

Ms Carolyn McNally
A/g Secretary
Department of Planning and Environment
23-33 Bridge Street
Sydney NSW 2000

3 June 2014

Dear Ms McNally

DRAYTON SOUTH COAL PROJECT – SUBMISSION TO DIRECTOR GENERAL

Darley Australia welcomes the opportunity to make a submission in response to Anglo American's Justification Report (February 2014) and Consequential Environmental Impact Assessment for Retracted Mine Plan (March 2014) relating to the Drayton South Coal Project.

We appreciated that the Planning Assessment Commission (PAC) visited the Darley Woodland stud farm prior to the public hearing it conducted in Denman last October to gain a first hand appreciation of the stud farms and the environment in which we operate. Nothing can properly substitute for this first hand knowledge. Given the Minister's own direct reference to our stud in the Minister's s23D request to the PAC in August 2013, we also now invite you to view our operations before finalising your report to the Minister (or her delegate).

Darley Australia, our experts and our legal advisers are strongly of the view that:

1. the Anglo American project for Drayton South **does not comply with the Director General's Requirements** – particularly, but not limited to, the requirements that relate to assessment of the impacts on the thoroughbred breeding industry;
2. the Anglo American Justification Report and proposal for a Retracted Mine Plan (RMP) **does not conform with the Planning Assessment Commission's recommendations**;
3. the Anglo American RMP proposal **clearly constitutes a substantially different and entirely new mine plan which, if it is to be considered any further, should be the subject of a fresh application, fresh DGRs**, a new Environmental Impact Assessment and proper scrutiny by all relevant State agencies;
4. the Anglo American RMP proposal, were it to proceed, would **significantly and permanently impact the viability of our business**, thereby fragmenting and destroying Australia's premier equine industry clustered in the Hunter Valley;
5. Anglo American's proposal for a new open cut mine at Drayton South is not economically viable and **would not result in any Net Economic Benefit for NSW**. The application of realistic thermal coal prices and the impacts on our industry reveal that this proposal would result in a **net loss of \$457m to the NSW economy; a loss of \$120m per annum to the regional economy; and put at risk at least 640 jobs**;
6. Anglo American has **failed in all its reports to date to be transparent and address** (either entirely or adequately) **critical concerns** including the impact of this proposal on thoroughbred studs, water, air quality, visual amenity, and heritage values of this region in the Hunter Valley;
7. the **independent PAC's recommendations** - that the studs be afforded "the highest level of protection" and the mine plan for Drayton South not be approved – **should be reflected in the final determination of Anglo American's application** by the refusal of that application
8. **No evidence has been provided by Anglo American in its RMP that suggests they have made any serious attempt to address the PAC's concerns** and recommendations relating to any future, much smaller, mine plan. Anglo American has not demonstrated that the impacts of the proposed RMP will not affect the viability of the horse studs nor have they made any real attempt to provide transparent, rigorous, scientifically based assessment of the impact of the RMP to demonstrate that impacts such as visual amenity loss, blasting, noise, dust or water impacts can be managed to an acceptable level.
9. **Anglo American stated in public** at the PAC hearing that any further alterations to the mine plan set out in its Preferred Project Report (PPR - August 2013), including, of course,

suggestions subsequently made by the PAC **concerning a future, much smaller footprint, would not be economically viable for the mining company.** Given this, **the PAC's conclusion that "if [a] smaller footprint is found unviable, the Commission considers that the project cannot proceed" should be endorsed and this mine, either as originally proposed (March 2011), as modified in the PPR (August 2013) or now as outlined in the RMP (March 2014), should not be approved.**

We remain steadfast in our view that this one mine is in the wrong place and has the potential to destroy an entire industry – Australia's premier multi-billion dollar thoroughbred breeding industry. The site proposed for Anglo American's new open cut mine at Drayton South is not a suitable site for mining and it is not in the public interest to allow it to proceed.

In our previous submissions Darley has stated ***"no reasonable person would choose to acquire, invest in, upgrade or operate a thoroughbred breeding business in such close proximity to a coal mine. It follows that mining and thoroughbred breeding in such close proximity are incompatible land uses. Should the Drayton South open cut coal mine proceed, Darley will be forced to reconsider its commitment to its operations in NSW due to the nature and scale of impacts of this proposal on our business."***¹

The sensitivity of our operations to the impacts of mining was clearly recognised by the PAC, the Gateway Panel and their expert advisers. In all their reports to date, including the "Justification Report" and the RMP, Anglo American has systematically failed to recognise the serious impact this proposed mine would have on the viability of our operations and the damage it would cause to our entire industry in the Hunter Valley.

When formulating the Director General's report we trust that you have access to, and take into account, our submissions and expert's reports all of which are publicly available. We also request that you take into account the submissions and the expert advice provided by the Hunter Thoroughbred Breeders Association which complement and support our submissions. In support of this submission we append expert reports that were commissioned to analyse Anglo American's Justification Report and RMP.

The Upper Hunter Strategic Land Use Plan recognised the national and international significance of our wine and thoroughbred breeding industries and identified large areas for heightened protection. The Government's announcements on 28 January 2014 recognised the Hunter's wine and horse-breeding industries as critical industry clusters, which are now off limits to coal seam gas activity.

The Government's decision on this matter is **the first test of the Government's new policies**, which it promised would protect our equine critical industry cluster.

The Government's two independent advisers, the Planning Assessment Commission and the Gateway Panel, have recommended against this mine. It would be fundamentally unfair and unreasonable if the NSW Government chose to disregard the recommendations of its independent Planning Assessment Commission and in doing so, jeopardize Australia's internationally recognised thoroughbred breeding ground in the Hunter Valley.

This decision is too important, and there is too much at stake for our future, for our industry and the thousands of employees associated with Australia's premier breeding and racing industry to get this wrong.

We reiterate our invitation to you to visit our stud farm prior to issuing the Director General's report.

Yours sincerely



Henry Plumptre
Managing Director

DARLEY AUSTRALIA
ANGLO AMERICAN PROPOSAL FOR NEW DRAYTON SOUTH MINE
SUBMISSION TO DIRECTOR GENERAL

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1. LIST OF PREVIOUS SUBMISSIONS

2. LIST OF EXPERT REPORTS

- A. Marsden Jacob Associates, Response to PAC Merit Review, Review of the Economic Analysis for Drayton South Open-Cut Coal Mine, March 2014
- B. Marsden Jacob Associates, Drayton South Coal Mine – review of the Economic Assessment in the Consequential Environmental Impact Assessment for Retracted Mine Plan, May 2014
- C. Advitech, Review of Retracted Mine Plan, Drayton South Coal Project, May 2014
- D. OD Hydrology, Review of Anglo American Drayton South Coal Project Justification, March 2014
- E. OD Hydrology, review of Anglo American “Drayton South Coal Project, Consequential Environmental Impact Assessment for Retracted Mine Plan”, May 2014
- F. GML Heritage Drayton South Coal Project, Review of Anglo American Justification Report, March 2014
- G. Michael Wright, Landscape Architect, Drayton South Coal Project, Response to Anglo American’s Response to the Scenic and Visual Impact Issues Raised in the Planning Assessment Commission’s Report, March 2014
- H. Michael Wright, Landscape Architect, Drayton South Retracted Mine Plan, May 2014

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INTRODUCTION

In our previous submissions to the Department and the Planning Assessment Commission (listed in Annex 1) we and our expert advisers have raised serious concerns about Anglo American's proposal for a new open cut coal mine at Drayton South. These concerns have not been addressed in either the Justification Report or the Retracted Mine Plan (RMP) proposal submitted by Anglo American.

Director General's Requirements

Based on our evaluations and our experts' advice we are of the view that Anglo American's Proposal for a new open cut coal at Drayton South has failed to address (either entirely or adequately) the Director General's requirements particularly in the areas of social and economic impacts, air quality, blasting, surface and groundwater resources, non-Aboriginal heritage, visual impacts, impacts on regional or state significant agricultural resources and most importantly it has omitted to acknowledge and assess the impacts on our operations and our industry.

These are not just our views but are also the findings of the experts advising the Planning Assessment Commission and the Gateway Panel.

Advisers to the Planning Assessment Commission found that "The Proponent's Environmental Assessment and Preferred Project Report, including the Agricultural Impact Statement, is **non-conforming and non-compliant with requirements.**"ⁱⁱⁱ The Gateway Panel found that "**Potential impacts of the proposed mine on the adjacent thoroughbred studs is poorly considered. Analysis of potential impacts on the Equine CIC is absent.**"ⁱⁱⁱ

Planning Assessment Commission Report and Recommendations

The Drayton South proposal has been the subject of rigorous and independent scrutiny by the NSW Planning Assessment Commission (the Review PAC) in response to terms of reference issued by the Minister for Planning. The Review PAC was led by the Chairman of the Commission (herself a former long standing Director General of the Department of Planning) and was comprised of senior and experienced Members.

The report published by the Review PAC in December 2013 came at the end of an assessment process which began in March 2011. That report was based on a thorough review of a massive volume of material prepared by Anglo, the PAC's own site inspections, its reviews of expert reports procured by it and its first hand consideration of written and oral submissions by opponents and supporters of the project. The PAC was told by Anglo that all the concessions that could possibly be made had been made and that what was put before the PAC was the only form of mine that could be economically justified by the company.

The unequivocal conclusion of the Review PAC, and its unconditional recommendation to the Planning Minister, was that the mine should not proceed because its adverse impacts would jeopardise the existence of two substantial and *site dependent* studs and the wider industry which they help sustain^{iv}:

- The Coolmore and Woodlands horse studs should be recognised as essential to the broader Equine Critical Industry Cluster and given the highest level of protection from the impacts of mining (R1)
- The mine plan for the site should not be approved (R2).

In response to the December 2013 Review Report, Anglo has published two further documents.

The "Justification Report"

Anglo American submitted this document to the Department in an effort to discredit the PAC and to cast doubt on the reliability of its findings and recommendations.

The arguments advanced in the document should all be dismissed for these reasons:

- a. the alleged *excess of authority* submission is based on either a calculated or careless misreading of the Minister's terms of reference - the Review PAC's task was focused but it was not confined, it did make recommendations and it did not, in so doing, exceed its authority;
- b. the *denial of natural justice* submission erroneously presupposes that the Review PAC was acting as a decision maker (and not a recommender) and that it was captive to the views of its advisers when they reached conclusions shared with the PAC by many others;
- c. the *irrelevant considerations* argument is based on the false premises that there was no real contest as between experts (when plainly there was and the Commission did not prefer/agree with Anglo's experts) and, absurdly, that as a review body it should have applied the rules of evidence

as if it were sitting as a Court; and

- d. the *failure to take into account relevant matters* submission also depends on an unsustainable contention - that because a review body states what most would accept as matters of fact (ie, that mining is an environmentally intrusive activity), this somehow proves that it cannot countenance a contrary position.

The "Justification Report" unfairly and inappropriately tries to characterise an unpalatable (for Anglo) review report as a form of unlawful determination. **The Minister should give the "Justification Report" no weight.**

The "Retracted Mine Plan" (RMP)

In making generalised comments about how, if and when any new mine plan was to be reconsidered at a later time, the PAC suggested it would need to be radically different from that which the Review PAC examined, all that was suggested was that a very different mine would require new environmental studies before being assessed.

The Review PAC did not provide a template for a new development application nor did it set out in any detail how a proponent would need to go about addressing concerns which the PAC harboured about incompatible land uses and long term adverse environmental impacts.

Properly understood, the Review PAC did no more than speculate about the as yet unassessed possibility of a new and radically different mine. Anglo has carelessly or calculatedly misread the Review PAC's report and attempted to portray the RMP as a complete response to detailed guidance from the Commission about what a new mine might look like.

Even if one assumes that this is what the Review PAC did, the RMP does not constitute a "square peg" for a "square hole". Anglo American admit that they cannot provide a square peg (ie a mine plan complying with the PAC recommendations) as such a mine plan of itself would be unviable. Unguided by DGRs, the RMP can only properly be characterised as a rushed, incomplete and largely unassessed proposal disguised as a mere amendment to a plan which was completely rejected by an independent and expert review body.

Objects of Environmental Planning and Assessment Act 1979

The objects of the Environmental Planning and Assessment Act 1979 are clear in the, inter alia, encouragement of the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages, ecologically sustainable development, and the protection of the environment for the purpose of promoting the social and economic welfare of the community and a better environment.^v

The materials advanced by Anglo American in support of the Drayton South proposal have not demonstrated that the Project will promote the social and economic welfare of the community and a better environment.

The Project will result in a net economic loss to the State and regional community, place at risk *at least* 640 viable, sustainable jobs, the viability of premier thoroughbred studs and an entire industry. It will put at risk the health of the Hunter River system, present unacceptable air, noise, dust, and threats to community and bloodstock health. It will irreparably destroy the visual amenity of the area (fundamental to the business model of international scale thoroughbred breeding operations) and the cultural heritage landscape of this historically significant part of the State. In so doing, it will clearly not "promote the orderly and economic use and development of the land"^{vi}.

Principles of Ecologically Sustainable Development (ESD)

The principles of ESD are fundamentally premised on a cluster of elements including the principle of sustainable use, the principle of integration, the precautionary principle, inter-generational equity, conservation of biological diversity and ecological integrity and internationalization of external environmental costs.^{vii}

The application of the precautionary principle and the concomitant need to take precautionary measures is triggered by the satisfaction of two conditions precedent:

1. A **threat** of serious or irreversible environmental damage (emphasis added); and
2. **Scientific uncertainty** as to the environmental damage (emphasis added).^{viii}

Based on the advice of our experts, and the conclusions reached by both the Planning Assessment Commission and the Gateway Panel, it is clear that the Environmental Impact Assessment, and subsequent reports submitted by Anglo American reveal serious scientific uncertainty as to the environmental damage posed by this mine and significant threat of serious environmental damage that cannot be mitigated and will be a legacy left for both the State and future generations.

The precautionary principle therefore should be applied to Anglo American's proposal for a new open cut coal mine at Drayton South.

Government Policy

In the Government's Strategic Regional Land Use Plan for the Upper Hunter the NSW Government recognised that *"two million hectares of our State's most valuable agricultural land as well as critical water sources that supply it are now subject to protections never before seen in NSW."* *"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."*^x

On 1 May 2012, the message and commitment conveyed by the Deputy Premier to the Our Land, Our Water, Our Future Rally was clear ***"The message I want to leave you with today is this: if any proposed mining or gas extraction activity is likely to harm our prime agricultural land or other important rural industry clusters or the water resources associated with those areas, it will not go ahead under this Government."***^x

In January of this year the Government recognised the Hunter's wine and horse breeding industries as critical industry clusters, which are now off limits to coal seam gas activity.

The current NSW Government has consistently outlined in its policies that heightened protections have been afforded to protect the Upper Hunter's wine and thoroughbred industries. The decision on Anglo American's proposed new open cut mine at Drayton South is the first test of the Government's new policies and its commitment to protect our industries. The Government's independent advisers, the Planning Assessment Commission and the Gateway Panel has reaffirmed that open cut coal mining and international scale thoroughbred breeding enterprises are incompatible land uses. The Planning Assessment Commission has recommended that Coolmore and (Darley) Woodlands studs be given the highest level of protection from the impacts of mining.

The Government should uphold the recommendation of the PAC and deliver on its commitments that their new policies will protect us.

State Environmental Planning Policies

The State Environmental Planning Policy (Rural Lands) 2008 unequivocally states that the aims of this Policy are as follows:

- a. to facilitate the orderly and economic use and development of rural lands for rural and related purposes,
- b. to identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purposes of promoting the social, economic and environmental welfare of the State,
- c. to implement measures to reduce land use conflicts,
- d. to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,
- e. to amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.

It is clear from this SEPP that strategic agricultural lands should be protected and every effort should be made to reduce land use conflicts and ensure the ongoing viability of agriculture on strategic agricultural land.

In November 2013 the Government introduced an amendment to the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 regarding the resource significance of a mining proposal (Clause 12AA) – including, inter alia:

- the economic benefits, both to the state and the region in which the development is proposed to be carried out, if developing the resource;
- any advice by the Director General of the Department of Trade and Investment, regional Infrastructure and Services, as to the relative significance of the resource in comparison with other mineral resources across the State;
- employment generation, capital expenditure etc.

Further amendments to this SEPP were introduced earlier this year with respect to the Gateway Assessment Process. The amendments included, inter alia:

- the importance of agricultural resources (s2 (d)(i)); and
- ensuring the protection of strategic agricultural land and water resources (s 2(d) (ii)); and

- ensuring a balanced use of land by potentially competing industries (s 2(d) (iii)).

There are a number of matters that are relevant to consideration of this particular SEPP:

1. it does not override considerations with respect to the objects of the EP&A Act – including as they relate to environmental impacts, amenity concerns, and public interest during the assessment of a mining development;
2. it reinforces the importance of protecting agricultural resources, strategic agricultural land and water;
3. the resource significance element of this SEPP has already been challenged in the Upper House.

In the case of Anglo American's proposal for a new mine at Drayton South, considerations regarding the economic significance of the resource are nullified by the significant impacts the proposed mine will have on the thoroughbred breeding industry, the NSW economy and employment in the region.

Furthermore, the Director General of the Department of Trade and Investment in his advice on this matter reaffirmed that^{xi}:

- It was not possible to determine whether, under the recommendations of the PAC, a new economically viable mine plan could be developed, although the sterilization of 30 per cent of the resource substantially reduces the project value to the company and the State, potentially making the project uneconomic;
- Drayton South has indicated that to meet export specifications it would need to blend coal product from all four pits, therefore restricting mining to two pits only would further deteriorate the economic viability of the project and consequently the benefit to NSW;
- On 28 January 2014 the Government announced the final step in identifying Critical Industry Clusters and confirmed its intention to safeguard these;
- The Gateway Panel and the PAC identified the Coolmore and Woodlands horse studs as core businesses that are pivotal to the sustainability of the Equine CIC due to their scale, financial value, international reputation and representation;
- The Department of Primary Industries supports the Gateway Panel and PAC's findings and recommendations that:
 - The Coolmore and Woodlands (Darley) thoroughbred stud enterprises are pivotal (core businesses) to the sustainability of the Upper Hunter Equine Critical Industry Cluster and should be protected.
- The socio-economic concerns previously raised regarding the cumulative impacts of the Drayton South Coal Mine Project on agricultural resources and enterprises remain unresolved.

The Public Interest

It is clear from the Government's policies and its State Environmental Planning Policies that the protection of rural lands, strategic agricultural lands and water resources and the protection of that land from land use conflicts are critical elements contributing to the social, economic and environmental welfare of the State.

It is crucial to note that our experts' advice reveals that the Anglo American proposal for a mine at Drayton South will yield a **net economic loss of at least \$457m to NSW, will result in a loss of \$120m per annum to the regional economy**, poses **a serious threat to the community's environment** (both water and air quality), presents **significant scientific uncertainty as to the environmental damage** it will cause, will **place at risk the viability of Australia's premier horse studs** and fragment and **unravel the equine critical industry cluster** located in the Hunter Valley, **risking at least 640 jobs** and thousands more when the wider impacts are felt throughout the regional and State economies.

The approval of this mine will exacerbate and perpetuate land use conflict in this region and in many other areas as it will signal that the Government and its policies are not protecting the very industries, agricultural lands and waters they are designed to protect.

It is abundantly clear that the Anglo American Drayton South mine proposal would harm the social, economic and environmental welfare of the State and that this proposal is not in the public interest.

SUMMARY OF SOCIO-ECONOMIC AND ENVIRONMENTAL IMPACTS

Based on the advice of our experts on Anglo American's "Justification Report" and RMP we are strongly of the view that:

- The proposed Drayton South open cut coal project will result in a net economic loss of \$457m to the NSW Economy, a loss of \$120m per annum to the local economy, risks the jobs of at least 640 people in our industry and will never break even when a realistic coal price of \$90 per mt is used;
- The proposed Drayton South open cut coal project will damage our reputation and threaten the viability of our operations in the Hunter Valley. It will damage the reputation and standing of the Hunter Valley's thoroughbred breeding industry and fragment and unravel the Hunter Valley's equine critical industry cluster;
- Anglo American has consistently demonstrated a fundamental lack of understanding of our business models and fails to address fundamental issues in their economic analysis;
- Anglo American has used implausible coal prices and analyses that overstate the benefits and understate the costs of this project – coal price assumptions remain unspecified, unjustified and unrealistically high;
- The analysis undertaken by Gillespie Economics has systematically failed to transparently report and enable independent analysis and appears to be biased in favour of the proposed mine development;
- The economic analysis underpinning the RMP categorically fails to address or demonstrate that its impacts will not affect the viability of the Darley stud;
- The Gillespie Economics analysis of the RMP, perversely, reduces coal volumes yet increases the economic benefits to the State – a result that is either analytically flawed or biased;
- Air Quality concerns have not been addressed or justified. A critical review of the RMP has been hampered by a lack of quantitative data; air quality modelling and assessment continues to lack transparency and fails to address key concerns raised by the PAC;
- Dust emissions from the proposed dragline, which was previously not included in the Redbank mining area, have not been quantified and, according to our experts, may result in elevated dust emissions;
- Anglo American has avoided addressing the impacts of increasing dust deposition rates and many other critical air quality concerns;
- Concerns relating to the underestimation of cumulative air impacts remain - reinforcing the PAC and our concerns that the modelling does not represent worst case scenarios and that the air quality impacts of this Project are unacceptable;
- Serious concerns relating to surface and groundwater remain unaddressed. No surface or groundwater assessment has been provided in either the Justification Report or the RMP contrary to the PAC's recommendations;
- Water modelling and analysis presents misleading and invalid surface water assessments and does not comply with the Aquifer Interference Policy;
- Modelling undertaken as part of Anglo American's Justification Report on the final void yields long term salinity estimates some 500 per cent higher than that reported in the Preferred Project Report; will result in ongoing continuous contribution of 1,000 tonnes of salt per annum from the final void to the Hunter river over the long term (> 1,000 years) contrary to the intentions of the Hunter River Salinity Trading Scheme;
- Critical assumptions in the final void water and salt balance modelling do not appear to be based in science;
- Anglo American's proposed final void/spill approach would be uncontrolled, occur over the very long term and be impractical, if not impossible to mitigate once realized;
- Significant uncertainty remains around the predicted long-term void behaviour, with significant uncertainty regarding the conclusions reached in respect of real world impacts;
- Anglo American has not presented any surface or groundwater assessment or information in the RMP. The RMP represents a significant change in the overall site water balance which has been recognised by the Proponent but not meaningfully assessed;
- Invalid statistical interpretation in the RMP suggests that the design of the water management system is much more likely to be exceeded (by 25% rather than 1%) than recognised or anticipated by the Proponent;

- The modelling undertaken by Anglo American to date cannot give anyone confidence that the long term water impacts and final landform of this mining proposal can be managed or mitigated;
- The Director General's Requirements for Non-Aboriginal Heritage have not been adequately or comprehensively addressed;
- Historic properties on the Darley and Coolmore stud farms are already statutory listed heritage items, yet the Anglo American reports fail to recognise that local and regional statutory planning controls provide for the conservation of listed heritage items and require the assessment of impacts on the significance of the listed heritage items and the broader setting;
- Muswellbrook-Jerrys Plains is listed on the Register of the National Trust (NSW) as a Landscape Conservation Area - a matter that has been entirely overlooked by Anglo American and its experts. This Landscape Conservation Area captures almost half of the mines Total Project area, 23% of the Drayton South mining and overburden emplacement area and almost of all the Darley and Coolmore properties – confirming the importance of the scenic and cultural values of these landscapes;
- Anglo American's experts, our experts and the PAC's expert agree on the potential cultural heritage values of the Darley and Coolmore properties – yet Anglo American has repeatedly overlooked the requirement of a comprehensive assessment of the impact of the proposed mine on these heritage values;
- The absence of a comprehensive and adequate heritage assessment fails to recognise and address the potential adverse and enduring impacts on the heritage values of Darley;
- An adequate and comprehensive non-Aboriginal heritage assessment that considers the cultural landscape values of both the area proposed to be impacted and the listed heritage items in the vicinity of this proposed mine is still outstanding;
- Anglo American has consistently failed to recognise the very high significance of the landscape values, Darley's importance to the equine critical industry cluster, the fragility of the scenic landscape to Darley's operations and business model;
- The claim by Anglo American that thoroughbred studs and mining operations coexist in Kentucky USA is flawed, misleading and mischievous. Apart from the thoroughbred breeding protection measures in Kentucky, the distances between mining to thoroughbred breeding operations range from 70km to 135km. This is in stark contrast to Anglo American's proposed mine which remains less than 1km (500 m) from our boundary;
- The proximity of the proposed Drayton South open cut coal mine will be a major and significant impact on the scenic and visual integrity of the Darley property;
- Anglo American's documentation and photomontages depict less than half of the actual extent of the mine that would be potentially visible. These oversights raise significant concerns regarding the credibility of Anglo American's assessment of the visual impacts and proposed mitigation measures;
- Open cut coal mining is one of the most incompatible land uses for neighbouring thoroughbred studs. It is the antithesis of thoroughbred breeding operations and the two cannot co-exist in such close proximity.

This is clearly one mine in the wrong place that will destroy an entire industry. It is an unsuitable site for a mine and given the threats it imposes to the industry, local community, environment, heritage and history, and the net economic loss it will create for the NSW and regional economies, approval of this mine in this location is not in the public interest.

1. FAILURE TO ADDRESS DIRECTOR GENERAL'S REQUIREMENTS

Based on our evaluations and our experts' advice, we are of the view that the proposal for a new open cut coal mine at Drayton South failed to address (either entirely or adequately) the Director General's requirements – particularly with respect to the:

- social and economic impact of the Project on the local and regional community paying particular attention to the thoroughbred breeding^{xii};
- a quantitative assessment of the potential air quality and odour impacts of the project on both the people and livestock^{xiii};
- blasting impacts on people, livestock and property^{xiv};
- detailed modeling and assessment of the potential impacts if the project on the quantity and quality of existing surface and groundwater resources; affected licenced water users and basic landholder rights; the riparian, ecological, geomorphological and hydrological values of watercourses both on site and downstream of the project^{xv};
- assessment of potential impacts on non-Aboriginal heritage values of the locality related to its settlement by Europeans and its pastoral history^{xvi};
- assessment of visual impacts on the thoroughbred breeding industry, residents, tourists and other road users^{xvii};
- identification and assessment of any regionally or state significant agricultural resources in the locality, with particular reference to the thoroughbred breeding industry^{xviii};
- a detailed assessment of the potential impacts of the project on agricultural resources and agricultural enterprises on the site and in the locality, with particular reference to the thoroughbred breeding industry^{xix};
- justification for significant long term changes to agricultural resources and post mining agricultural land use options, particularly if highly productive agricultural resources (eg thoroughbred horse stud and alluvial lands) are proposed to be affected by the project^{xx};
- preparation of an accurate Agricultural Impact Statement^{xxi}.

This is not only our assessment, but also that of the independent advisers to the Planning Assessment Commission and the NSW Mining & Petroleum Gateway Panel. In their reports these independent experts and advisers to the NSW Government make numerous references to the non-compliant nature of this Project's EA and responses to submission including:

"Despite the requirements of the Director General, assessment of the impacts on the CIC is largely absent. The EA fails to adequately describe the CIC or the role of Coolmore and Woodlands in it."^{xxii}

"The Proponent's Environmental Assessment and Preferred Project Report, including the Agricultural Impact Statement, is non-conforming and non-compliant with requirements. For example, no assessment of potential implications to the CIC has been included."^{xxiii}

"While the EA states clearly that it recognizes the value of thoroughbred breeding is greater than \$100M, it inexplicably concludes no economic or socio-economic impact on either stud or CIC."^{xxiv}

"Potential impacts of the proposed mine on the adjacent thoroughbred studs is poorly considered. Analysis of potential impacts on the Equine CIC is absent."^{xxv}

"The EA did not assess the potential for the area occupied by the studs in particular to be identified as a significant rural cultural landscape in its own right. It did not consider the likely impacts on the tangible and intangible heritage values associated with the horse breeding and the values of the landscape it is associated with."^{xxvi}

The PAC and Gateway Panels also raised additional concerns and made findings on the importance of Coolmore and Darley, which are presented in other sections of this submission.

None of these concerns have been appropriately or adequately addressed in Anglo American's "Justification Report" or RMP..

2. PLANNING ASSESSMENT COMMISSION REPORT RECOMMENDATIONS

2.1 Planning Assessment Commission Report

To date two independent Planning Assessment Commission reports (Bickham and Drayton South) have affirmed that international scale thoroughbred breeding operations and open cut mining are incompatible land uses.

The Drayton South Planning Assessment Commission found that:

“A previous review undertaken by the Planning Assessment Commission indicated that “available evidence supports the view that open-cut coal mining and viable international-scale thoroughbred breeding enterprise are incompatible land-uses” (PAC 2010).

Advisers to the PAC also found that *“Thoroughbred horse studs of the nature and scale of Coolmore and Woodlands and open cut coal mining as proposed by the Project are incompatible land uses. These land uses cannot co-exist in close proximity to one another.”* The Commission agrees with these statements, but notes that the Commission’s conclusions and recommendations are unique to the circumstances of this particular location.^{xxvii}

In its report to the Minister the Planning Assessment Commission recommended that:

- “The Coolmore and Woodlands horse studs should be recognised as essential to the broader Equine Critical Industry Cluster and given the highest level of protection from the impacts of mining; and
- The mine plan for the site should not be approved.”^{xxviii}

These recommendations are unequivocal and unconditional.

We note that in the PAC’s view **any future application for a much smaller mine** on the northern portion of the site must remain north of the natural ridgeline; that the setbacks proposed by the PAC are the “absolute minimum required” and **additional work would need to be undertaken** to demonstrate that mining in the remaining northern area of the site would not threaten the viability of the Coolmore and Woodlands studs.^{xxix}

Any new mine plan for the site would also need to be “further assessed to ensure the visual, blasting, noise and dust impacts could be managed to an acceptable level at the neighbouring stud properties and should take into account worst case scenarios. Other impacts would also need to be carefully considered both in relation to any impacts to the horse studs and more broadly, particularly in relation to the long term water impacts and the final landform.”^{xxx}

In the latter case of a **future application** the PAC’s view was that a smaller mine plan would require the removal of the majority of the Redbank pit (to the second ridge), the removal of the Houston Pit entirely, and the scaling back of the Whynot and Blakefield pits to protect the horse studs from the impacts on mining (as indicated in Figure 5, page 25 of the PAC’s report).

Critically, the Commission acknowledged **“these recommended changes may prove either technically and/or financially unviable. If this smaller mine footprint is found unviable, the Commission considers that the project cannot proceed”**.^{xxxi}

As is evidenced by Anglo American’s RMP, a smaller footprint along the lines suggested by the PAC is not technically or financially viable.

Therefore the PAC’s original recommendation should stand and the project should not proceed.

3. RETRACTED MINE PLAN

3.1 Runge Pincock Minarco

The NSW Department of Planning and Infrastructure commissioned Runge Pincock Minarco to provide an Expert Report in relation to the Drayton South Coal project held by Anglo American. Runge Pincock Minarco (RPM) presented their report to the NSW Department of Planning and Infrastructure in July 2013. In that report, Runge Pincock Minarco found that:^{xxxii}

- “Removing or reducing the size of the Houston Pit ... does not remove the visual impact as a portion of the Whynot pit extends to the south of the ridge. RPM completed an assessment of the case that aims to remove the visual impact by keeping it behind the ridgeline. ... The combined impact would have a material impact on the project economics.”
- Removing or reducing the size of the Redbank Pit ... would underutilize the coal processing plant and the truck and shovel fleet thereby removing low strip ratio coal from the first 19 years of the project. This would have a material impact on the project economics.”
- RPM also assessed the impact of a less intensive mining operation and concluded, “This results in a significant reduction in ROM coal produced in the first 19 years of the project. RPM concludes that there is little scope to reduce the intensity of the operation without having a material impact on the project economics.”

With respect to the final landform and voids, RPM found that changes to the final landform would “increase truck numbers to maintain proposed productivity, this may increase noise and dump impacts, increase operating costs and adversely impact on project economics.”^{xxxiii}

3.2 Anglo American Presentation to the Planning Assessment Commission

In its presentation to the Planning Assessment Commission Anglo American stated **“Further changes to the mine plan and delays to the proposal will make the project financially unviable ...”**^{xxxiv}

3.3 Planning Assessment Commission Report

The Planning Assessment Commission engaged R A Jennings and Associates to review the Drayton South Mine Plan. This report forms Appendix 6 to the Planning Assessment Commission’s report. The Planning Assessment Commission asked RA Jennings & Associates three key questions:

1. *Can the mine be kept behind the ridge from a technical perspective and what are the impacts for the mine?*
2. *Can the Redbank pit size be reduced to increase the buffer between mining operations and the horse studs? What would be the impact on the mining operation?*
3. *What are the options for reducing the number of pits that are open at any one time?*

On the first question RA Jennings & Associates concluded:

“It is technically possible to keep all of the mining operations to the north of the main ridge but **not without significant adverse impacts on the project.**” (Emphasis added)^{xxxv}

“Impacts on the project are as follows:

Lost coal reserves, dragline production losses, increased project risk and reduced project value.”^{xxxvi}

On the second question RA Jennings & Associates concluded “ *This would have a significant adverse impact on the Project economics.*”^{xxxvii}

On the third question, RA Jennings & Associates concluded^{xxxviii}:

“ Little scope is available to reschedule work on the Redbank pit”

By only working one pit at a time, the product coal specification would not be able to be achieved, and would therefore be an unworkable option.”

In its recommendations the Planning Assessment Commission was definitive with respect to Recommendations 1 and 2. That is:

- R1. The Coolmore and Woodlands horse studs are recognised as essential to the broader Equine Critical Industry Cluster and given the highest level of protection from the impacts of mining; and
- R2. The mine plan proposed for the site should not be approved.

In this respect the PAC’s conclusions were unequivocal: the mine plan before it should not be approved. This recommendation was not unconditional.

The remaining PAC recommendations clearly relate to a potential **new mine plan**. The Planning Assessment Commission’s views and correlating recommendations 3 to 5 explicitly refer to **“any future application for a much smaller mine.”**^{xxxix} The Planning Assessment Commission’s comments on any future new mine plan were that it must rigorously and comprehensively address that new mine plan’s impacts – including assessing the impacts of visual, blasting, noise, dust, water and

final landforms and demonstrating any new mine plan does not affect the viability of the Coolmore and Woodlands horse studs.

3.4 [Anglo American “Justification Report”](#)

In its “Justification Report” Anglo American clearly rejected the views and recommendations of the PAC and concluded “The setbacks proposed (by the PAC) would also materially affect the viability of the Project”^{xl} “.

3.5 [Retracted Mine Plan](#)

In its Consequential Environmental Impact Assessment for Retracted Mine Plan, which Anglo American states was developed “at the request of the Department of Planning” but which we note the Department says was not requested by it, Anglo American proposes substantial changes to the mine Plan which was the subject of the PAC review. These include:

- the removal of the Houston Pit and its associated visual bund,
- a “significant portion” of the Whynot mining area, and
- a “substantial area in the southernmost part of the Redbank mining area (pulling operations back a further 400m to the south).

These changes are claimed to reduce the mine life from 27 to 20 years.

Anglo American states that it “*reviewed the feasibility of removing a greater portion of the Redbank mining area as recommended by the PAC and found that this would make the Project unviable...*”^{xli}

Our examination and evaluation of the RMP reveals that:

1. the RMP fails to accommodate the setbacks proposed by the PAC;
2. the Redbank and Blakefield pits remain almost entirely intact;
3. the Redbank pit has been reduced by only 7 per cent;
4. the Redbank pit remains some 500 metres from our boundary - a situation that is untenable in terms of our future operation and viability;
5. the introduction of dragline operations in the Redbank Pit is a material change that will present significant air, visual, noise and lighting impacts that have **not** been the subject of appropriate rigorous scientific or environmental impact review;
6. there is no significant buffering between our operations and the proposed Drayton South coal mine;
7. Anglo American continue to fail to recognise the impacts this proposed mine will have on the amenity of the surrounding land, its heritage values; the impacts on our business model and reputation; and the fragility of the environment in which we operate;
8. the RMP does not address or accommodate the comments of the PAC both in terms of the size and scope of mining operations.
9. the RMP ignores the impacts on Darley Woodlands and Coolmore and the detrimental impact this mine would have on the future viability of our operations;
10. the RMP fails to assess environmental impacts (particularly noise, blasting, visual, water, final landform and air quality) and fails to take into account worst case scenarios.

The RMP demonstrably fails to respond to the PAC’s comments concerning future application for a much smaller mine. The risks to our future viability, the employment of our people, our environment and the health of our community remain as per the PAC’s findings.

Instead, the RMP merely reinforces the fact that the proposed Drayton South mine poses unacceptable risks to our air and water quality, to the scenic values of our landscape, and to our studs: these are risks which cannot be mitigated no matter how much one repeatedly tinkers with mine plans. It is clearly not technically or financially feasible for this mine to be constructed in a manner suggested by the PAC.

We are concerned that if any form of approval is given to a mine of the kind proposed in the RMP, because of what Anglo American has itself said so often, it will need to seek amendments to expand that smaller mine in the future in order to make it, on its own terms. “economically viable”.

The Minister (or her delegate) should not allow any form of “salami” development where a large and environmentally destructive project is sliced up over time and then allowed to be reconstructed in a series of future mine expansion applications.

4. ECONOMIC ASSESSMENT - NET ECONOMIC LOSS TO NSW

4.1 [Previous Submissions](#)

In our previous submissions to the Department and the Planning Assessment Commission (listed in Annex 1) we presented expert economic advice on the importance of the Darley and Coolmore studs to the Hunter Valley's equine critical industry cluster and outlined our concerns regarding the economic deficiencies of Anglo American's proposal for a new open cut coal mine at Drayton South.

Darley and Coolmore are Australia's largest thoroughbred breeders in scale and market size (including 40% of estimated income from stallion fees; 40% of mares covered in the Hunter Valley; 40% of foals produced in the Hunter Valley).

The Darley and Coolmore studs constitute the epicenter of Australia's and NSW's thoroughbred breeding industry. A fact that is confirmed by the NSW Department of Trade and Investment in its document Drayton South Coal Project – PAC Review and Gateway Panel Advice *"the Coolmore and Woodlands (Darley) thoroughbred stud enterprises are pivotal (core businesses) to the sustainability of the Upper Hunter Equine Critical Industry Cluster and should be protected."*^{xlii}

If this mine is approved, Darley will take all appropriate steps to protect its commercial interests. If Darley and Coolmore relocate interstate, our clients will follow, with detrimental consequent effects to the concentration of interdependent broodmare and agistment farms and other equine support industries located in the Hunter Valley.

In their analysis of Anglo American's economic report (prepared by Gillespie Economics) Marsden Jacob found that economic assessment deficient in that it:

- Used unrealistic and artificially elevated coal prices which artificially elevated the economic benefits of the Drayton South Project;
- Failed to address the Director General's requirements by assuming that open cut coal mining and thoroughbred breeding studs are compatible operations and thus falsely assumed that Coolmore Australia and Darley Australia will not be impacted;
- Did not comply with Government guidelines.

Marsden Jacob's economic modelling revealed that:

- When a realistic coal price of \$90 per metric tonne is used the proposed mine never reaches break even point;
- The Drayton South Project would result in a net economic loss to NSW of \$457m when a realistic thermal coal price is used and when the impacts on Coolmore and Darley are taken into account;
- The Project would place 640 jobs in our industry at risk and fragment the Hunter's equine critical cluster;
- The Project would strip \$120m per annum from the local economy.^{xliii}

A copy of Marsden Jacob's report is appended to this submission.

4.2 [Planning Assessment Commission Report](#)

The Planning Assessment Commission agreed "that the studs are highly important to the equine Critical Industry Cluster and consequently to the broader region, **and should be protected from the impacts of mining.**"^{xliiv} Notably, the PAC expressed this conclusion in terms of "mining" per se and not merely the project application before it.

In addition, the PAC recognised the importance of economic diversity to regional economies and made the following finding:

*"...the Commission considers that there is value in maintaining a wide range of industries within a diversified economy. The Commission notes that **this one mine** has the potential to severely impact on the studs, putting the equine industry at risk."*^{xliiv}

Despite the abundance of literature on the operation of CICs, the state and national importance of the equine CIC (outlined in the Upper Hunter Strategic Regional Land Use Policy), expert advisers to the PAC found that the Proponent's EA "fails to adequately describe the CIC or the role of Coolmore and Woodlands in it" "inexplicably concludes no economic or socio-economic impact on either stud or the CIC."^{xliiv}

The PAC's expert advisers outlined in their report the nature, value and organization of critical industry clusters. They reported that "CICs have existed for centuries as geographic concentrations, particularly where agricultural activities coalesce around a natural resource and attract complimentary activities seeking strategic socio-economic benefit." "CICs present an alternate way of organizing the value chain ..." Fundamentally, CICs are complex socio-economic systems. CICs have common

components: (i) core businesses or central actors; (ii) support businesses or actors; (iii) soft infrastructure; and (iv) hard infrastructure.^{xlviii}

In their findings, the PAC's advisers stated that *"there is enough consistent and well-informed argument to establish reasonable doubt about many aspects of the potential impacts on Coolmore and Woodlands, and the CIC, put forward in the Project's Environmental Assessment."*^{xlviii}

They also found that *"Coolmore and Woodlands (as Darley Australia and operated in conjunction with Kelvinside stallion stud) horse studs are the most important of all core businesses with the CIC. These studs are central to the functioning of the cluster."* *"Coolmore and Woodlands horse studs should be provided absolute protection from impacts of open-cut coal mining as proposed by the Project in order to preserve the sustainability of the CIC."*^{xlix}

Further they found that *"Project approval will likely trigger the withdrawal of Coolmore and Woodlands horse studs from the CIC because the potential impacts are considered unacceptable by these businesses."* *"If Coolmore and Woodlands horse studs exit the cluster, this will cause decline and possible demise of the CIC."*^l and *"the revival of the CIC should be considered unlikely because:*

- *the perceived and real issues that caused the decline will remain, deterring others from assuming the vacant role within the CIC; and*
- *cluster critical mass is lost."*^{li}

The PAC's expert advice and conclusions are soundly and rationally founded on independent, third party, probative research. The PAC's recommendations - that the Darley and Coolmore studs should be afforded the highest levels of protection and that this mine should not proceed - should be endorsed and reflected in a refusal of any approval for a mine in this precinct.

4.3 [Anglo American Justification Report](#)

Marsden Jacob was commissioned to evaluate Anglo American's Justification Report. In reviewing this report, Marsden Jacob found that the Anglo American Justification report:

- Demonstrated Anglo American's fundamental lack of understanding of the Darley Australia and Coolmore Australia business models;
- Again failed to address fundamental issues with the economic analysis that underpins the reported present value outcomes.

The findings of this review reinforced the conclusions reached by Marsden Jacob in their earlier review. Further Marsden Jacob found that the Gillespie economic assessment is deficient as the analysis:

- Uses an implausible coal price sensitivity test scenario;
- Overstates the benefits by including benefits that have no relevance to this project case;
- Appears to be biased in favour of the proposed mine development.

Based on our expert's findings on Anglo American's Justification Report we note that Gillespie Economics (2012) stated that the assumed a thermal coal price is an average of AUD\$118 per metric tonne. In its Supplementary Submission (2013) Anglo American stated that the price of thermal coal from the Project is assumed to ramp up from AUD \$107 per metric tonne in 2015 to AUD \$120 per metric tonne in 2022 and then remain constant over time. We note that the price per tonne is a price adopted by Gillespie Economics at the instruction of the Proponent. It is not justified and does not correspond to any credible international forecasts that indicate that thermal coal prices are declining and are well below the values used by Gillespie Economics in other analyses of coal projects in the region.

The economic assessment of the proposed Drayton South coal mine is highly sensitive to Anglo American's assumed thermal coal price path which is far higher than all of the international forecasts and well above recent market prices reported by the IndexMundi and Anglo American.

A recent report undertaken by the University of Oxford entitled *"Stranded Down Under? Environment-related factors changing China's demand for coal and what this means for Australian coal assets"*^{lii} concluded that to minimize the risk of stranded assets companies and Governments should *"further interrogate the coal price assumptions underpinning investment cases"*. It further noted that *"Australian state governments would be adversely affected financially by projects being abandoned or mothballed – less production will reduce royalty payments. The impact of this can be reduced through diversification."*

Marsden Jacob's economic expert's modelling of this project continues to reveal that the proposed Drayton South mine would:

- never reach an economic break event point when a more credible coal price of \$90 per mt is used;
- deliver a net economic loss to NSW of \$89m when a coal price of \$90 per mt is used;

- result in a net economic loss to NSW of \$457m when the impacts on studs are included;
- place 640 sustainable jobs at risk in the Hunter Valley;
- strip over \$120m per annum from the local regional economy;
- fragment the Hunter Valley's critical industry cluster;
- destabilize the concentration of interconnected broodmare farms and equine support industries in the Hunter Valley;
- negatively impact NSW's world famous breeding and racing reputation.

While Marsden Jacob assessment focused on the key deficiencies presented by Anglo American's thermal coal price assumptions and failure to factor in the impacts on the studs, Marsden Jacob make the notable point that other potential deficiencies (including the valuation of visual amenity, water quality, air quality, health, transport and water management impacts) could further increase the net economic loss to the NSW economy.

It is important to note that image, client perception, visual presentation and reputation are fundamental, critical components of all premium equine stud's business model. This is consistent with international best practice as is evidenced worldwide in both Coolmore and Darley, and other leading studs in Kentucky and Newmarket. This international best practice model is incompatible with mining operations, particularly open cut coal mining, located within 500 metres to 1 km from our boundary.

We have previously publicly stated that should the Drayton South project be approved in such close proximity to our operations it will adversely impact the productivity, investment attractiveness and viability of our studs and the entire thoroughbred breeding and support industries concentrated in the Hunter Valley. It will force us to consider all options to protect our interests, including reconsidering our commitment to our operations in NSW.

Economic Diversification is critical to regional economic strength. Our economic experts have confirmed that a contraction in the size of the thoroughbred industry represents a critical risk to the residents and businesses in the Upper Hunter Valley as it will reduce economic diversity. This is underscored by:

- recent analysis by the Regional Australia Institute which highlights the critical importance of economic diversification in regional economies and their vulnerability to shocks outside their control;
- recent decisions taken by mining companies in Australia, including in the Hunter, to withdraw operations due to the strength of the Australian dollar, falling thermal coal prices and high domestic costs.

Marsden Jacob also found that a contraction in the size of the thoroughbred industry represents a critical risk to the residents and businesses in the Upper Hunter Valley as it will reduce the region's economic diversity. Without economic diversification regional economies are highly vulnerable to shocks that are outside their control.

4.4 [Retracted Mine Plan](#)

Marsden Jacob's assessment of Anglo American's RMP has found that the economic assessment of the new Drayton South Open Cut Coal Mine remains fundamentally deficient and misleading because the:

- economic assessment does not conform with Recommendation 3 of the PAC Review Report;
- economic assessment does not comply with NSW Government Guidelines;
- coal price assumptions remain unspecified, unjustified and unrealistically high;
- economic assessment continues to over-state the benefits and under-estimate the costs; and
- economic assessment ignores the impact of the Project on Darley Australia and Coolmore Australia and our critical contribution to the regional and NSW economies.

Marsden Jacob also found that, perversely, despite the reduction in coal extraction proposed by the RMP, the present value outcome estimated by Gillespie Economics for NSW increases from \$320m to \$333m. These results are counter-intuitive and point to either analytical error or bias.

Throughout all their reports, the EA, the PPR, the Justification Report and the RMP Anglo American has systematically ignored the critical contribution Darley and Coolmore make to the regional and NSW state economy and has failed to acknowledge and assess the impact of this mine on neighbouring world scale thoroughbred studs and the consequent impacts on the Hunter Valley's thoroughbred breeding industry.

Despite the PAC's findings, and contrary to the PAC's recommendations, Anglo American continues to neglect any analysis on the significant impact this one mine will have on Australia's two international scale studs the 350 people who live, work and raise their families on those studs, and the remainder of the industry dependent on these studs.

It has categorically failed "to demonstrate that its impacts will not affect the viability of the Coolmore and Woodlands studs".

The analysis undertaken by our economic experts reveals the:

- Anglo American analysis does not adequately detail the assumptions that underpin the analysis (a systematic failure to transparently report and enable independent analysis)
- volume of coal being extracted falls significantly, but the economic benefit to NSW inexplicably increases;
- reported thermal coal price (approximately \$115 per mt) is meaningless because the price path is not specified and considerably higher than international and domestic forecasts by leading authorities; and
- analysis fails to recognise that if Darley and Coolmore were forced to relocate interstate the net economic cost the NSW of \$457m.

We, and our economic experts remain steadfastly of the view that the new Open Cut Drayton South mine poses a significant risk to the regional and NSW economy, results in a net economic loss to NSW, jeopardizes Australia's premier thoroughbred studs and entire equine cluster in the Hunter Valley.

This one mine is in the wrong location, is not economically viable and is not in the public interest.

5. AIR QUALITY

5.1 Planning Assessment Commission Report

The Planning Assessment Commission was “*not convinced that the air quality impacts would be acceptable, particularly given the latest modeling predictions do not appear to represent the worst case scenario*”.^{liii} In its report it also found:

- “Dust control would be a significant challenge as the mine plan includes four pits and a large surface area would be exposed for much of the 27 year mine life.”^{liv}
- “The air quality impacts of the project are not considered acceptable due to the combined concerns about the additional amenity and health impacts to residents living on the studs, and the reputational damage that may be caused with the deterioration of the industry.”^{lv}

5.2 Retracted Mine Plan

Advitech Pty Ltd was engaged to review the air quality impact assessment lodged by Hansen Bailey that accompanied Anglo American’s Retracted Mine Plan (RMP) for Drayton South. Advitech’s analysis found that:

- the RMP is not consistent with the PAC’s December 2013 recommendation;
- critical review of the RMP is hampered by a lack of quantitative data which would allow verification of air quality claims;
- the Hansen Bailey report is based on the premise that since the mine is “retracted” or “limited” in size spatially, air impacts will be less than previously modeled. This is not necessarily the case:
 - the additional impacts of the proposed operation of the dragline which was previously not an inclusion in the Redbank mining area, have not been quantified.
 - the proposed dragline may result in dust emissions released at an elevated height and therefore raise the potential for greater spatial dispersion of dust off-site.
- mine separation distances presented in Figure 2 of the RMP do not appear to be a representation of the closest linear distance from Woodlands stud to the proposed nearest mining area (Advitech’s review finds that Figure 2 would present the Blakefield mining area to be of closer proximity to Darley Woodlands); and
- The RMP states that there will still be off-site exceedences in predicted PM₁₀ 24 hour dust.

Further, Advitech’s expert analysis of the RMP finds that:

- the Proponent has continually failed to interrogate the Jerrys Plains BOM weather station to compare wind roses or other meteorological statistics and has not justified why 2005 is the most representative year for air dispersion modelling. This matter remains unaddressed in the RMP.
- supportive air dispersion modelling contour plots showing revised dust concentration contours have not been presented to allow comparison between previous assessments and the proposed RMP;
- there is no disclosure of the soil moisture and silt measurement range of the SKM peer review;
- there is no explanation of the increase in PM₁₀ emissions associated with updated silt and moisture values;
- previous concerns - that cumulative air impacts have been underestimated which could consequently result in fewer dust exceedence events assumed than would otherwise be the case - are not addressed;
- dust deposition rates generally increase with each monitoring year. The Proponent has avoided addressing this matter despite Charts D9 to D12 in the RMP showing an increasing linear trend with time;
- many other critical air quality concerns have not been addressed or justified and no comments have been made in the RMP.

Air Quality modelling and assessment continues to lack transparency and fails to address fundamental concerns raised by the PAC. The air quality impacts of the Drayton South mine remain unacceptable and not based on worst case scenarios. Anglo American’s RMP does not address the PAC’s significant concerns and recommendations on this matter.

6. SURFACE AND GROUND WATER

6.1 Planning Assessment Commission Report

Both the Planning Assessment Commission and the Gateway Panel raised serious concerns about the impact of the project on surface and groundwater systems and long-term salinity increases in the Hunter River.

The PAC noted concerns with respect to long term water impacts, such as those on groundwater and the ultimate water balance, connectivity and water quality of the final void and agreed that these impacts would need to be carefully considered.^{”lvi}

In its report the Gateway Panel stated that “surface area disturbance by the Project will have significant impacts on the adjoining Equine CIC land, Coolmore and Woodlands in particular, and deleterious flow-on consequences for the Equine CIC.”^{”lvii} It also raised significant and specific concerns on the impact of the Project on water systems, including:

- “concerns about the potential long-term salinity increases in the Hunter River (300+ years)”^{”lviii};
- “the construction of an open cut mine at the proposed location will cause impacts on both “highly productive’ and “less productive” groundwater systems (aquifers) which will occur both during and post mining activities”^{”lix};
- “concern that the salinity of the groundwater discharging from the final void may be considerably higher than predicted in the PPR”^{”lx};
 - “The Panel considers that the predicted salinities for the final void are likely too low. If the final void lake is more saline than predicted by the PPR then the salt load into the surrounding aquifers, Hunter River and saltwater Creek will also be higher than indicated in the PPR. The report does not provide the data required to assess the potential scale of this effect.”^{”lxi}
 - “An IESC concern is that the Hunter River should not be further impacted by saline discharges. ... The Panel has the same concern, as low salinity clean water is a key requirement for both Coolmore and Darley (Woodlands) horse studs.”^{”lxii}

6.2 Anglo American “Justification Report”

Darley Australia, along with Coolmore Australia, commissioned OD Hydrology to examine and report on the Anglo American Justification Report on the matters of surface and groundwater assessments, including long-term final void storage and salinity behaviour.

OD Hydrology found that, apart from a further round of modelling undertaken for the final void, **which yields long-term salinity estimates some 500% higher than reported in the Preferred Project Report**, there was no additional information or evidence within the Justification report in response to concerns previously raised in regards to surface water and groundwater assessment.

OD Hydrology found that:

- No information to date, including the EA, PPR and Justification Report has adequately addressed the issues raised regarding inadequacies in surface and ground water assessment, including the cumulative impacts of the Project;
- No response has been made in respect to the final void assessment relating to the concern of the subjective and unsupported assumptions and apparent inflow/outflow imbalance adopted within long-term final void water and salt balance modelling;
- Critical assumptions in the final void water and salt balance modelling:
 - do not appear to be based in science nor representative of real-world surface or ground water behaviours;
 - are wholly subjective and are not consistent with, or supported by, any reported water movement behaviours between the final void and spoil;
 - imply an underlying imbalance in the assumed final void behaviour.
- On the matter of compliance with the Aquifer Interference Policy, the highly simplified calculations do not provide a meaningful assessment of the likely salinity impacts on the connected waters;
- The reported outcomes from the latest set of modelling:
 - Represents a significant and fundamental change in the predicted long-term final void behaviour with predicted long-term salinity increasing by 500%

- Estimate an ongoing and effectively continuous contribution of some 1,000 tonnes of salt per annum from the final void to the Hunter River over the long-term (> 1,000 years)
- Proposed an ongoing, uncontrolled discharge that would impact most significantly upon low flow salinity conditions within the Hunter River which the Hunter River salinity Trading Scheme was established to improve and protect.

The final void represents a potentially long-term legacy issue for the State and the communities and industries that rely on the Hunter River. Importantly OD Hydrology concluded that the final void/spill approach proposed by Anglo American for the Drayton South mine, **would be uncontrolled, occur over the very long term and be impractical, if not impossible to mitigate once realized.**

The ongoing changes in modelling assumptions and magnitude of difference in each set of results at this advanced stage of Project assessment indicate **significant uncertainty around the predicted long-term final void behaviour, with consequent significant uncertainty regarding the conclusions reached with respect to real world impacts.**

6.3 Retracted Mine Plan

OD Hydrology also assessed Drayton South's RMP proposal, noting the PAC's statement that *"Any new mine plan for the site would need to be further assessed ... and carefully considered ... particularly in relation to the long term water impacts and final landform"*.

OD Hydrology found that the RMP is qualitative only and generally refers to outcomes of previous assessment undertaken for now outdated mine plans. There is no additional assessment of the issues referred to in the recommendations of the PAC.

Information provided by Australasian Groundwater and Environmental Consultants (AGE 2014) and WM Water and Environment Pty Ltd (WRM 2014) provided qualitative comment only on groundwater and surface water conditions during and post-mining.

OD Hydrology's review of the information provided by AGE and WRM found **no additional modelling assessment had been undertaken. No surface or groundwater assessment or information has been provided in the RMP which could be considered to meet with PAC recommendation of further assessment and careful consideration of the impacts of any new mine plan.**

In this report OD Hydrology reinforced previously reported concerns and criticisms including:

- Critical assumptions in the final void water and salt balance modelling:
 - did not appear to be based in science and were not representative of real-world surface or groundwater behaviour;
 - are wholly subjective and are not consistent with or supported by any reported water movement behaviour between the final void and spill;
 - imply an underlying imbalance in the assumed final void behaviour.
- Lack of compliance with the Aquifer Interference Policy:
 - highly simplified and limited calculations do not provide meaningful assessment of likely salinity impacts on connected waters;
 - reported outcomes show a significant and fundamental change in predicted long-term final void behaviour – with salinity increases 500% higher than previously reported;
 - ongoing, continuous contribution of some 1,000 tonnes of salt per annum from the final void to the Hunter River over the long term (> 1,000 years)
 - ongoing, uncontrolled discharge that would impact most significantly upon low flow salinity conditions within the Hunter River – contrary to the intentions and aims of the HRSTS;
 - any impacts would be uncontrolled, occur over the very long-term and be impractical, if not impossible to mitigate once realized.
- Misleading and Invalid Surface Water Assessment
 - The probabilistic values reported are not statistically valid and the forms of analyses are potentially misleading;
 - Invalid statistical interpretation means that the design of the water management system is much more likely to be exceeded (by 25% rather than 1%) than recognised or anticipated by the Proponent;
 - The RMP represents a significant change in the overall site water balance **that has been recognised superficially but not meaningfully assessed.**

7. NON-ABORIGINAL HERITAGE VALUES

7.1 Planning Assessment Commission Report

In its report the Planning Assessment Commission found that the “(Coolmore and Darley) properties have a **unique combination of scenic, historic and agricultural qualities which lend themselves to the equine and tourism industries but could be argued to have a significant heritage value of their own ... this combination of attributes is extremely difficult, if not impossible, to find elsewhere.**”^{lxiii}

Dr Richard Lamb, expert visual and landscape adviser to the Commission, found that the EA:

“... **did not assess the potential for the area occupied by the studs, in particular to be identified as significant rural cultural landscape in its own right.** It did not consider the likely impacts on the tangible and intangible heritage values associated with the horse breeding and later thoroughbred breeding industry and the values of the landscape it is associated with.”^{lxiv}

The Commission found “**that the studs have significant cultural landscape value tied to the existing land use activities that would be threatened by the proposed mining operations.** Obvious threats derive from short-term amenity impacts, but the greater and more significant risk is that thoroughbred breeding operations on the site would be discontinued. Without the continuance of this land use, it seems likely that the evolution of the cultural landscape would lose its significance, just as the continued use and maintenance of the built heritage items would no longer be assured.” “**The Commission considered that the landscape of the studs and their surrounds warrants conservation and protection.**”^{lxv}

7.2 Anglo American “Justification Report”

GML Heritage was commissioned to review advice to Anglo American by AECOM with regard to non-Aboriginal Heritage included in Appendix 4 of the Drayton South Justification Report . This report by GML supplements the earlier report provided by GML in October 2013 which concluded that Anglo American’s advisers AECOM did not adequately assess the potential impacts on the historic and cultural landscape values associated with settlement by Europeans and its pastoral history.

In its review of the AECOM advice to Anglo American contained in the Justification Report, GML Heritage confirmed that:

- The Director General’s Requirement for non-Aboriginal heritage have not been comprehensively or adequately addressed;
- **Historic properties on the Darley and Coolmore properties are already statutory listed heritage items;**
- Anglo American’s Justification Report **fails to recognise that the local and regional statutory planning controls provide for conservation of listed heritage items and require the assessment of impacts on the significance of the listed heritage item and the broader setting;**
- Provisions in applicable local and regional statutory planning controls as they relate to listed heritage items have not been adequately considered or addressed by Anglo- American to date;
- **Muswellbrook-Jerrys Plains is listed on the Register of the National Trust (NSW) as a Landscape Conservation area – a matter that has been entirely overlooked by Anglo American and its experts;**
- **Anglo’s experts agree with GML that the historic properties are of State significance and that the cultural landscape is potentially of National significance;**
- **AECOM, GML and Dr Richard Lamb are in agreement regarding the potential cultural heritage value of the Darley and Coolmore properties;**
 - Despite this the Anglo American has repeatedly overlooked the requirement for a comprehensive assessment of heritage values and the potential impacts on cultural heritage significance.
- Anglo American’s non-Aboriginal heritage assessments have **repeatedly overlooked the requirement for a comprehensive assessment of heritage values. This is, and remains, a significant omission;**
- In the **absence of a comprehensive and adequate heritage assessment** of the historic cultural landscape associated with settlement, pastoralism and the thoroughbred industry, this **fails to recognise and address the potential adverse and enduring impacts on the heritage values of Darley and Coolmore;**

- A number of underlying and potentially adverse impacts on other attributes of cultural significance and heritage values have not been adequately or comprehensively considered – this is a significant oversight in the impact assessment process for non-Aboriginal heritage;
- Without a comprehensive and adequate assessment of the heritage significance and values of cultural landscapes associated with Darley and Coolmore the extent of heritage impacts cannot be stated with any certainty.

GML notes that some additional non-Aboriginal heritage issues raised by the PAC review have been considered in the Justification report, yet the fact remains that an adequate and comprehensive non-Aboriginal heritage assessment that considers the cultural landscape values of both the area proposed to be impacted and the listed heritage items in the vicinity is still outstanding.

It is noteworthy that despite the findings of Anglo American's own heritage consultants and relevant supporting information being readily available in the public domain, the key requirement of the DGR for non-Aboriginal heritage has not been comprehensively or adequately addressed by Anglo American.

8. VISUAL IMPACTS

8.1 [Planning Assessment Commission Report](#)

In its report the Planning Assessment Commission found that the mine would have significant impacts on the visual amenity, landscape and image association with Coolmore and Woodlands studs, and their surrounds.^{”lxvi} “Any signs of mining, whether causing real or perceived impact, could create questions and doubt in the minds of buyers, investors and other industry representatives.”^{”lxvii}

Dr Richard Lamb, expert visual and landscape adviser to the Commission, found that:

- “The landscapes of the studs are of special intrinsic scenic quality and character, historically significant and of importance to the story of development of the Upper Hunter Valley, the theme of agriculture and rural industry and the thoroughbred racing industry. They are of special and possibly unique sensitivity to impacts on the scenic values of their settings and are highly vulnerable to direct and indirect visual impacts.”^{”lxviii}
- “The bund has little value to the public in protecting it from visual impacts and it has negative impacts on views and the imagery critical to the operations of Coolmore. The bund has a negative impact on the visual aspects of that image and is associated with direct and indirect visual impacts ...” “There are risks that the bund may not be rehabilitated to the degree envisaged in the VIA (visual impact assessment) leading to negative impacts on the character, scenic quality and the cultural heritage values of the rural setting that is critical to the imagery of the studs.”^{”lxix}

The Gateway Panel reinforced these conclusions.

- “The Panel finds the potential impacts of the proposed mine on the Critical Industry Clusters are significant. These potential impacts include those from dust, noise, vibration and blast overpressure and most importantly, loss of landscape values through diminished visual amenity. Loss of landscape values is considered the most material potential impact, as landscape values underpin the core businesses of both Critical Industry Clusters, eg the nearby Coolmore and Woodlands (Darley) thoroughbred horse studs and the Arrowfield Estate vineyard and winery.”^{”lxx}
- “The proposed mine will cause significant deterioration of landscape values which underpin the Coolmore and Woodlands (Darley) stud businesses. As this threatens the viability of these two businesses in the Upper Hunter region, then the sustainability of the Equine CIC itself is threatened by the proposed mine.”

8.2 [Anglo American “Justification Report”](#)

Michael Wright was commissioned to review the scenic and visual impacts contained in Anglo American’s “Justification Report”.

Mr Wright found that:

- Anglo American has **consistently failed to recognise the very high significance of the landscape values**, and in particular Darley, Coolmore’s and the Thoroughbred Breeding industry importance to NSW and Australia;
- **open cut coal mining is one of the most incompatible land uses for the neighbouring thoroughbred studs** – particularly with respect to their image and reputation and the ordered landscape that is fundamental to their business models and international best practice;
- **open cut coal mining is the antithesis of the thoroughbred breeding studs** as it creates a landscape that has been subjected to the most destructive and most unattractive man made land uses in the Hunter Valley;
- in addition to overburden emplacement activities, **the risks of dust and toxic gases emanating from blasts is both very high and frequent**. Coupled with noise and vibration, this will create **negative impacts for the stud’s clients and the 350 staff and families** that reside on the stud properties;
- the **movement of mining vehicles, heavy machinery and the blockage of roads will be a constant and stark reminder of the mining activities** in such close proximity to these international scale studs which will be **deleterious to their business viability**;
- of greater concern, events such as the Hazelwood Coal mine fire in Morwell, Victoria, would create major multi-dimensional problems for the studs operation, reputation and ultimately their business;
- **Anglo American’s non-compliance record**, as documented by the EPA, is of great concern to the Thoroughbred Industry, and particularly the Darley and Coolmore studs which are in such close proximity (within 500m – 1km) to the proposed Drayton South mine;
- the proposed **proximity of the Drayton South mine would be a major and significant impact on the scenic and visual integrity of the Darley and Coolmore properties**;

- with respect to Trigg Hill, the **Anglo American proposal systematically fails to acknowledge the panoramic views over the Woodlands property and the surrounding district and its importance of this scenic value to the overall integrity of the Woodlands operation;**
- **Anglo American documentation and photomontages depict less than half of the actual extent of the mine that would be potentially visible.** These oversights in Anglo American's assessment **raise serious questions about the credibility of the assessment of the visual impacts and the effectiveness of proposed mitigation measures;**
- **proposed screen tree plantings along the mine site** boundary and immediately adjacent to the Golden Highway intended to reduce visual impacts will not remove the impacts entirely, would be **significant contrast** and change to the current character and would **produce a negative impact for all travelling along the Highway;**
- **it is questionable whether Anglo American can maintain a 30m wide band of trees and shrubs for over 4km along the highway for the life of the mine.** This concern is reinforced by the ineffectiveness of existing tree screening and Anglo American's part performance on the rehabilitation of parts of the Drayton mine which the Department of Planning has considered inadequate;
- **Anglo American has failed to acknowledge the existence of the National Trust listed Muswellbrook-Jerrys Plains Landscape Conservation area which incorporates part of the Drayton South open cut mine:**
 - almost **half of the Total Project Area (47%) lies within the Landscape Conservation Area;**
 - approximately **23% of the proposed Drayton South mining and overburden emplacement areas are covered by the Landscape Conservation Area;**
 - **almost all of Darley and Coolmore are included in the Landscape Conservation Area confirming the importance of the scenic and cultural values of these landscapes.**

In his report Mr Wright confirms that the Thoroughbred Breeding Industry is a highly competitive market where many aspects of the business contribute to a stud's success. Landscape is one of the fundamental aspects of the business model as it not only presents a highly scenic setting for these investments but also illustrates the successful implementation of agronomy best practice. Landscape is fundamental to the image, reputation, brand and business success of these studs and a fundamental factor in all international scale studs throughout the world.

In his report, Mr Wright confirms that all of the world's thoroughbred breeding areas project similar combinations of scenic imagery in their physical environments. In this respect the Gillespie Economics report has totally misrepresented the concept of co-existence when comparing mining and thoroughbred operations in the Hunter Valley to those of Kentucky in the USA.

Mr Wright's research reveals that in Kentucky, apart from identifying and protecting thoroughbred breeding operations, the closest concentration of coal mines to the nearest county with Thoroughbred studs is in the **range of 70km to 135km.**

The suggestion made by Anglo American and its experts that we can co-exist is fallacious. No where in the world does a thoroughbred breeding industry of the status and importance of Australia's Hunter Valley operate with coal mines within 500m to 1km of their operations.

International experience, our industry experience and our experts concur with the conclusions reached by the PAC and its advisers that Thoroughbred horse studs and open cut mining **are incompatible land uses that cannot coexist in close proximity to one another.**

8.3 Retracted Mine Plan In considering Anglo American's RMP it is important to recall the advice of the PAC's experts and why the PAC recommended that the Drayton South mine not be approved.

The PAC concluded that the Drayton South open cut mine should not proceed at the planned scale in this location for two reasons^{lxxi}:

1. An impact on either of the Coolmore or Darley Woodlands studs has the real potential to cause the studs to leave, which would affect the cluster as a whole.
2. The Commission considers that the landscape of the studs **and their surrounds** (emphasis added) warrants conservation and protection. Open cut mining in this location threatens the significance of the **surrounding landscape.**

The PAC recognised that the "visual presentation, perception and image of the property is highly significant."^{lxxii}

The PAC's expert advisers, in his advice to the Commission concluded^{lxxiii}

“...the combination of physical, aesthetic, cultural and historical values that characterizes the studs, along with the nature of the rural industry that underpins them, gives rise to a heightened level of sensitivity to visual impacts of all three classes identified above ie **Direct, indirect and impacts on image** ..”

“A critical consideration has been missed concerning the importance of the impacts on the **dynamic views** (emphasis added) and the fragility of the image of the studs in the context of features that contrast with, appear out of context with, or clash with aspects of that image. The image is not just what is visible at any given point in time or from a single or range of locations ...”

“The landscapes of the studs are of special intrinsic scenic quality and character, historically, significant and of importance to the story of the development of the Upper Hunter Valley, the theme of agriculture and rural industry and the thoroughbred racing industry. They are of special and possibly unique sensitivity to impacts on the scenic values of their settings and are **highly vulnerable to direct and indirect visual impacts.**” (Emphasis added)

“... the visible presence if the mine in such close proximity has the potential to tarnish the reputational image that has been so carefully developed on **and around the properties**^{lxxiv} (emphasis added).

The landscape in which we operate (as a complete package of physical, aesthetic, cultural and historic values) is consistent with world's best practice, fundamental to our business model, our future viability and to our decisions to remain in the Hunter Valley. This is recognized by the PAC, and reflected in its recommendations.

The incompatibility of a mine 500m from our boundary remains a significant concern for our future viability, particularly when we note the PAC's adviser's conclusion that “there is no practical way to mitigate the impacts on the view since the operations proceed generally from north to south advancing toward Darley Woodlands over many years, with the rehabilitation following behind, there will be visual exposure of the mining through the operational life of the Redbank and Blakefield pits.”^{lxxv}

In his report on the RMP Mr Wright finds that:

- All issues, inadequacies and concerns raised in Mr Wright's review of Anglo American's Justification Report, remain with the exception of those relating to the Houston Pit and Overburden Bund;
- Anglo American has consistently failed to recognise the extremely high levels of visual sensitivity of the studs to open cut mining activity;
- Anglo American has failed to fully identify and assess the full range of visual impacts which are a consequence of this project;
- Anglo American has failed to mention and assess the impacts on the wider landscape and the vital importance of these wider landscapes to the presentation, image and business viability of these two studs;
- Anglo American continue to fail to recognise the extremely high levels of visual sensitivity of the studs to open cut mining activity, the most visually impacting land use in the Hunter Valley;
- The closest mining operations of the proposed Drayton South mine remain less than 1km of the stud's boundaries and main access road, the Golden Highway;
- Anglo American's claim that mining is not visible from the studs areas of operation is not correct and not supported by any evidence;
- Inconsistencies in the calculations of Anglo American's calculations of the proposed mining activity from our studs, the lack of photomontages, Anglo American's failure to produce a Visual Catchment Area map, and Anglo's presentation of only half the visual impact of their mining operations on our property, provides us with no confidence that the full extent of the visual impacts of this mine and its associated mining activity have been appropriately presented or assessed;
- Claims that potential noise, dust and blasting impacts have been further reduced by the retracted mine plan are not based on evidence (and we note are contrary to our experts advice including Advitech);
- The Redbank pit has been reduced by as little as 7 per cent;
- The presence of mining will still negatively affect the image of the studs;
- Anglo American has failed to prepare appropriate documentation with respect to the visual impacts of mining activity;
- Anglo American has dismissed the serious impact this mine will have on visual amenity, our resident employees, our livestock and our business and in so doing has also failed to comply with the PAC's recommendations.

9. NOISE, LIGHT AND BLASTING

9.1 Planning Assessment Commission Report

In its report, the PAC noted that *“lighting from the proposed mine would highlight the proximity of the mine” and that “As lighting impacts have not been quantified it is impossible to know whether the lighting impacts would affect breeding. Nonetheless the risk whether real or perceived has the potential to damage the business of the studs.”*^{lxvii}

The PAC further noted *“ the combined risks to horses and breeding operations from the mine’s noise, blasting, lighting and perhaps even air quality impacts are considered to represent a real concern for the studs and their clients. ... The Commission considers that there is a real risk that if these impacts are unacceptable to Coolmore and Darley and they were to leave this area, there would be significant impacts on the whole Upper Hunter Equine Critical Industry Cluster.”*^{lxviii}

On blasting the PAC noted *“the Proponent has indicated that additional blast events would be required, resulting in up to ten blasts per week (Hansen Bailey 2012). This requirement for 10 blasts per week would not comply with the ANZEC guidelines (1990)”*

In its recommendations for any future mine plan the PAC recommended that *“Any new mine plan for the site would need to be further assessed to ensure visual, blasting, noise and dust impacts could be managed to an acceptable level at the neighbouring stud properties and should take into account worst case scenarios.”*^{lxviii}

9.2 Anglo American Justification Report

Anglo American’s Justification Report retained the 10 blasts per week and continued to ignore the impact these blasts would have on our operations, our bloodstock and on the employees and their families who reside on our property. This is a highly intrusive and unacceptable situation for our business and the community of people who permanently reside on our farm.

We, and our advisers, refute the suggestion that people and livestock would become de-sensitised to blasting, noise and vibration over time. Exposing our people and livestock to ongoing health risks

The concerns the PAC, we, Coolmore and the HTBA raised in our submissions regarding the damaging impacts noise, lighting and blasting would have on our operations, investment and people remains unaddressed by Anglo in this submission.

9.3 Retracted Mine Plan

In its RMP, Anglo states that “blasting is to occur on average 5 days per week and not 10 times a week asserted by the horse studs”^{lxix} For the record, as mentioned above, the horse studs did not assert the 10 blasts per week, this blasting activity was included in Anglo American’s Environmental Assessment as reflected by the PAC in its report. On the RMP we note the admission of Anglo’s advisers Bridges Acoustics that “this review has indicated that the retracted mine plan proposed by AAMC for the Drayton South Project is expected to result in very similar noise levels and blast impacts.”^{lxxx}

Anglo American continues to disregard the serious impacts of blasting, noise and lighting effects on the viability of our operations, our reputation and the impacts they will have on our livestock, people, air quality and visual amenity. Anglo American present a series of assertions regarding the impact of noise, blasting and light intrusions on our operations are not based on evidence and not supported by any scientific assessment or justification. These serious concerns remain and have been reinforced by our expert advisers reports which are appended to this submission.

Anglo American’s record of non-compliance at Drayton North, including airblast overpressure exceedences, lack of noise compliance and noise limit exceedences, odours from spontaneous combustion, dragline operations in areas affected by spontaneous combustion, dust emission exceedences, blast fired exceeding blasting limits and blasts fired outside of time permitted by the licence and failure to undertake appropriate dust monitoring, as recorded in the EPA’s public register of compliance for Drayton North^{lxxi} provide ample evidence that these risks are real. The occurrence of these incidents at the proposed Drayton South mine, in such close proximity to our operations and our community of people and families would present serious risks to the health of our people and livestock and damage our reputation and viability of our business.

These risks cannot be ignored, cannot be managed and are patently unacceptable and could not be tolerated.

Annex 1

PREVIOUS SUBMISSIONS:

Darley Australia has made several submissions with respect to the proposed Drayton South Coal Project “the Project) including:

1. Submission to the Drayton South Environmental Assessment, 18 January 2013;
2. Submission to the Planning Assessment Commission, 3 October 2013;
3. Oral submission to the Planning Assessment Commission hearing on 10 October 2013;
4. Supplementary Submission to the Planning Assessment Commission (appending presentations made to the Planning Assessment Commission by Darley and its experts), 16 October 2013;
5. Joint Supplementary Submission with Coolmore to the Planning Assessment Commission (responding to Anglo American’s Supplementary Submission and appending experts advice) 6 December 2013.

Annex 2

EXPERT REPORTS LODGED AS PART OF THIS SUBMISSION

- A. Marsden Jacob Associates, Response to PAC Merit Review, Review of the Economic Analysis for Drayton South Open-Cut Coal Mine, March 2014
- B. Marsden Jacob Associates, Drayton South Coal Mine – review of the Economic Assessment in the Consequential Environmental Impact Assessment for Retracted Mine Plan, May 2014
- C. Advitech, Review of Retracted Mine Plan, Drayton South Coal Project, May 2014
- D. OD Hydrology, Review of Anglo American Drayton South Coal Project Justification, March 2014
- E. OD Hydrology, review of Anglo American “Drayton South Coal Project, Consequential Environmental Impact Assessment for Retracted Mine Plan”, May 2014
- F. GML Heritage Drayton South Coal Project, Review of Anglo American Justification Report, March 2014
- G. Michael Wright, Landscape Architect, Drayton South Coal Project, Response to Anglo American’s Response to the Scenic and Visual Impact Issues Raised in the Planning Assessment Commission’s Report, March 2014
- H. Michael Wright, Landscape Architect, Drayton South Retracted Mine Plan, May 2014

Annex 3

FOOTNOTES

- ⁱ Darley Submission on Anglo American's Drayton South Environmental Assessment, 18 January 2013
- ⁱⁱ Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 6
- ⁱⁱⁱ NSW Mining & Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, 10 December 2013, p15
- ^{iv} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, piii
- ^v Environmental Planning and Assessment Act 1979, Section 5
- ^{vi} Environmental Planning and Assessment Act 1979, Section 5 (a) (ii)
- ^{vii} Principles of Ecologically Sustainable Development, The Hon Justice Preston
- ^{viii} Principles of Ecologically Sustainable Development, The Hon Justice Preston
- ^{ix} Strategic Regional Land Use Plan Upper Hunter, Premier's Foreword
- ^x The Hon Andrew Stoner, Deputy Premier, Address to Our Land, Our Water, Our Future Rally, 1 May 2012
- ^{xi} Department of Trade and Investment, Drayton South Coal Project – PAC Review and Gateway Panel advice, Mr Mark Paterson, 7 February 2014
- ^{xii} Director General's Requirements, Key Issues, Social & Economic, 3 August 2011
- ^{xiii} Director General's Requirements, Key Issues, Air Quality, 3 August 2011
- ^{xiv} Director General's Requirements, Key Issues, Noise & Blasting, 3 August 2011
- ^{xv} Director General's Requirements, Key Issues, Water, 3 August 2011
- ^{xvi} Director General's Requirements, Key Issues, Heritage, 3 August 2011
- ^{xvii} Director General's Requirements, Key Issues, Visual, 3 August 2011
- ^{xviii} Director General's Requirements, Key Issues, Agricultural Productivity, 3 August 2011
- ^{xix} Director General's Requirements, Key Issues, Agricultural Productivity, 3 August 2011
- ^{xx} Director General's Requirements, Key Issues, Agricultural Productivity, 3 August 2011
- ^{xxi} Supplementary Director-General's Requirements, 30 April 2012
- ^{xxii} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 6
- ^{xxiii} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 6
- ^{xxiv} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 6
- ^{xxv} NSW Mining & Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, 10 December 2013, p15
- ^{xxvi} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 5, rla, richard lamb & associates, Advice to the NSW Planning Assessment Commission, p7
- ^{xxvii} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p27
- ^{xxviii} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, piii
- ^{xxix} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, piii
- ^{xxx} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, piii
- ^{xxxi} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p25
- ^{xxxii} Runge Pincock Minarco, Expert Review of Drayton South Open Cut Coal Project, NSW Department of Planning and Infrastructure, July 2013, Executive Summary, piv
- ^{xxxiii} Runge Pincock Minarco, Expert Review of Drayton South Open Cut Coal Project, NSW Department of Planning and Infrastructure, July 2013, Executive Summary, p20
- ^{xxxiv} Anglo American Coal, PAC Presentation, slide 12
- ^{xxxv} Review of Drayton South Mine Plan Options, Planning Assessment Commission, R A Jennings & Associates, October 2013, p4
- ^{xxxvi} Review of Drayton South Mine Plan Options, Planning Assessment Commission, R A Jennings & Associates, October 2013, p4
- ^{xxxvii} Review of Drayton South Mine Plan Options, Planning Assessment Commission, R A Jennings & Associates, October 2013, p6
- ^{xxxviii} Review of Drayton South Mine Plan Options, Planning Assessment Commission, R A Jennings & Associates, October 2013, p9
- ^{xxxix} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, piii
- ^{xl} Anglo American Drayton South Justification Report, p28 of 40
- ^{xli} Anglo American Drayton South Justification Report, p2
- ^{xlii} NSW Trade and Investment (February 2014) Drayton South Coal Project - PAC Review and Gateway Panel Advice.
- ^{xliii} MarsdenJacob Associates Economic Impact of the proposed Open-cut Coal Mine development on the Hunter Valley Thoroughbred Industry, October 2013
- ^{xliv} Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, pii

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- xliv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p21
- xlvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 6
- xlvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 20
- xlvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 4
- xlvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 4
- i Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 4
- li Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 4, La Tierra, Report to the NSW Planning Assessment Commission, p 34
- lii Stranded Down Under? Environment-related factors changing China's demand for coal and what this means for Australian coal assets, University of Oxford, p 66
- liii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, pii
- liv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p20
- lv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p21
- lvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p18
- lvii Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p15
- lviii Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p15
- lix Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p16
- lx Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p17
- lxi Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p18
- lxii Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p18
- lxiii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p12
- lxiv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 5, rla, richard lamb & associates, Advice to the NSW Planning Assessment Commission, p7
- lxv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p27
- lxvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p17
- lxvii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p15
- lxviii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 5, rla, richard lamb & associates, Advice to the NSW Planning Assessment Commission, p14-15
- lxix Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, Appendix 5, rla, richard lamb & associates, Advice to the NSW Planning Assessment Commission, p16
- lxx Mining and Petroleum Gateway Panel, Drayton South Coal Project Advisory Report, p3
- lxxi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p27
- lxxii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p13
- lxxiii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p17
- lxxiv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p15
- lxxv Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p15
- lxxvi Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p20
- lxxvii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, p21
- lxxviii Planning Assessment Commission Drayton South Coal Project Review Report, December 2013, piii
- lxxix Anglo American, Consequential Environmental Impact Assessment for the Retracted Mine Plan, March 2014, Section 3.3, p13
- lxxx Anglo American, Consequential Environmental Impact Assessment for the Retracted Mine Plan, March 2014, Appendix C, p2
- lxxxi POEO Act Public Register, www.epa.nsw.gov.au