

30 January 2020

**Lauren Evans**

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**By email:** [Lauren.Evans@planning.nsw.gov.au](mailto:Lauren.Evans@planning.nsw.gov.au)

Dear Lauren,

**RE: RESPONSE TO INFORMATION REQUEST FOR THE MAXWELL PROJECT (SSD-9526)**

I refer to the Muswellbrook Shire Council's (MSC's) review of the Submissions Report for the Maxwell Project (SSD 9526) provided to the Department of Planning, Industry and Environment (dated 6 January 2020).

A response to each of the Muswellbrook Shire Council's information requests is provided in Enclosure 1.

Dr Colin Driscoll (Hunter Eco) has also prepared a response to the information requests related to the Biodiversity Development Assessment Report. Dr Driscoll's response is provided in Enclosure 2.

Please do not hesitate to contact the undersigned should you wish to discuss.

Yours sincerely,



Bill Dean  
General Manager – Projects  
**Malabar Coal Limited**

ENCLOSURE 1

RESPONSE TO MUSWELLBROOK SHIRE COUNCIL  
INFORMATION REQUESTS

ID	Consolidated Summary of Issue	Response
1	<p><i>1.0 The project relies on existing infrastructure approved and constructed under different applications, for example, DA 163/2002 and Project Approval 06_202. SSD 9526 should have sought modifications to these approvals at the same time as the new project, and ideally, a single new approval for the Maxwell project, incorporating infrastructure on, and rehabilitation required for, the former Drayton mine, and the ongoing use of the Antiene rail spur and other infrastructure, would be issued.</i></p> <p>...</p> <p><i>Noted. Appropriate conditions of approval are required to ensure this occurs, although Council still has concerns about unintended consequences of proceeding in this manner, rather than considering all impacts and required conditions of approval as part of this Project.</i></p>	Muswellbrook Shire Council (MSC) has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.
2	<p><i>2.0 The approval needs to include a requirement for Community Enhancement contributions and payments to local road maintenance costs to assist with mitigating cumulative impacts of the mine.</i></p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.
3	<p><i>3.0 To help with cost of infrastructure upgrades to the State road network, to enable residential subdivisions that will utilise Bimbadeen Road, a condition of approval is requested that requires a financial contribution to the intersection upgrade (preferably as a SIC).</i></p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.
4	<p><i>4.0 The Biodiversity Assessment Method (BAM) Accreditation Scheme under the Biodiversity Conservation Act 2016 requires an accredited assessor to take full responsibility for the content of the Biodiversity Development Assessment Report (BDAR), including responses to comments provided as part of a review. Therefore, Council directs it's response to the Maxwell Project - Submission Report, where they relate to the BDAR, to Dr Colin Driscoll (BAAS17004) the accredited assessor.</i></p>	As requested, Dr Colin Driscoll (Hunter Eco) has provided a response to MSC's information request (refer Enclosure 2).

ID	Consolidated Summary of Issue	Response
5	<p>5.0 Council does not accept that the accredited assessor has developed the BDAR consistent with the BAM based on the adequacy of the surveys for <i>Diuris tricolor</i> or that the BDAR has not provided a detailed adaptive management strategy for impacts associated with subsidence and remediation. In addition, whether or not the Hunter Central Coast Regional Planning team within the Biodiversity Conservation Division of DPIE who undertook this review deemed the surveys to be adequate is irrelevant, as they are not the administrators of the BAM or the Accreditation Scheme. Council would be happy for the BDAR to be reviewed for consistency with the BAM by the scheme administrators to give certainty to all parties.</p>	<p>Dr Colin Driscoll (Hunter Eco) has provided a response to this information request (refer Enclosure 2). In the response, Dr Colin Driscoll concluded:</p> <p><i>Summarising, in 2018 there was no evidence of Diuris tricolor at the location of previous records. Given persistent grazing of the whole study area over several years, compounded by drought conditions, it was not likely that the species would be recorded elsewhere at that time. This proved to be the case following a series of meanders throughout the disturbance area and surrounds. As part of the Drayton South Open Cut Mine Project, Cumberland Ecology (2015) conducted surveys in 2011 across the similar study area and only recorded several individuals of the species in one location. This strongly supports the view that the species is restricted to the one location outside of the Biodiversity Assessment Development Footprint.</i></p>
6	<p>6.0 In regards to the surveys undertaken Council reiterates its original comments on the BDAR that:</p> <p>...</p> <p>In regards to the accredited assessor comments in section 6.1.1 of the submission report:</p> <p>a. Table 26 of the BAM requires that for Major Projects details of the adaptive management strategy proposed to monitor and respond to impacts on biodiversity values that are uncertain (Section 9.4 of the BAM) be included within the BDAR.</p> <p>b. Rather than the condition of consent that 'Malabar would accept', Council [sic] proposes that the 'table of measures to be implemented before, during and after construction (in the broad sense) to avoid and minimise the impacts of the project, including action, outcome, timing and responsibility', as per Table 26 of the BAM, be the condition of consent to ensure the projects consistency with the BC Act as a whole.</p> <p>c. Particular attention needs to be given to impacts to <i>Diuris tricolor</i>, Pink-tailed Legless Lizard (<i>Aprasia parapulchella</i>), and Striped Legless Lizard (<i>Delmar impar</i>) as these are the species most likely to be impacted by subsidence and remediation.</p>	
7	<p>7.0 Issues with the site access road from Thomas Mitchell Drive to the Mine Entry Area in the first year of mining operations.</p> <p>...</p> <p>Council accepts that to balance earthworks volumes and material placement, the MEA and the site access road need to be constructed simultaneously. Council is still concerned about the transport of coal prior to the road being sealed.</p>	<p>As described in the Submissions Report (Malabar, 2019) and the Air Quality and Greenhouse Gas Assessment (Todoroski Air Sciences, 2019), the potential air quality impacts associated with the use of the unsealed sections of the site access road during construction in the first year of operations (i.e. for coal transport) was considered. It was demonstrated that there would be no adverse air quality impacts on any receivers.</p> <p>Notwithstanding, standard dust mitigation measures (e.g. watering) would be implemented along the transport and services corridor and erosion control structures would be established to capture any runoff water.</p>
8	<p>8.0 The EIS states that the largest surface cracking from subsidence is likely on the steeper slopes in areas with shallow depths of cover (p. 6-9). Given this is also the location where soil erosion is more likely if the soil surface is disturbed, it is critical that adaptive management practices be incorporated into the mine project to identify and rectify erosion problems as they arise.</p> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>

ID	Consolidated Summary of Issue	Response
9	<p>9.0 Council requests that additional receiving water monitoring points be included, in addition to those nominated in Figure 9.1 of the Surface Water Assessment. Council suggests that at the very least a monitoring point be established between W4-Bowfield and W3 that will sample water coming off the majority of the subsidence area before it enters Saddlers Creek. There is also merit in establishing a monitoring point that will cover the largest subsidence area within the southern catchment that drains directly to the Hunter River (as detailed on Figure 9.1 of the Surface Water Assessment), and a monitoring point that would monitor for potential impacts from the Transport and Services Corridor on Plashett Reservoir.</p> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
10	<p>10.0 The EIS provides 5 options for the management of excess water. As no agreements are in place for options 1 – 3 to be utilised, and high salinity levels would make pastoral irrigation deleterious on pasture growth (p.6-30), the assessment of the project should be based on option 4 being the likely outcome.</p> <p>...</p> <p>Malabar seem to agree that excess water will most likely be dealt with via irrigation or evaporation of water within the Project site but provide no comment on the issue of salinity levels, or impacts, resulting from changes to hydrological cycles, on native plants and animals (i.e. they haven't described the size or location of the area that would be irrigated to enable an assessment of the impact of the irrigation).</p>	<p>The site water balance indicates the proposed water management system has sufficient capacity and capability to contain mine affected water on-site without the need for irrigation or evaporation of water within the Project site. Notwithstanding, if excess water was accumulated on-site during operations, Malabar would preferentially enter into water sharing arrangements with existing operations, including:</p> <ol style="list-style-type: none"> <li>1. Sharing mine water with BHP's neighbouring Mt Arthur Mine (e.g. for use in dust suppression), so reducing that Mt Arthur Mine's reliance on other water sources.</li> <li>2. Sharing mine water or treated water with other industrial users (e.g. AGL), so reducing their reliance on water sourced from the environment (e.g. the Hunter River).</li> <li>3. Sharing treated water with agribusiness (e.g. viticulture, cattle operations and equine industries).</li> </ol> <p>If excess water accumulates on-site and water sharing agreements are not established, irrigation or evaporation of water on-site for the Project would be undertaken in accordance with an approved Water Management Plan for the Project, which would be prepared in consultation with any relevant government agencies (e.g. Department of Planning, Industry and Environment – Water).</p>
11	<p>11.0 Given the low participation rate in the privately owned bore census, an adaptive management approach is required to manage draw downs on private bores that were not predicted in the EIS, including a mechanism for owners to contact the mine for immediate relief/assistance. Recommendations in the Annual Report should cover the medium and long term adaptive measures.</p> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
12	<p>12.0 Council requests a condition of approval to require offsets for the EPBC Act entities impacted, to ensure like-for-like offsets consistent with the EPBC Act. Council also requests that the applicant commits to how it will secure its offsets. This will allow the BCT, if the applicant chooses to pay into the fund, to begin to engage with landholders within the region with certainty. This will give the greatest likelihood that at least some of the required offsets are sourced locally, that there is minimal lag between the impacts occurring and local offsets being secured, and provide landowners within this region the greatest opportunity to benefit from the approximately \$7.2 million BCF payment.</p>	<p>As described in the Submissions Report, Malabar would undertake biodiversity offset measures for listed threatened species and ecological communities in accordance with the NSW <i>Biodiversity Conservation Act, 2016</i> (BC Act) and Commonwealth <i>Environment Protection and Biodiversity Conservation Act, 1999</i> (EPBC Act), as required. Malabar is currently investigating potential to locate offsets within the Muswellbrook Local Government Area (LGA).</p>

ID	Consolidated Summary of Issue	Response
13	<p>13.0 The BDAR states that 'the exact location of surface cracking and other potential subsidence impacts is unknown; however the nature and extent of potential subsidence impacts of the Project can be reasonably estimated and assessed'.</p> <p>Therefore the applicant is able to, and therefore should be required to address this direct impact consistent with the BAM as part of the application. Particular attention needs to be given to direct impacts on the Pink-tailed Legless Lizard (<i>Aprasia parapulchella</i>) and Striped Legless Lizard (<i>Delmar impar</i>). This is due to their occupation of, and reliance upon, terrestrial habitat, and therefore they are most likely to be impacted upon due to subsidence and subsequent rehabilitation. Council's preference would be to retire additional credits to mitigate impacts to these specific entities.</p> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
14	<p>14.0 The rehabilitation section provides few commitments, with all details proposed to be provided post approval as part of the Mine Operations Plan process.</p> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
15	<p>15.0 Appendix Q - Agricultural Impact Statement determines that within the Project Area, LSC Classes 4 and 6 are dominant. In general, the land is capable of supporting grazing land use with small areas capable of opportunistic cropping and a smaller area capable of supporting a more frequent cropping regime. Based on a site visit of adjoining rehabilitation occurring on the former Drayton mine site, Council is not satisfied that the current pasture rehabilitation would be suitable for grazing.</p> <p>...</p> <p>Council notes that the rehabilitation area contains a lot of surface rock, which would create problems for farm machinery and hazards for farm animals, and minimal organic matter to help bind the soil from erosion forces or retain water for plants.</p>	<p>The existing rehabilitation areas at the Maxwell Infrastructure site have not yet achieved the completion criteria outlined in the approved Mining Operations Plan (the approved MOP). Current progressive rehabilitation areas are not necessarily representative of the ultimate rehabilitation at mine closure.</p> <p>Appropriate management and amelioration measures would be implemented so that rehabilitated pasture areas would be comparable in productivity to pre-mining pasture conditions. As part of the rehabilitation activities, Malabar would implement control measures to minimise potential impacts of erosion.</p> <p>Current pasture areas on Malabar-owned land in the vicinity of the Project contain rocky areas that are successfully used to graze cattle.</p>

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16	<p>16.0 The proposed infrastructure corridor passes through areas designated for woodland rehabilitation as part of the former Drayton mine site. As a result, the effectiveness of rehabilitation in this part of the site will be delayed for at least three decades (more if Spur Hill site is approved for mining). An additional area of woodland rehabilitation should be provided east of the proposed infrastructure corridor (currently proposed for pasture) so that some biodiversity corridor valleys can start to establish on the site immediately.</p> <p>...</p> <p>Council is still concerned that establishment of an important biodiversity corridor will be delayed for more than 30 years. An additional area of woodland rehabilitation should be provided east of the proposed infrastructure corridor (currently proposed for pasture) so that some biodiversity corridor valleys can start to establish on the site immediately.</p>	<p>The proposed rehabilitation strategy provides a balance of productive agricultural land and nature conservation areas following the completion of rehabilitation and mine closure.</p> <p>Post-mining land use objectives and rehabilitation domains for the Maxwell Infrastructure are described in the approved MOP. These rehabilitation domains were developed following an assessment of potential post-mining land uses (e.g. nature conservation, agriculture), taking into account relevant strategic land use objectives in the region and the potential benefits of the post-mining land use to the environment, future landholders, and the community.</p> <p>Malabar would undertake biodiversity offset measures for relevant BC Act and EPBC Act listed threatened species and ecological communities impacted by the Project. As a result, the direct loss of habitat associated with the Project in combination with offset provision would result in no net loss in biodiversity, as the biodiversity offset would be a greater area of land, multiple times the size of the Biodiversity Assessment Development Footprint, which would be conserved and managed to achieve a gain in biodiversity values.</p>
17	<p>17.0 The management of noise must be made a high priority, noise complaints can be expected from noise from site machinery and ventilation, typically during night-time activities.</p> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
18	<p>18.0 Muswellbrook Shire Council encourages the Proponent to work in partnership with the local Aboriginal people to:</p> <ul style="list-style-type: none"> <li>• Mitigate the loss of cultural landscape in the vicinity of the Project;</li> <li>• Reduce the vulnerability of Aboriginal people caused by the cyclical nature of mining and the impacts this has on affordable housing;</li> <li>• Increase Aboriginal employment and training as a high priority of the Project with more than 10% of Aboriginal people working in the mine from the Wanaurah Local aboriginal Lands Council area.</li> </ul> <p>...</p> <p>Noted. Appropriate conditions of approval required to ensure this occurs.</p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>

ID	Consolidated Summary of Issue	Response
19	<p>19.0 Muswellbrook Shire Council requests that the historical significance of the former Drayton Mine is recognised by way of a memorial and written/pictorial history of the site, prior to the reuse and reablement of current mining infrastructure on the site. This would require qualified assessment of existing mining remnants and a permanent record of the operational history of the former Drayton Mine, with consideration of an onsite memorial at the entry to the site that would describe the previous operations of the former Drayton Mine, including any significant information that would act as a memorial to previous employees. This memorial, would support local interest and the interest of visitors to the Upper Hunter region in the mining activities at this location.</p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
20	<p>20.0 Council recommends the establishment of a condition explicitly forbidding the Maxwell mine site being accessed from Edderton Road for mining related operations.</p> <p>...</p> <p><i>Council notes that the Proponent would be prepared to accept a condition precluding access for Mine related activities off Edderton Road and the Golden Highway.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
21	<p>21.0 If Edderton Road is maintained in its current alignment, specific traffic control and road maintenance measures will be required to ensure that public safety is maintained and traffic utilising Edderton Road is not experiencing long delays due to subsidence damage – the aim should be for road closures of similar length in time as road closures for mine blasts.</p> <p>...</p> <p><i>The RTS identifies a level of disruption, over the life of the mine, that Council does not consider to be acceptable to the travelling public, local industries and businesses. There are also inherent safety risks for road users during periods of active subsidence. As a result, Council requests that the Proponent be required to construct the realignment of Edderton Road outlined as an option in the EIS.</i></p>	<p>Malabar has mitigated concerns about potential impacts on Edderton Road by presenting two alternatives that would maintain both the safety and operability of Edderton Road. The two proposed options are: (i) subsidence management and normal road maintenance techniques along the existing alignment; or (ii) the realignment of the road around the Maxwell Underground area.</p> <p>Malabar is seeking consent for both of these options as part of the Project.</p> <p>Malabar has scheduled a meeting with MSC in February to discuss the management of potential impacts on Edderton Road.</p>
22	<p>22.0 Any changes to the road network, including road closures, will be subject to the approval of Muswellbrook Shire Council. Council's current policy is that it will not approve any closures to public roads and or changes to the Shire's road network until the 'Mine Affected Roads Network Plan (2015)' has been reviewed and updated.</p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>



ID	Consolidated Summary of Issue	Response
23	<p>23.0 The RTA does not consider the disposition of the site access road post-mining. Council would recommend that Malabar enters into consultation with Council regarding any potential benefit for the provision of the road to be dedicated as public road post-mining in order to increase community connectivity and transport efficiency.</p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
24	<p>24.0 The EIS states coal may be hauled on public roads under emergency or special situations with the written approval of DPIE, RMS and Council. All truck loads under this scenario would need to meet load limits for public roads.</p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to adequately define 'emergency' and 'special situations' and to set an absolute maximum time/quantity of coal that could be hauled during an emergency or special situation.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
25	<p>25.0 It is some time since the Upper Hunter sub-region has been home to an underground mine. Council encourages the employment of people who reside in the Muswellbrook Shire. To achieve this outcome, Maxwell Coal should:</p> <ul style="list-style-type: none"> <li>• Ensure a local education option that transitions open cut mining qualifications to underground mining qualifications through the provision of ongoing training at the Muswellbrook TAFE campus as required (or via a suitable local provider). This will negate the need for drive-in/out labour, reduce driving fatigue accidents and improve the local economy.</li> <li>• Engage the equivalent of four apprentices per year from the Muswellbrook Local Government Area, this will have a positive socio-economic benefit to the area.</li> <li>• Engage permanent employees over casual labour or labour from labour hire companies, this will have a positive economic benefit to the local area.</li> </ul> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>

ID	Consolidated Summary of Issue	Response
26	<p><i>26.0 A contribution should be required for 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 LGA has high economic dependence on the mining industry. Mining operations are disrupting highly productive industries and reducing the potential to further develop these industries to create diversity of employment. In addition, land use uncertainty is impacting on investment in diversified industries. As a result, uneven economic growth and distribution of economic resources (including wages) is experienced due to the mining industry.</i></p> <p>...</p> <p><i>Council stills considers that a contribution should be required for diversification of the economy post mining.</i></p>	<p>The Project would be developed solely as an underground mine, delivering predominantly metallurgical (coking) coal to the global metals market.</p> <p>Malabar has approached the design of this Project and its conduct in the local community with the following aims:</p> <ul style="list-style-type: none"> <li>• being aware of the points of view and perceptions of neighbouring landholders;</li> <li>• developing a Project that can operate as a sustainable long-term enterprise;</li> <li>• maintaining and enhancing agricultural activity on land that Malabar owns that is not required for mining activities, the Maxwell Solar Project or biodiversity conservation;</li> <li>• encouraging and being supportive of other community and government proposals or initiatives for the use of Malabar land or infrastructure that can co-exist with the Project; and</li> <li>• supporting local employment and local businesses.</li> </ul> <p>In addition, Malabar is also:</p> <ul style="list-style-type: none"> <li>• making key senior Malabar personnel available for consultation to allow for direct consideration of stakeholder feedback;</li> <li>• being a positive contributor to the local community through community contributions, assistance programs and sponsorships;</li> <li>• proactively progressing rehabilitation of previous open cut mining areas at the Maxwell Infrastructure;</li> <li>• actively improving Malabar's agricultural properties and viticultural operation in the region, so that these will be long-term sustainable and productive businesses that can co-exist with underground mining operations. By way of example, Malabar has introduced high quality Chardonnay vines into its Merton Vineyard and now producing award-winning wines; and</li> <li>• facilitating enhancements to tourism in the region by providing long-term use of the Llanillo Homestead, adjacent to the Golden Highway, by Hollydene Estate.</li> </ul> <p>Malabar is continuing to progress the separate approval process for a 25 megawatt (MW) solar farm on a rehabilitated open cut disturbance area at the Maxwell Infrastructure (known as the 'Maxwell Solar Project').</p> <p>If the Project is approved, Malabar would operate the Project in consideration of the aims described above and actively contribute to the diversity of the Muswellbrook LGA economy.</p> <p>Accordingly, Malabar remains of the view that further economic contributions for the diversification of the economy post-mining are not justified.</p>
27	<p><i>27.0 The local community is highly dependent on mines for socio-economic. The impact of closure on local and even regional socio-economics can therefore be significant and should be a key consideration in closure planning processes and documents. At the close of mining operations every effort should be made to maintain the quantum of employment opportunities, in turn avoiding economic and social disruption to the local community through loss of job opportunities.</i></p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>

ID	Consolidated Summary of Issue	Response
28	<p>28.0 Transition to post-mining activities should commence before mining ceases. This may require adjustments to Mining Lease conditions. A working party with participants from Muswellbrook Shire Council, DPIE, Premiers and Cabinet, Maxwell Ventures (Management) 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 2035 to commence planning for the transition to a post-mining suite of uses for the site.</p> <p>...</p> <p><i>Noted. Appropriate conditions of approval required to ensure this occurs.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>
29	<p>29.0 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:</p> <p>a) parties to the Paris Agreement within the UN Framework Convention on Climate Change; or</p> <p>b) countries that have established policies to reduce greenhouse gas emissions to a level similar to the Paris Agreement.</p> <p>...</p> <p><i>Noted. The approval Authority needs to ensure Australia contributes to a reduction in greenhouse gas emissions.</i></p>	<p>MSC has reviewed the Submissions Report and has not requested any additional information from Malabar regarding this issue.</p>

ENCLOSURE 2

DR COLIN DRISCOLL (HUNTER ECO)  
ADDRESSING MUSWELLBROOK SHIRE COUNCIL RESPONSE TO SUBMISSIONS COMMENTS



Bill Dean  
Malabar Coal Limited  
c/- Resource Strategies  
PO Box R864 Royal Exchange  
NSW 1225

28 January 2020

Dear Bill

**Maxwell Project  
Addressing Muswellbrook Shire Council Response to Submissions Comments  
(6 January 2020)**

**Council Issues 4.0, 5.0 6.0 a. b. c. and d.**

The NSW *Threatened Plants Survey Guidelines* (OEH 2016) notes:

**Section 3.2 Optimise the time of the year for the survey**

*The threatened-plant surveyor may use key biological or regionally specific information (including reference sites and known localities where the species has been recorded) to further refine survey times and thus optimise the detectability of a species.*

The geographic coordinates of the only previously known locations of *Diuris tricolor* from within the study area were sourced from Cumberland Ecology (2015). These locations (all in one locality) were used as a reference site to determine whether the orchids were flowering at that particular season in 2018. As noted in Hunter Eco (2019) inspection of this reference site was conducted on three occasions (13/9/2018; 23/9/2018; and 23/10/2018) with no evidence of these orchids found.

Cumberland Ecology (2015) had conducted surveys for *Diuris tricolor* across an area similar to the Maxwell Study Area in 2011, in clearly favourable growing conditions for the species, and had only recorded them in one location. Given that none were present in the known location in 2018 it was even less likely that they would be present elsewhere in the study area, including the disturbance area. However, a wide area survey was conducted across the disturbance area) consistent with Section 4.4 of OEH (2016) and supported by similar advice in Section 4 of DotE (2013) as follows:

**Section 4.4 Survey design for large potential habitat areas (OEH 2016)**

*The survey approach defined in this guideline may be impractical for larger areas of potential habitat where the time taken to search vegetation for small threatened species is high (e.g. grasslands, uninterrupted but narrow riparian habitat, semi-arid and arid shrublands and woodlands, or open woodland grading into disturbed or derived native grasslands). **Options to reduce survey effort in these areas include dividing the proposed site into stages; refining the areas of potential habitat through site survey and an expert report; and reducing the survey area by realigning the boundaries or footprint of the proposed development, thereby reducing the area of impact.***

**Section 4. Minimal Survey Requirements for Terrestrial Orchids (DotE 2013)**

*Given the cryptic nature of terrestrial orchids and their often rare, scattered appearance in bushland, quadrat-based surveys or meandering searches alone are not considered to be an adequate survey technique. **However, a random 'meander' survey may be conducted initially during the flowering period to ascertain the presence of the orchid species. This is to cover large areas of potential habitat if the species has not been detected previously at the site.** Records are taken using GPS and on-ground markers along transects where the target species is located. A more thorough search should then be undertaken in the vicinity of plants detected using area search and targeted parallel transects.*

Survey tracks were included in Figure 9 of Hunter Eco (2019). A map showing only the orchid survey tracks within and near the Biodiversity Assessment Development Footprint is appended to this letter. Areas that appeared to be characteristic of the orchid's habitat were subject to close scrutiny.



Summarising, in 2018 there was no evidence of *Diuris tricolor* at the location of previous records. Given persistent grazing of the whole study area over several years, compounded by drought conditions, it was not likely that the species would be recorded elsewhere at that time. This proved to be the case following a series of meanders throughout the Biodiversity Assessment Development Footprint and surrounds. As part of the Drayton South Coal Project, Cumberland Ecology (2015) conducted surveys in 2011 across the similar study area and only recorded several individuals of the species in one location. This strongly supports the view that the species is restricted to the one location outside of the Biodiversity Assessment Development Footprint.

*Diuris tricolor* has been addressed above indicating that there is negligible likelihood of the species occurring within the Biodiversity Assessment Development Footprint. Protection measures are in place for the area of the previously known group of plants (Plate 1).



Plate 1 – Fence and sign installed around the previously known group of *Diuris tricolor*



**Council Issue 6.0 d (part a).**

Section 5.6 of the BDAR describes the strategy for monitoring and responding to subsidence impacts (i.e. preparation of an Extraction Plan), consistent with Table 26 and Section 9.4 of the BAM. The Extraction Plan is an approval required by standard conditions of development consents for underground coal mines in NSW. The guidelines for adaptive management (Section 9.4.2 of the BAM) are not relevant to this Project.

**Council Issue 6.0 d (part c).**

With respect to the two legless lizards, the BDAR assesses the potential subsidence impacts on the species (Sections 7.2.4 and 7.2.5). Section 5.3.1 of the BDAR describes a controlled approach to remediation of surface cracks, with particular attention to *Diuris tricolor*, Pink-tailed Legless Lizard and Striped Legless Lizard.

Yours Faithfully  
HUNTER ECO

Dr Colin Driscoll  
Environmental Biologist

**References**

Cumberland Ecology (2015) *Drayton South Project Biodiversity Assessment Report*  
*Drayton South Coal Project EIS Appendix M.*

Department of the Environment (2013) *Draft Survey Guidelines for Australia's Threatened Orchids.*

<http://environment.gov.au/resource/draft-survey-guidelines-australias-threatened-orchids>

Hunter Eco (2019) *Maxwell Project Baseline Flora Report.* Prepared for Malabar Coal Limited.

Office of Environment and Heritage (2016) *NSW Guide to Surveying Threatened Plants.*  
<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Threatened-species/guide-surveying-threatened-plants-160129.pdf>



