HTBA SUBMISSION
MAXWELL UNDERGROUND COAL MINE PROJECT – SSD 9526
ENVIRONMENTAL IMPACT ASSESSMENT

SEPTEMBER 2019

INTRODUCTION & EXECUTIVE SUMMARY

The HTBA represents Australia's multi-billion dollar thoroughbred breeding industry centered and concentrated in the Hunter Valley consisting of over 200 thoroughbred breeding operations and support industries. It is Australia's largest concentration of thoroughbred breeding operations (2nd largest in the world) and largest producers, suppliers and exporters of premium thoroughbreds.

Our industry contributed some $5 billion, $2.6 billion and over $0.5 billion per annum to national, state and regional economies. We are a significant national, state and local employer and have been recognised by the NSW Government as a state significant industry. A summary of the economic significance of our industry is appended to this submission.

Our industry has been mapped as an Equine Critical Industry Cluster and promised heightened protection by the NSW Government, as well as having been protected from coal seam gas mining.

Compared to our sister industries world-wide, we are the only thoroughbred breeding industry of significant size, importance and global reputation that is not protected with buffers or protection zones from incompatible development – such as mining.

The importance of our industry, and its two central players Coolmore and Godolphin, is well documented and has been recognised by five previous Planning Assessment Commissions and the NSW Gateway Panel[i].

The "Maxwell" underground coal mine proposal is situated on the Drayton South site previously owned by Anglo American and purchased by Malabar Coal in 2018.

Based on the information contained in Malabar's Environmental Impact Statement, in particular the paucity of detailed underpinning information, modeling and costing, and our preliminary assessment, we find it necessary to lodge an objection, with the reasons outlined in detail in the body of this submission. In summary they include:

- the proposal's potentially serious and adverse impacts on surface and ground water and the lack of appropriate and robust water modeling – issues also identified in the Gateway process by the Independent Expert Scientific Committee which are either inadequately assessed or remain unaddressed;
- the lack of detail and supporting evidence to justify the claimed net benefits of this proposal;
- the underestimation of costs and overestimation of benefits claimed by Malabar Coal;
- inadequate air quality analysis;
- the lack of transparency and underpinning information relating to the mine plan;
- impacts associated blasting during construction and noise exceedances during the life of the mine;
- inadequate assessment and quantification of mine rehabilitation;
- deficient heritage assessments – both Aboriginal and historical;
- inappropriate assessment and lack of quantification of the potential impacts on the operations of neighbouring studs and potential flow on impacts for the Equine Critical Industry Cluster;
- inadequate assessment of the proposal's impact on agricultural productivity;

- potential visual impacts (including indirect and dynamic); and
- inadequate social impact assessment – including the impacts on inter-generational equity and distributive equity.

This is the third mining proposal on the old Drayton South site. Our community is fatigued with the relentless mining applications in the Upper Hunter, the constant demand and drain on our community's resources and finances and inherent uncertainty (including investment uncertainty) this creates. Those constant demands have and are required in an effort to protect our sustainable agricultural industries, quality of life, health and wellbeing, environment (particularly air quality and water security), scenic landscape and heritage and our economic diversity and resilience.

This situation is not sustainable. Government leadership is seriously overdue to deliver on the promised commitments to protect our industry and the associated jobs and livelihoods of our employees and businesses that rely on our industry, restore balance to the Hunter, and provide investment certainty to agricultural and associated tourism industries.

Yours sincerely

Dr Cameron Collins
President.

1. THE PROJECT

1.1 DESCRIPTION & LOCATION

Maxwell Ventures Management Pty Ltd, a wholly owned subsidiary of Malabar Coal Limited (Applicant) purchased the "Drayton" assets (comprising both Drayton North and South sites and associated exploration licence and mining leases) from Anglo American in 2018.

This purchase followed the rejection by four Planning Assessment Commissions of Anglo American's proposal for an open cut coal mine on this site (formerly known as Drayton South) – the most recent rejection being in 2017 – and the subsequent closure of the Drayton mine.

The new Applicant has applied to underground mine the former Drayton South site, to extract some 148 million tonnes Run of Mine (ROM) coal over 26 years, using both "bord and pillar" and "longwall" mining methods, operating continuously 24 hours a day 7 days a week.

The location of this proposal is the former Drayton South site, which is the only buffer between mining operations of Mount Arthur to the north of the Godolphin and Coolmore studs.

The Hunter Valley's Muswellbrook area is the traditional land of the Wonnarua people. Since European settlement, the site and surrounds have largely been used for agricultural purposes, including grazing, cropping, dairying and horse breeding. The area of the proposed mine site and surrounds was covered by the Plashett, Bowfield, Arrowfield, Strowan, Woodlands and Edderton Estates, granted during the 1820s.

There is a history of thoroughbred horse breeding occurring on Godolphin Woodlands from the late 1800s and Arrowfield from the early 1900s. This land is still used for pastoral purposes.

This project, as with the former Drayton South project, is located directly opposite Godolphin and Coolmore Australia operated sites – Australia's leading thoroughbred breeding operators. These two studs were recognised by previous Planning Assessment Commissions[ii], as "central players", the "epi-centre," and "essential" to the broader Hunter equine critical industry cluster (ECIC) and recommended they be "given the highest level of protection from the impacts of mining."

Five previous PACs[iii] have recognised that the ECIC is highly sensitive to potential mining impacts, mainly because the industry has a carefully managed image of clean, green, bucolic, rural idyll designed to reassure investors of the safe, healthy and caring environment the stud farms provide for their horses. Reputation is paramount in the horse business because of the inherent risks associated with horse breeding. As a result, studs are constantly vigilant to customers' concerns ***real or perceived*** (emphasis added).

The Applicant's EIS acknowledges that this underground coal mine proposal will alter the landscape which forms the backdrop within which Australia's two premier studs operate.

1.2 JUSTIFICATION FOR THE PROJECT

Malabar Coal justifies the project on the basis of contributions to Governments (federal, state and local) by way of company tax, coal royalties, land taxes, and council rates; production of coking coal; export sales of coal product; the generation of "new" employment; and claimed net benefits resulting from the project.

Based on our preliminary analysis, there is little detail or supporting evidence in the EIS to underpin and justify these claims. Given the paucity of underpinning evidence and lack of transparency in the EIS it is difficult to properly scrutinise and analyse Malabar's claims. This lack of detail is contrary to NSW Government policy and guidelines – specifically guidelines on State Significant Projects and policies relating to community consultation.

Our preliminary analysis suggests that the Applicant is overlooking the risks, overstating the benefits and understating the costs of the project, consequently calling into question whether this project is in the public interest.

We note that a constant justification for Anglo American's (the previous owner) two applications for an open cut mining on this site was that underground mining was potentially hazardous, inefficient, costly and uneconomic.

2. NSW GOVERNMENT POLICIES & LEGISLATION, IPC DECISIONS AND CASELAW

2.1 Environmental Planning and Assessment Act 1979 ("EP&A Act")

The objects of the EP&A Act (as outlined in section 1.3) are to:

a) promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

b) facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,

c) promote the orderly and economic use and development of land,

d) promote the delivery and maintenance of affordable housing,

e) protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,

f) promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),

g) promote good design and amenity of the built environment,

h) promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,

i) promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,

j) provide increased opportunity for community participation in environmental planning and assessment.

We are not convinced that this proposal achieves objectives 1.3 (a); (b); (c); (d); (e); (f) and (j).

2.2 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 ("Mining SEPP")

The aims of Mining SEPP as outlined in section 2 of the policy are (emphasis added):

a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and

b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and

(b1)to promote the development of significant mineral resources, and

c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and

d) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development:

(i) to recognise the importance of agricultural resources, and

(ii) to ensure protection of strategic agricultural land and water resources, and

(iii) to ensure a balanced use of land by potentially competing industries, and

(iv) to provide for the sustainable growth of mining, petroleum and agricultural industries.

We are not convinced that this proposal meets aims 2(a), (b), (c) and (d) of the Mining SEPP.

2.3 Strategic Regional Land Use Plan – Upper Hunter ("The Plan") & The Hunter Regional Plan ("the HRP")

These Plans recognise the importance of restoring balance to the Upper Hunter; the need to end land use conflicts; the need to transition from traditional energy sources to renewables; the need for resilient and diverse regions and the need to protect and grow industries such as Equine, Viticulture and Tourism in the Upper Hunter.

In delivering the Upper Hunter Strategic Regional Land Use Plan in 2012, the Premier acknowledged "The Upper Hunter is one of the State's most fertile and productive agricultural areas" and "the national and international significance of the Upper Hunter's wine and thoroughbred industries has also been recognised, with large areas of the region also identified for heightened protection."

In 2015 the Commission noted that the "Strategic Regional Land Use Plan for the Upper Hunter prepared in 2012, identifies and highlighted the importance of the Upper Hunter's Equine and Viticulture Critical Industry Clusters. Further strategic planning work is needed to address current conflicts and deliver planning protections to safeguard both of these Critical Industry Clusters from incompatible land uses thereby providing greater certainty for all sectors and potential land uses in the region and providing greater investment in these Critical Industry Clusters".

In the Community Health and Amenity chapter of the Plan, the NSW Government acknowledged that:

- "A perceived decrease in human health and well being (physical and psychological) is one of the key impacts from coal mining in the Upper Hunter region. And
- the impact of air pollution on health and amenity is a major community issue in the region. And
- The main air pollutant from mining is dust, which is caused by vehicle activity, wind erosion from exposed surfaces, stockpiling, drilling, blasting, crushing and screening.

This chapter of the Plan also recognised that mining causes noise pollution, impacts negatively on visual amenity and has the potential to impact both on water security and safety.

In 2016 the NSW Government published the Hunter Regional Plan, another 20-year blueprint for the future that "reflects community and stakeholder aspirations."

Direction 5 of the HRP is to transform the productivity of the Upper Hunter in recognition that "it is undergoing a transition with the major transformation occurring in power generation, emerging technologies, growth opportunities in agriculture and changes in the mining sector."

Direction 9 of the HRP focuses on growing tourism in the region, including enabling the growth in tourism in the Upper Hunter through integration with the Equine Critical Industry Cluster.

Direction 19 focuses on identifying and protecting the region's heritage.

A key part of the local Government narrative for the Upper Hunter and regional priorities includes:

- the protection of the Equine Critical Industry Cluster and allowing for expansion of the thoroughbred industry.
- supporting the tourism economy by investigating ways to leverage agriculture and equine industry strengths to attract food based and equine-related visitors.
- The objectives of growing international tourism, preserving the Upper Hunter region's heritage, protecting the Equine Critical Industry Cluster, allowing for expansion of the Thoroughbred Breeding industry and leveraging the equine industry to boost regional tourism and investment are incompatible with the approval of mines. The impact of mining is to dissuade this investment and create adverse impacts on our environment, heritage and investment and tourism attractiveness.

It is difficult to reconcile the aims, goals and directions contained in these NSW Government policy plans with the approval of another mine in such close proximity to the central players of the Equine Industry Cluster in the Upper Hunter.

2.4 Local Government Plans

Both the Muswellbrook and Upper Hunter Shire Councils have local environment plans in place that:

- encourage the proper management of natural resources by protecting, enhancing or conserving them;
- ensure the natural environment is protected;
- provide a secure future for agriculture;

- incorporate the principles of cumulative impact assessment to provide a framework within which assessments of resource development proposals can be made;
- ensure thorough assessment of social, economic and environmental impacts, along with community health and wellbeing, are incorporated in individual resource development proposals;
- require Social Impact Statements so that thorough assessments for all mining projects are conducted.

The Upper Hunter Shire Council's Position Statement on Coal and Coal Seam Gas (2011) makes clear the Council's opposition to coal and coal seam gas mining in the LGA. The Council's more recent resolution on Climate Change and Sustainability (2019) recognises that all levels of Government, local, state and federal, must respond effectively to global warming and play their role in setting safe climate goals, implementing sustainable programs to contribute to the state and national response to global warming.

We are not persuaded that this proposal meets the stated objectives of the abovementioned local government plans.

2.5 The NSW Gateway Process

We note that this proposal does not adequately meet the concerns raised by and/or the recommendations of the NSW Gateway Panel and/or the Independent Expert Scientific Committee.

2.6 Recent IPC Decisions

We note that recent IPC decisions relating to the Dartbrook Underground Mine Modification extension and the greenfield Bylong coal open cut and underground proposal particularly their assessment and findings on mining impacts relating to:

- air quality, noise, subsidence, groundwater, noise and blasting, biodiversity, heritage and greenhouse gas emissions;
- the lack of rigour in the assessment of environmental and social costs of the project in the Cost Benefit Analysis;
- the lack of rigour with respect to the Social Impact Assessment and absence of economic and social impact assessment of the Equine Critical Industry Cluster; and
- the principles of Ecologically Sustainable Development – particularly inter-generational equity.

2.7 Recent Caselaw

The judgment of Preston CJ in Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7 we submit, ought be considered in the assessment of this proposal, and as an essential backdrop to issues such as the:

- impacts of the mine on existing, approved and likely preferred uses;
- incompatibility with the existing, approved or likely preferred uses and the comparative public benefits of this mine and other land uses;
- amenity impacts of the mine (noise and dust impacts);
- visual impacts of the mine;
- social impacts of the mine (real and perceived);
- impacts of the mine on climate change; and
- economic and public benefits of the mine and other land uses; and
- balancing the benefits and the impacts of the mine.

3. ASSESSMENT

3.1 AIR QUALITY

The increasingly parlous state of the Upper Hunter's air quality is well known and has been the subject of significant community concern and media attention over the past few years. It is a very serious concern for the medical profession, residents, agricultural and tourism related businesses in the Upper Hunter.

Coal mining linked air pollution, exceedances and spikes in PM10 and PM2.5 and the cumulative impacts of coal mining are of critical concern to the health and wellbeing of the Upper Hunter community and a key requirement in the assessment of greenfield coal mining proposals – including the Maxwell Project.

Based on our preliminary analysis we cannot accept the Applicant's conclusion that there will be "no impacts on air quality from the Project alone" – particularly given the Applicant has not undertaken any cumulative assessment of the air quality impacts of its proposal.

Nor can we accept that elevated PM_{10} and $PM_{2.5}$ air quality levels in the Upper Hunter are simply and solely due to other, non-mining, sources such as motor vehicles and wood fired domestic heaters. This simplistic analysis seems to obscure and misconstrue the air quality impacts of this proposal and the serious community concerns regarding the Upper Hunter's air quality.

We question the air quality assessment approach adopted by the Applicant, which seems to present and process individual data sets in isolation rather than adopting a cumulative approach or presents an aggregated approach without divulging underpinning data sets and/or assumptions.

Curiously the background monitoring data adopted by the Applicant appears much lower than that found in Muswellbrook or the Upper Hunter Air Quality Monitoring Network.

We also question the underlying assumptions and basis upon which Scope 1, 2 and 3 emissions are calculated and therefore the veracity of the conclusions reached by the Applicant.

We note the emission calculation data is generated by outdated emission factors rather than factors relevant to this current proposal – including tonnage and transport parameters.

Further, and particularly concerning during drought periods, we question the appropriateness of proposed dust suppression and mitigation methods – primarily relying on water application to unsealed surfaces, stockpiled coal hoppers and conveyor transport points. In our view, this does not qualify as a "best practice" approach.

3.2 GROUND AND SURFACE WATER

Preliminary analysis of the impact of this proposal on ground and surface water has revealed serious risks and threats to the Hunter's water systems, which are the lifeblood of our industry and a critical water source for the Upper Hunter community.

The predicted drawdowns in the Hunter River alluvium, Saddlers Creek and Saltwater Creek will have a negative impact on not only surface water and flows within the Hunter River, Saltwater Creek and Saddlers Creek but on existing vegetation, grazing stock and dependent ecosystems.

The proposed mine plan for the deposition of spoil, rejects, tailing and water to open voids presents a future risk to surrounding water resources.

There is no consideration of the potential placement of ash into the void by AGL in the future. The potential effects on groundwater level rise and flow have not been addressed nor has the effect on water quality should ash be placed in the void.

The addition of ash or additional tailings and/or water to the void could increase the opportunity for release through seepage via the Denman Formation or overflow of highly saline acidic water to the surrounding streams or water table.

Should void water rise to above the surrounding groundwater levels, flow directions will be reversed leading to the release of highly saline and likely acidic water to the environment.

Should the surrounding rock be more permeable than currently understood, or the void overtopped, stored water will present a significant risk to down gradient water highly productive alluvial aquifers of the Hunter River and Saddlers Creek.

The EIS Sensitivity and Uncertainty Analysis does not address the issue of subsidence, its calculation and effect on groundwater flow. Nor does it effectively address the potential for surface fractures and their connectivity to underlying subsidence particularly when associated with the Saddlers Creek Alluvium or faults and dykes.

Preliminary analysis reveals disparities between calculated annual Groundwater Model inflows and those used for the Surface Water Assessment Water Balance. The lack of comprehensive annual mine inflows for the period of mine activity and beyond does not provide transparency or enable appropriate scrutiny of the model outputs.

The Groundwater conceptualisation lacks meaningful discussion on the proposed handling of subsidence, potential connectivity to surface and related post-mining recharge.

The Applicant's EIS inadequately assesses or fails to address the Independent Expert Scientific Committee's (IESC) concerns regarding the potentially irreversible and severe impacts of this project to groundwater resources and surface water courses and the IESC's related concerns with respect to model confidence levels.

A key component of the EIS surface water assessment is the development, calibration and application of a site-specific water balance model, which provides a valid representation of real-world flows, water quality and storage behaviour over the range of potentially climatic and operational conditions within which the project could be expected to operate.

In the absence of a robust and demonstrably accurate water balance model little confidence can be placed on conclusions reached regarding likely or potential impacts on surface and groundwater.

Preliminary analysis of the Applicant's water balance model reveals:

- the water balance model has been calibrated over a 2 year period during a particularly dry period and with no active mining operations being undertaken;
- given this paucity of calibrated information, no confidence can be placed on this model being used for predictive purposes;
- a lack of consistency or clarity relating to components of the site water balance, which does not engender confidence in the validity of the Applicant's reported outcomes or conclusions;
- the statistical interpretation of the model misrepresents the probability of critical outcomes, including cumulative probabilities;

- there is no meaningful assessment of the risk of supply shortfall or excess water associated with the project over its operational life;
- questionable proposed water management concepts.

As with the ground water assessment, the Applicant's surface water assessment also inadequately assesses or fails to address serious issues raised by the IESC – particularly with respect to the potentially long term changes to Permian hard rock aquifers and surface watercourses due to subsidence and fracturing (which if they were to eventuate will be irreversible).

Despite the critical importance of surface and groundwater systems to the community and region, the Applicant seems to have undertaken a very rudimentary assessment which raises serious concerns, would leave unacceptable inherent risks and uncertainties and inspires little confidence. This is despite the particular regard placed on these issues by the IESC as part of the Gateway process.

3.3 NOISE & BLASTING

As a general comment, it is improper for any mine proposal to start with exceedances of prescribed noise limits for any affected parties – as is the case for this proposal.

Project noise and blasting are serious issues for our industry, particularly given two of our international scale studs are located directly opposite the proposed underground mine.

The Applicant acknowledges that there will be blasting during the 3 year construction phase. If not well understood, and assessed, the impact on the nearby studs (directly on their operations and indirectly on reputation) and social impacts to the nearby noise sensitive community will be profound and adverse.

Based on our preliminary analysis we find serious fault and limitations with:

- noise modeling undertaken using outdated software which is no longer considered best practice and cannot be independently scrutinised;
- background noise limits and project noise limits which seem to adopt outdated 2000 information with no detail on or justification of their appropriateness to the current proposal;
- non-compliance with the Industrial Noise Policy and lack of evidence that the proposal will continuously comply with project noise limits;
- the noise intrusiveness assessment which is incomplete and unjustified;
- does not assess the impacts of blasting to the nearby thoroughbred operations.;
- the blasting assessment refers only to structural damage not the impacts to the nearby equine community.

In addition to blasting during the 3 year construction phase, we note that blasting may also occur during the life of the project (final void(s)). The impacts of both these scenarios on nearby thoroughbred studs are not assessed.

3.4 MINE PLAN

The Applicant's mine plan does not provide the level of information required to fully scrutinise, assess and validate the underground operation. This is contrary to all principles of transparency and accountability, which underpin the preparation and assessment of State Significant Development proposals.

Based on the information provided in the Applicant's EIS, we submit that the merits of this proposal cannot be properly assessed, including the claimed net benefits and therefore whether it is in the public interest.

For example, the EIS does not provide:

- a detailed breakdown of the capital costs of the project;
- a detailed breakdown of the operating costs of the project;
- details on the coal price assumptions;
- details on coal resources and recovery including the assumed product coal quality by coal type to verify the stated coking/thermal coal product split;
- a detailed breakdown on headcount requirements. We question the claim of generating "new" jobs and the unassessed impacts of employment substitution between industries in the region;
- details on the selection of longwall panel orientation or the impacts of multi-seam mining;
- details on the geological and geotechnical evaluation process – an issue also raised in the Peer Review Subsidence report;
- detail of underground equipment numbers;
- detail on mine development rates;
- details on the overall ventilation system and seam gas;
- details on the management and risk of spontaneous combustion;
- details on blasting during construction activities.

The dearth of detail on the mine operation plan raises many questions and provides little confidence in the ability to assessment of the justification for the proposal.

3.5 REHABILITATION

Preliminary analysis relating to rehabilitation has identified some important issues with this proposal. These include:

- the extent and quality of reactive mine waste materials and how these will affect the rehabilitation of the Drayton North mine area – including final mine voids and associated pit water and the tailings/coarse reject emplacement areas;
- final void management, including whether the final pit voids will be geotechnically viable to successfully stabilise and establish suitable vegetation cover;
- impacts of subsidence on the rural landscape which could adversely affect the suitability of lands for subsequent rural uses;
- insufficient timeframe to restore land for post-mining land use; and
- solar infrastructure and its relationship with final rehabilitation.

We note that the concept of major and more natural re-shaping (geofluvial methods) of the previously Anglo mined areas has been rejected by the Applicant due, primarily, to the costs of major earthworks that would be involved. This is a disappointing outcome and

discordant with "best practice" being undertaken by other major mining companies in the Upper Hunter.

Preliminary analysis of the Applicant's EIS reveals residual concerns regarding risks associated with spontaneous combustion and the potential costs relating to the installation and decommissioning of nitrogen atmosphere equipment; the general management of explosive gases and spontaneous combustion; the decommissioning of the sewerage treatment facility; rehabilitation of mine impacted riverine areas; and the closure of portal and vent shafts. There are serious reservations also on whether the site can be rehabilitated to pre-mining conditions.

Given the above, we question the veracity of the rehabilitation proposal for the site and whether the current Security Deposit would be sufficient to adequately cover rehabilitation costs.

3.6 HERITAGE

The Applicant acknowledges the study area is part of an Aboriginal cultural landscape. However preliminary analysis reveals that no Aboriginal cultural landscape or mapping has been undertaken.

No connection between Aboriginal artefacts and stone sites, their use and the wider landscape connections are made. There has been no attempt to understand how this landscape formed and functioned as part of the region – including its importance to the Indigenous and cultural history of the region.

No archeological testing has been or is proposed to be undertaken, despite the area containing high sensitivity landforms.

The extent of surface cracking resulting from subsidence is unknown and unpredictable. The potential impacts are not considered in the EIS and, as a consequence, the EIS may misrepresent the impacts to Aboriginal archeological sites due to subsidence and cracking.

Known Aboriginal sites within the project area may be impacted, potentially irreparably.

The Applicant's historic heritage assessment concludes that the project would result in:

- No impacts on items of historic heritage by surface development associated with the project;
- No impacts on relics;
- No indirect impacts that are material or adverse; and
- No cumulative impacts to heritage places.

The Applicant's EIS notes that the National Trust listed Muswellbrook-Jerrys Plains Landscape Conservation Area would experience subsidence effects arising from underground mining operations associated with this proposal.

Preliminary analysis reveals insufficient understanding and appreciation of the land use history of the area applied to the Applicant's heritage assessment for the cultural landscape, which results in a cursory assessment of heritage impact that omits key aspects of heritage value and the potential impacts on these values.

The associated social values of the area have not been adequately assessed or addressed. The cumulative impacts do not consider the question of balance with respect to the rural/mining landscape.

The Aboriginal and European historic heritage significance of the area is well documented – including through submissions and reports presented to, and those of, four previous

Planning Assessment Commissions relating to the previous Drayton South mining proposals on this site. Nevertheless, it has not been accounted for in the EIS.

3.7 EQUINE CIC

The Upper Hunter's ECIC has been mapped, legislated and recognised by the NSW Government as nationally and state significant. It is internationally recognised and is one of three centres of thoroughbred breeding excellence in the world (alongside Kentucky in the USA and Newmarket in the UK).

It is the largest agricultural industry in the Upper Hunter and is home to the second largest concentration of studs in the world (second only to Kentucky in the USA). It is Australia's largest producer, supplier and exporter of premium thoroughbreds.

The ECIC is vertically integrated comprising stud farms, broodmare farms and a sophisticated network of equine support industries – including the Scone Equine Hospital, which is the largest in the Southern Hemisphere and a centre of excellence in its own right.

The Hunter Valley is recognised domestically and internationally as Australia's Horse Capital producing champion equine athletes, which are the envy of the world – including the world's champion racehorse Winx, the horse that stopped a nation.

The importance of the Hunter's ECIC, its central players (Coolmore and Godolphin) and its vulnerability to threats of mining is well documented, including in six previous Planning Assessment Commission and Gateway Panel reports [iv].

Based on our knowledge, experience and analysis, compared to little if any substantiating analysis from the Applicant, the Applicant's claims relating to the following are concerning:

- horse stud client perceptions of mine construction and operations are rated as minor or unlikely;
- impacts of stud operations, viability and impacts on the ECIC are rated as unlikely or minor;
- interactions with water resources are rated as unlikely or negligible;
- generation of noise or dust from surface activities is rated unlikely or negligible;
- interactions between Malabar and neighbouring landholders are rated as possible.

Given the importance of the Hunter's ECIC, and the critical importance of Godolphin and Coolmore as its epi-centre, and the requirements of the NSW Government's Agricultural Impact Statements for State Significant Development proposals, it is concerning that the analysis undertaken assumes away any potential land use conflicts and associated risks on the basis that they can be mitigated and does not therefore undertake any meaningful analysis should the contrary be the case.

3.8 AGRICULTURAL PRODUCTIVITY

Many coal seams in the Hunter Valley have high sodium contents, which in turn increase the risks to soils and water in the area – including beyond the physical boundaries of the mined areas. Potential risks to the Hunter's water systems have been covered in section 4.2.

Preliminary analysis of the Applicant's proposal reveals unresolved concerns with risks associated with saline water infiltrating through the soil profile resulting in degradation to soils and vegetation; waterlogging of crops and pastures; impacts on irrigated and non-

irrigated fields; and potential negative impacts on crop harvests thereby reducing agricultural productivity.

These risks could be further exacerbated by subsidence related impacts, which could disrupt irrigation channels, surface irrigated pasture, and negatively impact plants, animals and ecological communities.

3.9 ECONOMIC ANALYSIS

The Applicant's EIS suffers from a lack of detail and transparency.

This lack of transparency is contrary to NSW guidelines and presents across many of the calculations in the economic assessment, including for example claimed capital costs, operating costs, coal price assumptions. The assumed coal price, in particular, is a key source of benefits but lacks justification.

Preliminary analysis reveals the Applicant's economic assessment is deficient.

It overstates the benefits and understates the costs of the proposal, including environmental and social costs. The externality impacts are either ignored or under-estimated.

The Applicant's economic analysis and justification suffers from optimism bias and raises serious questions about the claimed net benefits and whether this proposal is in the public interest.

3.10 VISUAL IMPACTS

We acknowledge that an underground mine proposal on this site would be less visually intrusive than the previous two applications for open cut mining on this site.

We note the Applicant has acknowledged there will be visual impacts associated with their proposed underground operations which will be visible to and from the studs located directly opposed the proposed mine, their clients and to other travellers and tourists.

We also note that this proposal will have dynamic, static, direct and indirect visual impacts.

We consider that these impacts have not been adequately assessed or addressed in terms of the impacts on the reputation of our industry and investment attractiveness, and impacts on the potential for tourism development in this region, the consequent impacts on the Upper Hunter community.

3.11 SOCIAL IMPACTS

The thoroughbred breeding industry has a proud and long history in the Upper Hunter spanning nearly 200 years. We are an integral part of the Upper Hunter community and play our part in supporting our local community without fanfare or public acclamation.

We are committed to social cohesion and harmonious relations between all industries in our region. We would not wish to witness a recurrence of divisiveness in the community caused by the previous two applications for mining on this site.

We have, for many years, advocated for appropriate buffers or zoning so that all industries can peacefully exist with appropriate measures in place to address incompatible development and land use conflict. A conclusion also reached by previous Planning Assessment Commissions and the Gateway Panel.

We note that social impact concerns raised by the local community as part of this proposal are similar to those expressed for the previous Drayton South mine – including but not limited to, concerns relating to air quality, water security, noise, future land use, visual amenity, increases in traffic, extra pressure on community services, including already stretched local health services, and impacts on housing prices.

We are mindful of the real and perceived social impacts of this proposal, the intergenerational and distributive impacts, and the lack of quantification of these impacts in the Applicant's EIS.

3.12 UNCERTAINTY

All industries and the Upper Hunter community need certainty so they can invest and grow with confidence and to underpin community cohesion, sense of place, health and wellbeing, way of life and aspirations.

This application for mining directly opposite two of Australia's international scale studs and the epicenter of the Hunter's ECIC is the third application for mining on this site in less than 10 years. To assert that this situation creates uncertainty for investors, our industry, employees, their families and the Upper Hunter community would be an understatement.

The global market for thoroughbred investment dollars is fiercely competitive. While Australia's industry is perfectly placed to take advantage of global investment opportunities, our premier thoroughbred breeding industry in the Upper Hunter is at risk of losing market share to its global competitors (particularly NZ) due to the constant mining applications, their proximity to our premier studs, the consequent potential negative impacts on image and reputation and investment certainty these factors create.

3.13 OTHER ISSUES

Given the omissions and shortcomings relating to the Applicant's EIS outlined in this submission, and the volume of material which needed to be reviewed (nearly 5,000 pages) in a tight time frame, it is disappointing and regrettable that the Department of Planning did not undertake a more thorough assessment of the adequacy of the Applicant's EIS before placing it on exhibition.

This burden should not place the onus on the community to identify shortcomings in an Applicant's EIS, which in turn imposes unwarranted and significant resource and financial pressure on communities.

[i] Planning Assessment Commission, The Bickham Coal Project Report, 3 May 2010; Planning Assessment Commission, Drayton South Coal Project Review Report, December 2013; NSW Planning assessment Commission Determination Report, Drayton South Coal Project, 17 October 2014; Planning Assessment Commission Drayton South Open Cut Coal Project Review Report, November 2015; NSW Planning Assessment Commission Determination Report Drayton South Coal Project (SSD 6875), 22 February 2017.

[ii] Ibid

[iii] ibid

[iv] Planning Assessment Commission reports mentioned above; plus Report by the Mining & Petroleum Gateway Panel to Accompany a Conditional Gateway Certificate for the Drayton South Coal Project, April 2, 2015.