

COMMENTARY ON THE DRAYTON SOUTH RETRACTED MINE PLAN

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Executive Summary

This statement provides responses to statements made in Anglo American's *Consequential Environmental Impact Assessment for Retracted Mine Plan* report dated March 2014, in relation to visual impact issues resulting from the amended Drayton South open cut coal mine proposal. This statement should be read in conjunction with the earlier statement prepared by me (dated March 2014) in response to Anglo American's *Justification* report dated February 2014.

Of the 7 key issues in my previous report responding to Anglo's *Justification* report, 6 of the issues are still completely relevant when read in conjunction with Anglo's *Retracted Mine Plan* report. These issues include Landscape and Cultural Values, Image and Reputation, Proximity to Existing Mines, Visual Impacts from Trig Hill Lookout, Vegetation Screening along the Golden Highway, and Landscape Conservation Area as defined by the National Trust. Only the Houston Pit Bund commentary is not relevant in relation to the *Retracted Mine Plan* report.

Assessment of Visual Impacts

Anglo have again failed to fully identify and assess the full range of visual impacts which are a consequence of this project. The full range of visual impacts defined by Dr Lamb in his report to the PAC (Appendix 5, *Expert Advice on the Visual and Landscape Impacts*, December 2013) are; direct visual impacts, indirect visual impacts, impacts on image and impacts on dynamic views.

Anglo claims that the *Retracted Mine Plan* would remove all remaining direct impacts from the horse studs and reduce the minor indirect visual impacts, and any resultant effect that this may have on the image of the studs. They make no mention and have not assessed the impacts on the dynamic views which Dr Lamb considers to be especially important. Anglo also have failed to mention the impacts on the wider landscape and the vital importance of these wider landscapes on the presentation, image, reputation and business viability of these two studs.

Anglo's claim that mining is now not visible from areas within the studs, is not supported with any evidence of proof such as photomontages, visual catchment mapping or even cross sections. They claim that potential noise, dust and blasting impacts have been further reduced by this retracted mine plan however the two closest pits to Coolmore and Darley, Redbank and Blakefield, are still almost entirely intact. The Redbank Pit has been reduced by as little as 7% based on a calculation using their plan in Figure 3.

Anglo 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. Despite retracting mining activity in two areas, the closest open cut mining operations are still less than 1km from the stud's boundaries and the main access road, the Golden Highway. This close proximity to the open cut mine exposes the studs to significant indirect visual impacts including dust and gas plumes from blasting, dust from the machinery and the exposed open cut and overburden surfaces, as well as night lighting for the 24 hour operation.

Highwall Mining

In addition to the open cut operations, the highwall mining operational boundary is proposed to remain immediately adjacent to the Golden Highway and therefore it will be located as close as 30-50m to Coolmore's boundary. The descriptions of the potential impacts of this form of mining are inadequate and the lack of consultation with the studs on this issue is of great concern to both Coolmore and Darley.

Maximum Resource Recovery

The inclusion of a green boundary line marked as the *Maximum Resource Recovery* on the plan on page 8 of the *Retracted Mine Plan* report, without any explanation, is of considerable concern to the studs as it includes many areas that are highly visible to the studs and the surrounding wider landscape. This plan seems to signal the direction of future applications for extensions to mining activity which would be even closer to the studs and their key access route, the Golden Highway, than the current proposal. Future extensions to the mining operations are a real risk for the studs and is a key issue of concern.

Noise and Blasting

The frequency of blasting as presented by Anglo in the *Retracted Mine Plan* offers no certainty for the studs on this critical issue, as it states that blasting would occur 5 days per week, not 10 times a week as reported by the PAC which was based on information supplied by Hansen Bailey in 2012. It is also unclear whether there would be more than one blast per day on each of the 5 days in the week, now proposed by Anglo. This lack of consistency and a failure to properly consult with the studs on this issue has only created confusion and more concern.

Stud's Proximity to the Mine

Anglo have again failed to accurately present information that is critical to an understanding of the impacts of this mine. Their measurements of the proximity of the mine to the studs is inconsistent, lacking in logic and misleading. Inconsistencies in these calculations continue to occur in Anglo's reports and in turn casts doubt on the assessments of the predicted impacts of the project, and this in turn increases the level of concern that the impacts are not being accurately estimated.

The issue of proximity of this proposed open cut mine to the studs remains a critical issue that has not been addressed in the Retracted Mine Plan report. The existing Drayton mine, along with other mines and power generation operations in the area, are generally more than 10km from the two studs and yet the open cut operations of this proposed mine would come to within 400-700m of the studs and the highwall mining would come to within 30-50m of the Coolmore boundary.

Anglo have failed to comply with the PAC's recommendations by not retracting to the north of the ridgeline marked in yellow in its report (Figure 5, page 25) and therefore based on the PAC's recommendations, the project cannot proceed.

Introduction

This statement provides responses to statements made in Anglo American's *Consequential Environmental Impact Assessment for Retracted Mine Plan* report dated March 2014, in relation to visual impact issues resulting from the amended Drayton South open cut coal mine proposal. This statement supports the earlier statement prepared by me (dated March 2014) in response to Anglo American's *Justification* report dated February 2014. These statements need to be read in conjunction with each other as the commentary in both documents are relevant and pertinent to each other.

Assessment of Visual Impacts

Anglo American states in the *Retracted Mine Plan* report that all *direct* visual impacts are now entirely concealed from the studs behind the existing ridge lines as a result of the retracted mine plan (Section 2.2.1, page 2), and that the additional setbacks would reduce the *minor* indirect ephemeral visual impacts and therefore effects on image (Section 3.1, page 10).

Anglo American have again failed to acknowledge the full range of visual impacts which affect the studs. These impacts are clearly described by Dr Richard Lamb in his report to the PAC which states; 'There are considered to be three kinds of visual impacts that are relevant to this assessment. The first concerns direct visual effects of the proposal (ie. where mining activities such as overburden removal, winning of ROM product, overburden emplacement, construction, rehabilitation, transport of materials, etc. would be visible). The second class of visual effects is indirect (ie. where there is no direct visibility of the mining operations, but there is visual evidence of them). The third class of impacts are impacts on the image of the studs, a significant part of which is based on appearances.' (Appendix 5, Section 8, page 8).

In addition to these visual impacts from fixed locations, Dr Lamb also identifies the importance of including dynamic or moving views in the assessment which 'are experienced not only in moving sequences, which may be repeated regularly, but may also be from experiences that are displaced in time, in views or other visual material, such as those from books, digital or other visual media etc. are also assembled cognitively into an image of a place, journey or destination.' (Section 8.3, page 12).

Anglo American makes no mention of the impacts on the dynamic views in their assessment of the retracted mine plan. The reason for this can only be that these impacts are not altered by the new mine plan.

Direct Visual Impacts

There are a range of direct visual impacts that will result from this mine for example there is the potential that the dragline will be visible from a range of viewpoints including the studs, at times during mining operations, particularly when the dragline is mining on or close to the ridgelines. Based on internet research, I believe that the dragline at Drayton is a Bucyrus 1370W which can have a boom length of 95m. This machine and its powerful spotlights, (as illustrated on the cover of the Retracted Mine Plan report and in the photograph below), would potentially be clearly visible both during the day and night, when mining these areas. This would constitute a direct visual impact.

Darley lookout and the high country on Coolmore and Darley will still be directly impacted by being visually exposed to large areas of the mining operations. Darley's Trig Hill Lookout will remain unusable for client visits for 20 years, the revised life of the mine. Overburden dumps in particular, are a significant visual element in the mine's operations and are potentially more visually impacting than the open cut areas and therefore these huge piles of material should have been more accurately modelled and included in the assessment in the form of plans, cross sections and 3D models.

Anglo American should also have prepared photomontages to prove their assertion that the studs will not be directly impacted. For example, photomontage views from Coolmore at Ellerslie and Strowan, towards the Whynot Pit, and from along Darley's frontage on the Golden Highway towards the Blakefield and Redbank pits, should have been prepared, including the dragline working at or near, the top of the ridge, to demonstrate their statements. As mentioned in my previous report, responding to Anglo American's Justification report, Anglo American should correct the photomontage from the Trig Hill lookout to illustrate



Figure 1. An image of a dragline working at night

the full extent of the visual impact on this view, as opposed to only half of the visual impact, as shown on this photomontage. As also mentioned in my earlier report, Anglo American cannot rely on a few rows of trees along the site boundary to screen these views from the Golden Highway, over a 20+year period. An assessment of this retracted mine plan cannot be made without these photomontages.

Anglo American should have also produced a Visual Catchment Area map to confirm which areas, within the total area of the studs and the surrounding landscapes, will remain exposed to the direct visual impacts of the mining activity.

Indirect Visual Impacts

The presence of mining will negatively affect the image of the studs as the indirect impacts are not *minor*, as suggested by Anglo American (Section 3.1, page 10). The proposed setback will not change the major impact of an open cut mine less than 1km from the Golden Highway and the stud's boundaries. The retention of most of the Redbank Pit and the part of Blakefield Pit which were identified for removal by the PAC, in the Retracted Mine Plan, means that these indirect visual impacts will still be in very close proximity and highly visible.

A range of indirect visual impacts will still be visible from a wide range of view points both within the studs and on the Golden Highway including dust and potential coloured gas plumes resulting from blasting and light spill from plant and machinery at night. Dust will emanate not only from blasting but will also be wind generated from the open cut and overburden dumps, as it is understood that only the haul roads will be treated for dust suppression.

In addition, the presence of numerous mining vehicles on public roads (ranging from 4WDs with their tall orange flags to oversized trucks carrying huge pieces of mining machinery), roadside screen plantings and signage, all contribute to the many and varied indirect visual impacts of open cut mining. The sound of machinery working including engines, scrapping and clanking noises, reverse warning noises from vehicles as well as the sound of blasting will heighten awareness of the presence of the mine, particularly at night when noise levels are low and the mine is still operating. As Dr Lamb states; 'Each of these is an indirect impact of the operations.' (Section 9, page 14)

He also states; "...night time lighting of the operations that may be perceived as causing a glowing effect on the atmosphere,... may conflict with the image of cleanliness, safety, isolation and the absence of lighting that is typical of the rural, high quality experience in the imagery projected by the studs. Blasting, noise and dust plumes from blasting or vehicles on haul roads and working on unconsolidated overburden may all be perceived to be alien to that imagery. In that regard, the sensitivity of the studs to impacts on the imagery is inherent in their branding and identities and deserves acknowledgement and special consideration with regard to the acceptability of the proposed mine ..." (Section 8.4, page 13)

All of these elements of the mining operations are strong reminders to tourists, clients, residents, workers and their families that mining is occurring in the immediate area. While these are indirect impacts, they still have a strong visual impact on people, in particular clients, investors and visitors, and can influence their dynamic visual imagery of the place.

Image and Dynamic Views

Anglo American has again failed to properly consider the impact of this mine on the imagery that is projected by the studs. Dr Lamb states that Anglo American ‘does not accord them a level of sensitivity that is sufficient to acknowledge their unique qualities’ (Section 10, page 15). He goes on to say; ‘A critical consideration has been missed, concerning the importance of the impacts on dynamic views 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.’ In referring to the studs he says; ‘The image is constructed to be ideal, timeless and is carried as much in the mind of people that come to and deal with the studs.’

He goes on to say; “Dynamic view experiences would provide the circumstances for any employee or permanent resident and for many visitors to the studs to perceive sufficient visual information on which to base an understanding of the presence of the adjacent mining operations. Visitors to the studs, who commonly would be clients, may find features of the adjacent mining landscape, compared to the scenic quality, character and blue ribbon imagery of the studs themselves and their wider settings to be discordant and a negative impact on both the scenic quality and the image projected by the studs.” (Section 8.3, page 13)

As I mention in section 3 on page 5 of my earlier report, the presentation of these studs and the imagery that this conveys, is an intrinsic component of the stud’s business model and is part of the reason that they are considered to be one of the three international centres of excellence in the Thoroughbred breeding industry.

Dr Lamb states; ‘ 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.’

Anglo American’s dismissive comment in Section 3.1 on page 10 about “the minor indirect ephemeral visual impacts and any resultant effect on image”, is a clear reflection of their continued lack of understanding of the level of sensitivity of the studs to impacts on their dynamic views and therefore their presentation, image, reputation and business viability.

Highwall Mining

It is noted that the highwall mining is still proposed to extend to within approximately 30-50m of the Coolmore’s boundary as the plans indicate that high wall mining is to extend up to the northern boundary of the Golden Highway road reserve around the existing Edderton Road intersection. Anglo American have only stated in the EA (Section 4.2.2, page 44) that this mining operation will result in no noticeable subsidence or surface disturbance but no evidence of an assessment has been produced to justify this claim.

Anglo American has failed to provide more detailed information about the impacts of highwall mining on the studs to support the unsubstantiated claims regarding subsidence and other impacts, including perceptible impacts at the surface such as noise or vibration impacts, as a result of this form of mining in such close proximity to the studs and the Arrowfield Winery. The potential impacts of highwall mining are not adequately described or assessed nor supported by any independent verification.

Maximum Resource Recovery

The inclusion of a green line on Figure 3 on page 8, entitled *Maximum Resource Recovery* area without any explanation in the text of the report, raises a question about its purpose on the plan. It is noted that it extends well beyond the main ridgeline out into areas highly visible to both Coolmore and Darley. This aspect of the plan suggests that this would be the area in which future extensions of the open cut mine are proposed to occur. It may explain why Anglo American are committing so much of their pre-approval resources in creating screen tree plantings westwards along the Golden Highway, in front of Darley's entrance near Saddlers Creek, in areas where they claim that the mine will not be visible.

Noise and Blasting

Anglo American state that blasting is to occur "on average 5 days per week and not 10 times a week asserted by the horse studs" (Section 3.3, page 13). The statement citing 10 blasts per week was made by the PAC (Section 4.1.3.2, page 18) and is attributed by the PAC to Hansen Bailey (2012). If this is not the case then Anglo American must correct this statement and explain clearly what is meant by "blasting on average 5 days per week" as it is unclear whether there would be one or more blasts each day during that 5 day period. Anglo American have failed to properly consult with the studs about their plans for blasting and these statements by Anglo American add further confusion and concern for the studs over this very important issue.

Anglo American state that exhaust silences and sound attenuation devices are to be fitted to mobile plant before moving into the Redbank mining area (Table 7, page 14). It would seem prudent to fit these devices before commencing mining in any areas of the operation as the measures will need to be undertaken anyway and they should be applied across all pits. A piecemeal approach to acoustic management measures only gives rise to greater concern that the stud's sensitivity to all impacts from this mine are not being understood and therefore not adequately considered.

Stud's Proximity to the Mine

The issue of proximity of this proposed open cut mine to the studs remains a critical issue that has not been addressed in the Retracted Mine Plan report. The existing Drayton mine, along with other mines and power generation operations in the area, are generally more than 10km from the two studs and yet the open cut operations of this proposed mine would come to within 400-700m of the studs and the highwall mining would come to within 30-50m of the Coolmore boundary.

In Figure 2 on page 6 of the *Retracted Mine Plan* report, Anglo American claim that the proposed mining activity in the open cuts would be at least 2km from Darley and 2.3km from Coolmore. I dispute these figures. Not only do Anglo American's calculations ignore the comments made by Dr Lamb and the PAC, they are inaccurate and completely ignore the continuing and unabated visual impacts that this proposed mine will have on the operations and future viability of Coolmore and Darley.

While I question the relevance of the points from which Anglo American's calculations are derived, if I were to measure from the same points, I find that these calculations are incorrect. My calculations indicate that if they were to measure to the Blakefield Pit from their starting point in Darley, this pit would be only 1.5km away, as it is 500m closer than the Redbank Pit. Similarly, when calculating the distances from their starting point in Coolmore to the Redbank and Whynot pits, the figures should read 2km, not 2.3km, and 2.5km, not 3.7km respectively to the closest areas of mining. If the Coolmore starting point were moved northwards to the property boundary on the river, the shortest distance would be less than 2km.

Inconsistencies in these simple calculations cast doubt on the accuracy of the numerous calculations, and therefore the assessments of the predicted impacts of the project, in Anglo American's reports. These inconsistencies indicate that Anglo American's statements are not accurate and are therefore misleading and consequentially cannot be relied on for decision making.

The proposed Drayton South mine represents a complete reversal of the current visual quality and character of the landscape of the studs and the wider visual catchment. This visual quality and character is recognised by Dr Lamb when he states; “West of Jerrys Plains at present there is something of a break ... which assists the sense of continuity of the studs with the adjacent rural landscape and also with the sense of isolation that is part of the imagery of these places.” (Section 8.3, page 13) If this mine were to go ahead this sense of continuity and isolation would be lost and with it, the essential image of the place upon which the studs so heavily rely.

Conclusion

Of the 7 key issues in my previous report responding to Anglo American’s *Justification* report, 6 of the issues are still completely relevant when read in conjunction with Anglo American’s *Retracted Mine Plan* report. These issues include Landscape and Cultural Values, Image and Reputation, Proximity to Existing Mines, Visual Impacts from Trig Hill Lookout, Vegetation Screening along the Golden Highway and the Landscape Conservation Area as defined by the National Trust. Only the Houston Pit Bund commentary is not relevant in relation to the *Retracted Mine Plan* report.

Anglo American have failed to acknowledge and properly assess the full range of visual impacts as defined by Dr Lamb as being direct visual impacts, indirect visual impacts, impacts on image and impacts on dynamic views. Anglo American claims that the *Retracted Mine Plan* would remove all remaining direct impacts from the horse studs and reduce the minor indirect visual impacts, and any resultant effect that this may have on the image of the studs. They make no mention of the impacts on the dynamic views which Dr Lamb considers to be especially important. Anglo American also have failed to mention the impacts on the wider landscape and the vital importance of these wider landscapes on the presentation, image and business viability of these two studs.

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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. Despite retracting mining activity in two areas, the closest open cut mining operations are still only 400-700m approximately, away from the studs.

In addition to the open cut operations, the highwall mining operational boundary is proposed to remain immediately adjacent to the Golden Highway and therefore as close as 30-50m to Coolmore’s boundary. The descriptions of the potential impacts of this form of mining are inadequate and the lack of consultation with the studs on this issue is of great concern to both Coolmore and Darley.

Anglo American have failed to comply with the PAC’s recommendations by not retracting to the north of the ridgeline marked in yellow in its report (Figure 5, page 25) and therefore based on the PAC’s recommendations, the project cannot proceed.