/L, Muswellbrook Chamber of Commerce, traditional owners and local land council members and the Hunter JO Economic Transitions Committee should be established by the year 2025 to commence planning for the transition to a post-mining suite of uses for the site.

*Mangoola is pleased to note MSC's interest in working with Mangoola regarding the transition of the site to other land uses post mining and welcomes the opportunity to work through this process with MSC.*

*The Mangoola site will provide existing infrastructure, connectivity to road and rail transport, and a large area of buffer of land, providing potential for a variety of final land uses. There are a range of strategic initiatives that are starting to plan for future employment generating land uses in the central and upper Hunter Valley region, including the Muswellbrook LEP, the Synoptic Plan and the Strategic Regional Land Use Plan for the Upper Hunter (Department of Planning and Infrastructure 2012) and the Hunter Region Plan 2036.*

Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

Expected credit points (excluding individual species credits) generated at the time of "Preliminary Completion" are expected to be 2,187, this is in contrast to the 17,718 credit points the site is currently assessed at. There is no expected timeline for this and given that rehabilitation aims to "Reduce the need for long term monitoring and maintenance by achieving effective rehabilitation" it would appear there is an expectation to write rehabilitation of the site off well before it has become "similar". Given that the criteria for preliminary completion is >50% benchmark richness and canopy class coverages ranging from 25 to 200 percent of benchmark values the completed rehabilitation could look nothing like that upon which it is based.

*The MOP will detail performance measures and criteria for specific rehabilitation areas and will include the specific benchmark values seeking to be achieved by the proposed rehabilitation and a proposed timeline. In order for the ecological rehabilitation that is proposed as part of the project to be relinquished, it will need to meet relevant completion criteria that will consider the floristic, structural and functional components of the specific PCTS that it is seeking to replicate, in accordance with industry standards and the MOP.*

Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

Each alternative mine and final landform scenario is considerably smaller than the preferred option for impacts on vegetation and final water catchment capture from Big Flat Creek. Considered separately, as they should be, the impacts of even the largest of the alternatives are far smaller than the preferred option. Council prefers Final Void option 4 (One void in the North) to option 3

*As such each of the options considered are in addition to the MCCO Additional Disturbance Footprint as proposed in the EIS and are not standalone or separate options.*



Further as detailed in **Section 3.3.1** an independent expert examination of the proposed final landform has been undertaken by Andrew Hutton of IEMA. The independent review concluded that Case 3, as presented in the MCCO Project EIS, represents an appropriate outcome which demonstrates that Mangoola has considered the balance between delivering an economic mine plan whilst giving proper regard to leaving beneficial post mining land uses and minimising final voids.

Council Comment to RTS

Noted. Muswellbrook Shire Council continues to be concerned that new voids are still being proposed as part of mine projects. There are no voids in the 'natural' landscape, so retaining a void at the end of the project means a permanent impact on the landscape.

Transition to post-mining activities should commence before mining ceases. This may require adjustments to Mining Lease conditions and the LEP to facilitate.

*Mangoola agrees that planning for the transition to post-mining activities should commence well before mining ceases and has committed to do so. MSC's interest in this area is acknowledged and Mangoola would welcome the opportunity to work with MSC on future land use options for the site.*

Council Comment to RTS

Noted. Appropriate conditions of approval required to ensure this occurs.

Open Cut Voids - What are the rehabilitation "treatments" and revegetation plans for voids? How have these been determined? And what is their purpose (to what objectives and criteria)? Water management is an oblique activity and not an end use. What is the end use of the proposed pit lakes?

*With regard to the final voids, the landform within the final voids is defined as all land that is not able to be rehabilitated to a subsequent use and will include highwalls, benches, ramps and the area where water will accumulate to form a pit lake. The highwall is a rock face which represents the edge of the mining area and extends down to the pit floor. It consists of a series of steep slopes and benches. The low wall, which is the face of emplaced overburden within the pit is planned to be shaped and rehabilitated and available for other land uses (i.e. either conservation or agricultural land uses) and so is not considered part of the final void.*

*As outlined in Section 6.7 of the EIS, a groundwater assessment of the final landform (at closure) indicates that the proposed final voids (non-back filled mine areas) will form long-term hydraulic sinks and will be comprised of two open water pit lakes. The final void water balance modelling found that these pit lakes will not spill as the predicted water level will reach equilibrium well below the spill point of the voids. Equilibrium levels would be reached slowly over a period of more than two hundred years. Final pit lake salinity levels would increase slowly as a result of evapoconcentration.*

*After approximately 300 years the salinity of the final voids will have an EC of less than 10,000  $\mu\text{S}/\text{cm}$  (or less than approximately 6400 mg/L assuming a factor of 0.64 to convert from  $\mu\text{S}/\text{cm}$  to mg/L). At this water quality the voids would be available for a range of uses including recreational uses and potentially aquaculture (if desired in the post mining landscape) as is discussed further in Section 6.17.5 of the EIS.*

*At this salinity, the final void pit lakes could support a range of fish species. Certain fish and other aquatic species can tolerate a broad range of water quality including the salinity values predicted for the final voids, including Silver Perch and Australian bass.*

Council Comment to RTS



The RTS elaborates on the voids suitability for aquaculture based on predicted water quality and equilibrium reached in 300 yrs. However, not only does this not account for the use of voids for the 300 years until water is of a suitable quality, the use of voids for aquaculture it is a poorly considered option. In most cases mine voids would not be suitable for this purpose. Let alone issues with ready access to voids, their depth, and compatibility with surrounding potential land uses. Department of Primary Industry guidelines indicate that there are a number of disadvantages in using large ponds:

- difficult to monitor and control disease outbreaks
- difficult to manage water quality problems
- difficult to control algae blooms
- costly to control disease outbreaks and algae blooms, as the entire pond must be treated
- erosion of banks
- difficult to sample or catch fish
- slow to drain, leading to stress, deterioration of water quality and possibly predation by birds during and after harvest, there is a large quantity of product to handle and market.

In addition, the use of 'safety berms' due to the lack of detail provided on their design do not seem to be an adequate long term control for 'inadvertent access to the highwalls'.

### Greenhouse gases

Council requested that the applicant should be required to prepare an Export Management Plan that ensures that any coal extracted from the development that is exported from Australia; is only exported to countries that are:

- a) parties to the Paris Agreement within the UN Framework Convention on Climate Change; or
- b) countries that have established policies to reduce greenhouse gas emissions to a level similar to the Paris Agreement.

*Mangoola has incorporated a range of measures into the MCCO Project design, with the aim of minimising GHG emissions and improving energy efficiency from the mining operation. Energy efficiency was a key driver for the design of the mine plan as one obvious consequence of reduced energy usage is a reduction in operating costs.*

*Glencore recognises that over the next 20 years the percentage of the global primary energy mix supplied by coal is predicted to decline. As the MCCO Project will meet a continuing demand for thermal coal, and fits within Glencore's committed production cap, Glencore considers that the MCCO Project is aligned with the global energy market.*

*Aside from the direct impact that this will have on Mangoola, Glencore considers that the Suggested Condition would likely be perceived by other investors as creating a sovereign risk in investing in mining in NSW which may undermine achieving the aims of the Mining SEPP to 'promote the development of significant mineral resources' (see clause 2(b1) of Mining SEPP).*

*It should be noted that the NSW Government has recently introduced the Environmental Planning and Assessment Amendment (Territorial Limits) Bill 2019 that will provide greater policy direction and will preclude consent authorities imposing export management plan type conditions.*

### Council Comment to RTS

Noted. The approval Authority needs to ensure Australia contributes to a reduction in greenhouse gas emissions.

Council appreciates the opportunity to comment and would be pleased to provide additional information if requested.

Yours faithfully

A handwritten signature in blue ink, appearing to be 'SP', located below the 'Yours faithfully' text.

Sharon Pope  
Executive Manager Environmental and Planning Services