

Enquiries
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9 January 2013

Mining Projects
Department of Planning & infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Mr David Mooney
(email: david.mooney@planning.nsw.gov.au)

Dear Mr Mooney,

Re: Drayton South Coal Project

Please find enclosed Council's submission on the Drayton South Coal Project. The submission is made under delegated authority from Council and will be presented to the Council for endorsement at a meeting to be held on 21st January, 2013.

I thank the Department for allowing Muswellbrook Shire Council to make a submission on this project and also for granting an extension of time until today to lodge the submission.

Yours faithfully



Russell Esdaile
Acting General Manager
Public Officer

Drayton South Coal Project

[Application pursuant to s75J of the
Environmental Planning and Assessment Act 1979]

OUTLINE OF SUBMISSIONS



**muswellbrook
shire council**

The Application

1. By Application dated 4 March 2011 (the **Application**), Anglo American Metallurgical Coal Pty Limited (the **Proponent**) seeks, pursuant to the, now repealed s75J of the Environmental Planning and Assessment Act 1979 (the **Act**), to develop a new coal mine (the **Project**). It is common ground that the Proponent is entitled to make the Application pursuant to that provision because of the effect of transition arrangements set out in Schedule 6A of the Act.

Submissions in summary form

2. Council does not support the Application and notes that:
 - (a) The Project, taken individually and in aggregation with other proposals for road closures and road realignments will have a substantial impact on traffic efficiency in the local government area. Although the project will bring forward road safety improvements on Edderton Road, the short-term improvements to traffic safety do not ameliorate the permanent loss of traffic efficiency;
 - (b) The Application is founded on a false assumption insofar as the Project's impact on Muswellbrook Water is concerned. Council notes that it will not have sufficient waste water treatment capacity to support the Project until 2022;
 - (c) The Application is founded on a false assumption insofar as the Project's impact on community health and childcare services is concerned. The Project would have a deleterious impact on public health services and childcare services and should be refused;
 - (d) The Application is founded on false assumptions insofar as the Project's impact on the local economy is concerned. Council submits that the demand created by the Project for goods and services in circumstances of constrained local supply would merely result in inflationary pressures in various discrete markets rather than return any local economic benefit. The Project would have a substantially deleterious impact on the sustainability and growth of the thoroughbred industry and other industries including the agriculture and tourism industries. The Project would expose the local economy to substantial vulnerability in the event of a further weakening of the international price of thermal or soft coking coal, an increase in the value of the Australian dollar, or a further increase in the cost of coal production.
 - (e) The Project would have a substantial and unmitigated impact on the preservation of local biodiversity, Regional woodland connectivity, remnant vegetation preservation and water quality downstream of the Project.
 - (f) The Project falls well short of 'best practice' insofar as final landform and rehabilitation is concerned. The Project would result in three final landform voids.
 - (g) The Project would contribute to particulate matter in the Upper Hunter

air shed in circumstances where the air shed is at capacity insofar as the National guideline is concerned. The Project makes no sufficient attempt to manage dust with best practice techniques.

For all the above reasons, Council submits that the Application should be refused.

Local roads

Background

3. In 1997, Council adopted a mining-related road strategy for the Shire known as the Western Roads Strategy. The document was developed in response to increasing requests from the coal industry for substantial road closures and realignments. The document was developed to strategically coordinate the orderly reconfiguration of the Shire's rural road network to meet the traffic efficiency and safety needs of all road users including the coal industry – which was located then, as now, substantially west of the New England Highway. The document was funded by those industry participants seeking network closures or realignments at the time.
4. It is important to note that each of the coal mining developments in the Shire is accessed by a local road. These roads include: Thomas Mitchell Drive, Bengalla Link Road, Wybong Road, Coal Road, and Muscle Creek Road. Some of these roads were purpose built¹ and others evolved from former rural roads².
5. In addition, there is increasing coal related traffic on local roads not used for primary access to coal mines. Edderton Road, which links coal mining developments in the Shire with the Golden Highway and the Mount Thorley Industrial Estate, is one such road. The Bell and Market street over-dimensioned vehicle bypass of the National highway is another.

Traffic

6. Council has qualified an independent traffic expert to assess the impact of the project on local roads and particularly:
 - (a) Thomas Mitchell Drive;
 - (b) Edderton Road; and
 - (c) the overall network efficiency and safety.

At the time of making this submission, the independent traffic expert's report was not available.

7. It is noted, however, that:
 - (a) The assertion that the realignment of Edderton Road will “complement the already approved realignment of the northern section of Edderton Road” is not thought to be true. The proposed northern realignment is likely to be counter-productive in terms of traffic efficiency directing traffic away from the desired north eastern travel alignment to Muswellbrook. The Proponent's proposed realignment further exacerbates this traffic inefficiency. The present and proposed alignments are depicted in a diagram which will be forwarded separately. While it is acknowledged that the Project will bring forward traffic safety improvements, the Project will result in a permanent loss of traffic efficiency.

¹ Bengalla Link Road and parts of Thomas Mitchell Drive, Coal Road (and Muswellbrook Coal Road).

² Wybong Road, Thomas Mitchell Drive, Muscle Creek Road.

- (b) The Proponent asserts that “with improved road geometry and sealed width, it is likely to better operate at the default 100 km/h speed limit. Therefore, there should be minimal impacts (and possibly even an improvement) to the travel time due to the realignment itself”. That assertion is not thought to be true. Additionally, the statement is founded upon two false assumptions. Firstly, it is noted that the project only brings forward road safety upgrades by approximately five years. The proper assessment, therefore, should be made against the longer term upgrades on the existing alignment as against the shorter term upgrades on the realignment. Secondly, the Proponent’s assertion that the HVEC proposal is also unlikely to affect travel times is false and acknowledged by HVEC in its assessment.
- (c) The Proponent asserts that the movement of the Edderton Road/Golden Highway intersection 5kms to the north-west will result in 3 – 4 minutes of extra travel time for traffic heading north-west to the intersection and, conversely, that traffic heading south-east to the intersection will have 3 – 4 minutes of less travel time. The inference is that there is a balancing in the overall impact. It is noted, however, that the vast majority of traffic enters the intersection from the north-west. Secondly, the real traffic delay is also affected by the counter-productive proposed realignment of the road itself and not just by the placement of the intersection. It is not true, therefore, to assert that north-western traffic will have their travel times increased by 3 – 4 minutes or 5kms. The real impact is much greater.
- (d) With respect to Thomas Mitchell Drive, the proponent essentially asserts that HVEC is undertaking upgrade works and that those works are sufficient. All parties (the Department of Planning, the RMS, Council and HVEC) noted that Thomas Mitchell Drive in its then present condition was unsatisfactory to meet the safety and traffic efficiency requirements of the HVEC and associated developments including the Drayton coal mine. Accordingly, it was a condition of the HVEC approval that it upgrades three Thomas Mitchell Drive intersections and provides \$7.06m to upgrade Thomas Mitchell Drive. The figure of \$7.06m was arrived at from a conceptual costing done as a desktop exercise by the RMS during the HVEC approval process for the Mt Arthur coal mine and was a representative estimate for the cost of the full upgrades required. A detailed costing of those necessary upgrades now discloses that the works will cost \$17m. Council has since funded a further \$4m of upgrade works but there remains a \$5.96m shortfall. The Proponent’s assertion is therefore false on at least two counts, firstly it assumes that HVEC was required to undertake the work in all events but a careful reading of the approval discloses that while this is true of the intersections, it is not true of the road itself and that HVEC is only required to complete the first \$7.06m of the works all agree is necessary to adequately protect the travelling public from the effect of the developments concerned. Secondly, it assumes that HVEC will fully develop its project. While that course is likely, it is noted that the obtaining of a development approval does not require an obligation to proceed to development and an underwriting condition on the Proponent to complete all the necessary works is required.

Road closures

8. While the Application refers to the “realignment” of Edderton Road, the Proponent does not, in fact, propose a realignment at all (a process which realigns the road with its road reserve) but rather a road closure and the gazettal of a new road. The distinction is important because while an application under section 138 of the *Roads Act* 1993 (the **Roads Act**) must be applied consistently with any s75J approval pursuant to planning law, an Application under Part 4 of the *Roads Act*, for a road closure, does not. It is the subject of a separate consultative and statutory process. The Minister or the Planning Assessment Commission does not have power to prejudge an Application the Parliament intended as the subject of a separate administrative process.
9. The Proponent has been repeatedly invited to submit a concurrent proposal for its road closure with its planning proposal. The earliest of those invitations was made in 2009. Despite repeated invitations to do so, the Proponent has elected to proceed solely with its planning proposal.
10. Council notes that it will be the consent authority for any road closure and accordingly, does not propose to comment on the merit or otherwise of the proposal to close a section of Edderton Road. Council notes, however, that any approval by the Minister or the Planning Assessment Commission must:
 - (a) Have a pre-condition that the Road Act application for road closure be approved in substantially the same terms as any planning approval; and
 - (b) Must not seek to prejudge that separate statutory exercise.
11. Council notes that it has indicated to the Proponent that Council is unlikely to consider a Road Act application for the closure of a road until a mine affected road network study for the Shire is completed so that the cumulative effect of mine related closures can be understood. Council notes that the Department of Planning and HVEC have made \$50,000 contributions so that this exercise can commence. The exercise is unlikely to be concluded before September 2013 and remains only partly funded. The Proponent has made no contribution to the exercise despite being aware of the importance of doing so.

Muswellbrook Water

Background

12. Council is the owner and operator of water and waste water treatment services in the Muswellbrook local government area. The provision of water and waste water treatment is the provision of critical infrastructure.

The Proponent's assumption

13. Much of the proponent's environmental assessment is founded upon an assumption that as the Project seeks to largely continue the employment of its existing workforce (with a significant but insubstantial increase in that workforce) that its impact on the necessary provision of services by third parties, including Council, is negligible. That key assumption, which underpins its environmental assessment, is false.
14. In its planning, Council takes into account the cumulative workforces of multiple developments deemed significant including six coal mines. In assessing its support or otherwise for coal mining development, Council takes into account its capacity to meet the demand of that development on Council services. Council, in assessing that it had appropriate capacity for new and expanding mine development, was entitled to take into account the end of life of existing mines including Drayton and the organic transfer of a cumulative skilled workforce to those new and developing coal mines. That is particularly so where the open-cut coal workforce skills were readily transferrable. It would be improper and, in the alternative, unreasonable, for Council to have assumed in its planning that the Drayton South coal mine would be approved and the workforce transfer from Drayton to Drayton South because:
 - (a) the Proponent had no development consent to do so;
 - (b) the Drayton approval ended in 2017;
 - (c) the Drayton coal resource was economically exhausted in 2017;
 - (d) the Drayton South coal project was known to be controversial;
 - (e) the Proponent had publically stated in the National media that the project was marginal from a financial point of view and would be jeopardised by the introduction of certain Federal Government taxes; and
 - (f) it would have been to 'gold plate' the provision of public infrastructure for Council to plan to meet uncertain future demand.

The truth of the matter is that Drayton South is a new mine on a new lease and although it proposes to transfer its workforce, from a planning point of view there is no proper distinction or legal reason why that workforce need be transferred to that as against any other new or expanding open-cut coal mine. The assumption is an affectation to hide its real and demonstrable social, economic, and infrastructure impacts.

The Proponent itself, in its Application discloses to 'create' 450 operational jobs. The Proponent assumes for its economic benefit modelling the creation

of new jobs but for its social and infrastructure impact cost modelling assumes the creation of a negligible few.

Capacity

15. Muswellbrook Sewage Treatment Plant (the **STP**) was originally constructed in 1935 and has been augmented several times in response to population growth and tightening water quality requirements. The treatment plant uses a trickling filter process with maturation ponds for the treatment of sewage and cold anaerobic digestion for the stabilisation of residual sludge. The STP operates with aging infrastructure that is at or fast approaching its treatment capacity limits. The biological trickling filter process was installed in 1937 and 1963 and the condition of major structures ranges from poor to satisfactory. As a result of population growth, the treatment plant currently operates at or above its intended treatment capacity. In 2012, Hunter Water conducted an assessment of the STP which noted:

- (a) The imhoff tank is overloaded;
- (b) The trickling filters are operating at their hydraulic limits; and
- (c) The sewage flows to the treatment plant routinely exceed the hydraulic capacity of the channels and pipework that connects the major treatment tanks, resulting in internal overflow events and unintended bypassing of treatment units.

Council notes that the STP was offline from inflow overload and the consequential destruction of the STP's biological process for a week in 2011.

16. Council's Sewage Servicing Strategy plans the replacement of the STP in 2022 at which time its capacity will increase from 12,500 EP to 21,000 EP. Council's estimate of the cost of the new STP, fortified by a review conducted by the NSW Office of Public Works, is \$34m.
17. In giving its support to the Mt Arthur coal expansion project and the Mt Pleasant project, Council assumed the end of the Drayton project. Council also assumed the recommissioning of a decommissioned part of the STP to provide an additional 500 EP.
18. Council has explored all options for the interim augmentation of the STP and has made multiple applications to the State Government for funding assistance to bring the replacement of the STP forward to meet the needs of the Drayton South project but, to date, has been unsuccessful in those endeavours.
19. Council estimates that the project will create cumulative coal industry induced demand of 388.8 EP calculated on the basis of 450 (created jobs) x 0.6 (Muswellbrook based proportion) x 0.8 (jobs to household conversion rate) x 1.8 (household to EP conversion rate).
20. The Proponent makes no offer to bring the construction of the STP forward to meet the demand and Council has no capacity to meet it otherwise. The cost to bring the project forward is \$9.6m. It is noted that even if the Proponent made an offer sufficient to enable the project to be brought forward, it is unlikely the project would be constructed by the time it is required.

21. In short, it was reasonable for Council in its planning to assume the transfer of the Drayton workforce to other new or expanding mines in its forward calculations for servicing capacity. The Council has no ability to meet the sewage treatment demand induced by the Drayton South project. Council notes that it will have capacity to meet the needs of the Drayton South project from 2022 and invites the Proponent to resubmit its Application at that time.
22. Council notes that it has qualified the NSW Office of Public Works to provide an independent comment on the matters set out by Council above.

Community services

23. Council repeats the submission at paragraphs 13 and 14 in respect of the assumption concerning the continuation of the Proponent's workforce from its Drayton operation in support of the Council's submission in this part.
24. In HVEC's application for expansion of the Mt Arthur coal mine, it noted³ that:

The potential cumulative impacts on the local region are likely to include:

- [(a)] likely significant strains on health services, in particular hospitals;
- [(b)] contribution to strains on the existing childcare services; and
- [(c)] potential pressures on existing primary education services.

25. HVEC was right to make those concessions concerning health services. In the intervening period, the Hunter New England Area Health Service (**HNEAHS**) has confirmed that poor population health presentation statistics at Muswellbrook Hospital are partly because of grossly inadequate health service availability in the Muswellbrook area. Those poor population health statistics include:

- (a) In "the period 2007 to 2009, 0-35 year-old people resident in the Muswellbrook postcode had higher rates of emergency department presentations for both asthma and overall respiratory illness than the remainder of the HNEAHS and Sydney"⁴;
- (b) "For rates of asthma presentations, residents in the Muswellbrook postcode ranked highest among people aged less than 35 years of age"⁵;
- (c) "Muswellbrook area has high rates for emergency department presentation for asthma"⁶;
- (d) "Singleton and Muswellbrook local government areas have higher rates of cardiovascular disease hospital separations than all of the Hunter New England Area Health Services (HNEAHS) or NSW"⁷.

³ See p. 12.55 of the EA for the proposed modification.

⁴ See p. 11, *Respiratory and cardiovascular diseases and cancer among residents in the Hunter New England Area Health Service*, NSW Health.

⁵ *Op Cit*, p.12.

⁶ *Op Cit*, p.11.

⁷ *Op Cit*, p.19.

Additionally, Muswellbrook has the highest preventable mortality rate in the Hunter and the emergency department at the hospital has been described by HNEAHS as “grossly undersized”. It is understood the floor area of the emergency department, for example, is 1/20th of the appropriate clinical standard.

26. At the time of the Mt Arthur approval, the Department of Planning accepted the impact but noted that royalty payments would be made to the State Government which was responsible for improving health services and health infrastructure in Muswellbrook and it was satisfied funds would flow as they were required. With respect, that finding was a convenient falsehood. The Department of Planning either knew or ought to have known that at the time the Department of Health had nothing in its budget, neither in its forward estimates, nor in its ten year planning to do anything to improve either health services or health infrastructure at Muswellbrook in any significant way.
27. Council submits that the health services strain will, in addition, be on general medical practitioner services, midwifery and other allied health services including ambulance services.
28. Council submits that the Project will have a deleterious effect on human health and should be refused. Council submits that assessed impacts on human health should not be “bundled up” with other considerations in a balancing exercise undertaken to assess public interest.
29. Council submits that HVEC’s was also right to make concessions with respect to its assessed impact on childcare and early and primary education services. Council notes that it holds an independent Shire-wide childcare services study which confirms that assessment. Council subsidises childcare services, particularly costly out-of-hours day care services, in the Shire and the Project will place an unacceptable burden on Council and its community.
30. Council submits that the Proponent’s offer to mitigate health and educational impacts by way of making community contributions to lifestyle matters by a proposed voluntary planning agreement with Council is:
 - (a) improper;
 - (b) contrary to a proper construction of planning principles; and
 - (c) contrary to Government policy and to the public interest in relation to health and education (particularly in relation to the ensuring of human health);

Council submits that the Proponent’s attempt to mitigate health and educational impacts in the manner sought by the Proponent is a relevant matter for the purpose of the assessment.

Economic impact

Background

31. Although no cumulative assessment of the impact of mining on the labour force has been undertaken, there is anecdotal evidence that the endogenous labour pool has not been able to satisfactorily meet the needs of intensive mining in the sub-region⁸. Limited labour supply and high demand for labour has increased the price of labour which, in turn, appears to have flowed into prices more generally.
32. Council submits that the labour market is probably over heated in the sub region – something which is every bit as burdensome as a labour market which suffers a lack of demand. Labour is an important input in production. A high labour price contributes to higher prices more generally. This is problematic in a community with a 50% higher proportion of people on fixed incomes – many of whom rent from the Department of Housing. The unemployment rate in the Upper Hunter (which for statistical reasons includes Gloucester, Dungog, and Upper Hunter LGAs – all of which have comparatively little mining) is 2.5 percentage points lower than the State unemployment average. The real figure for Muswellbrook and Singleton is probably much lower – and lower again when the skew for the disproportionate number of persons presenting with barriers to entry (largely from areas of social disadvantage) is taken into account.
33. The price of labour has been constrained in real terms – unable to outstrip the local cost index. That may be one contributing factor in why Muswellbrook's position on the relative wealth index has dropped relative to local government areas without significant mining over the last fifteen years.
34. There are other consequences that flow in an economy denuded of sufficient labour. The depletion of trade qualified persons providing domestic trade services is one such consequence.
35. Relative inelasticity of supply is true of a number of other local markets as well. The supply of irrigable water from the Hunter is perfectly inelastic – a result of the deregulation of water licences and the full allocation of the Hunter supply.
36. Except for some minor incremental (marginal) further land use, the supply of land is also perfectly inelastic and the market for accommodation is relatively inelastic – constrained by the availability of land for urban release, the SEPP (infrastructure) and its effect on residential development on the rail corridors, and construction timetabling. House prices and the cost of living in Muswellbrook, Denman, Aberdeen and Scone have risen markedly in the last few years and the supply of rented properties approximates mere turnover.
37. Any pressure on demand against such relatively inelastic supply has affected price shocks. The price shocks created by those demand spikes have been pronounced and have given rise to sharp increases in the cost of living. The ability of the sub-region's economy to absorb its 30 state significant

⁸ 2008 ACARP Report: Assessing the Cumulative Impacts of Mining on Regional Communities: An Exploratory Study of Coal Mining in the Muswellbrook Area of NSW (the Centre for Social Responsibility in Mining, the Centre for Water in the Minerals Industry and the University of Queensland) February 2008.

developments at equilibrium, insofar as individual local markets are concerned, is very limited indeed and, as noted, the face value of labour has increased at a rate less than the increase in the cost of living – wages growth therefore declining in real terms.

38. The economic assessment undertaken by the Proponent contains a number of false assumptions:
 - (a) That supply in various discrete markets will react perfectly elastically to the demand created by the project;
 - (b) That the project will necessarily proceed for the full proposed period; and
 - (c) it incorporates the conclusions of the proponent's traffic and social reports which rely on the assumption discussed in paragraphs 13 and 14.
39. The analysis does not consider a number of matters which the Proponent was required to consider, including:
 - (a) the opportunity cost of sterilising the growth, or directly impacting upon the thoroughbred industry; and
 - (b) the effect of the project on the local economy.
40. Council has qualified an expert to comment in relation to the above. At the time of making this submission, that report was not available.
41. Council asserts that the demand created by the project will cause overheat in a number of discrete local markets pushing up inflation above rises in the face value of labour and a consequential deterioration in the purchasing power of wages in the present economy.

Economic diversity

42. Price shocks have impacted upon other industries which compete for land, water and labour. Quite apart from the uncertainty created by buffer, offset, and attenuation acquisition attaching to mining consents, price shocks have undermined the certainty necessary for capital investment in industries which compete in affected markets.
43. Muswellbrook Shire is home to the largest supply of thoroughbred horses for sale to the international market of any local government area in Australia.
44. In what might be described as the closest thing to judicial comment on the looming conflict between the thoroughbred and mining land uses, the commissioners in the Bickham decision found that "the available evidence supports the view that open-cut coal mining and a viable international-scale thoroughbred breeding enterprise are incompatible land uses"⁹.
45. The viticulture industry is also under substantial pressure (principally from

⁹ Planning Assessment Commission (3 May 2010) *The Bickham Project Report*, at p. vi.

oversupply). The viticulture industry has 'sandbagged' its decline by pegging itself to the tourism market. That tourism market relies on critical mass. The expansion of the mining industry has claimed a number of wineries which have significantly reduced that critical mass. Further, the demand created by the mining industry for accommodation has squeezed out the demand created by tourism for accommodation and impacted heavily upon the tourism industry.

46. The urban land use conflict with coal mining also needs further examination. As noted earlier, Muswellbrook's residential growth is substantially constrained by coal mining development and associated rail infrastructure. Acquisition has also constrained the prospect for the further release of industrially zoned land.
47. Council submits that the project will have a deleterious impact on economic diversity and expose the local economy to substantial vulnerability in the event of a further weakening of the international price of thermal or soft coking coal, an increase in the value of the Australian dollar, or a further increase in the cost of coal production.

Ecological environment

48. The Proponent applies to engage in further significant land disturbance. An offset strategy is proposed by way of mitigation.
49. The following is noted:
 - (a) The mine is positioned in a critical part of the Shire's environmental (woodland connectivity, remnant woodland, and remnant valley floor habitat) corridor. Particularly, the mine will disturb land of substantial ecological value and some of the most intact local habitats outside of the Shire's national parks and state reserves;
 - (b) A substantial part of the proposed disturbance contains remnant or regenerating woodland or grassland communities which are listed under State and Federal Legislation as Ecological Communities under various levels of threat such as Critically Endangered and Endangered Ecological Communities. The Project Area is also a foraging location for Swift Parrot (Endangered/ EPBC Act) with recorded sightings during the 2011 surveys conducted for the Project.
 - (c) The offset strategy principally proposes offsite offsetting. Council submits that this strategy does not cure the impact of the proposed disturbance in circumstances of such large cumulative historical disturbance in the local government area.
 - (d) It is further noted that there is little land left in the Shire for offset and mining proponents have increasingly sought to acquire land in neighbouring LGAs to satisfy offset requirements. Against that background, there is the very real potential for the extinction of local ecological species. This is particularly true of Muswellbrook's native orchids which are apparent for only short periods each year. The proper and sufficient management of offset plans to preserve habitats and species is increasingly problematic when half the rateable area of

the Shire is subject to potential disturbance.

50. Council submits that, for the above reason, the Project will have an incurable and unmitigated detrimental impact on local biodiversity and ecology and the Application should be refused.
51. Further, and in the alternative, Council does not support the offset strategy in the absence of evidence of the final landscape management plan (and the rehabilitation and offset management plan) and its integration with the offset strategy proposed by the Application. Particularly, Council notes that the utility of the offset management plan will ultimately depend in no small measure on the success of the final landscape management plan. The final landscape plan should include routes for internal access to significant ecological colonies to ensure the perpetual preservation and endogenous recolonisation (sustainability) of the offset enhancement areas and the undisturbed habitats.

Final landform

52. The Project includes a conceptual final landform that includes expansive planar slopes and a distinct lack of micro relief and natural appearance. This is particularly evident on slopes facing south east and clearly visible from the New England Highway. The landscape plan falls well short of best practice being deployed at neighbouring mines.
53. The 2007 Environmental Assessment Drayton Mine extension (2007 EA), includes a photo' montage (figure 30C pp. 97 and 98) that understates the visual impacts of the spoil emplacement. The landform currently visible is significant in the landscape and should be shaped to produce a natural landform and contain appropriate topographical features in keeping with the surrounding undisturbed landscape.
54. Council's mining rehabilitation policy encourages research into best practice rehabilitation techniques particularly in this field of emplacement geomorphology to attain stable and natural looking landforms. While Council cannot, at this time, provide any guidance on how a more natural looking landscape can be achieved, it is critical that this type of information be developed quickly so that mining rehabilitation strategies and management plans may be better informed and developed.

Final voids

55. The proposed final landform in this modification includes three voids. The proposal is not consistent with Council's policy on final voids. The proposed project falls well short of best practice aimed to reduce the number and depth of residual landform voids. The Project makes no sensible attempt to achieve best practice in that regard.
56. The Northern Void is proposed to be filled to a level of RL 178. This is compared to the 2007 EA (final landform Figure 24 p. 80) where that area is shown as a flat area at RL 220m and is free draining. The modified landform appears to be internally drained; however, no indication of the hydrology or water storage capacity is provided.

57. The southern void is proposed as a water body. It is noted that the high wall remains as a steep face. Final use of the void appears to rely on the Drayton South Project utilising these voids.
58. The modification for the eastern voids proposes a combination of filling with tailings and possibly ash from Liddell Power Station. The final surface level is proposed at RL150. This will be adjacent to the western ash dam wall at RL 201. The 50m height difference will be within 100m laterally resulting in an effective 2:1 grade far beyond the expectations on mine rehabilitation nominally no greater than 18 degrees.
59. Council submits that the proposed final landform voids represent a substantial and permanent environmental detriment and that the Project makes no sensible attempt to minimise its use of voids and that it is legitimate to refuse development consent, in conjunction with other principles of public interest, for that reason.

Revegetation

60. The conceptual final land form in the modification EA does not provide any information regarding vegetation rehabilitation. The 2007 EA includes the provision of vegetation corridors in keeping with the "Synoptic Plan". Council's mining rehabilitation policy seeks the commitment of 70% of the disturbed area to be rehabilitated to "high density tree planting" which is defined in the order of greater than 30 trees per hectare.
61. Council submits that the landscape rehabilitation should be determined from the integration of potential land uses considering the proximity to road access, utilities, water supply, surrounding land uses, slope, aspect, outlook or visibility and elevation. The analysis of these factors should result in a series of sub-domains that meet the strategic objectives set out in Council's Land Use Development Strategy.
62. It is proposed that if the Project proceeds, that following the completion of rehabilitation, when the completion criteria is met, that the land be rezoned to appropriate land use zones in the Muswellbrook Local Environment Plan.
63. Any land that may be proposed for RU1 should be characterised by:
 - (a) having access to roads, water and utilities and the final land form must be of a suitable geomorphology to allow for functional association with adjacent high quality agricultural land.
 - (b) infrastructure or utilities necessary to give effect to the land-uses contemplated by the plan.
 - (c) All land rehabilitation plantings should provide for biodiversity connectivity, i.e. no more than 3km spacing between minimum patches sizes of 10 hectares and interstitial tree plantings at 60-80m spacing (3-4 trees per hectare).
64. Council notes that the land has been classified as strategic agricultural land and further notes that the Project makes no attempt to consider a landform and revegetation plan which considers longer term use for that purpose. Council submits that the final landform and rehabilitation was arrived at solely

to minimise the cost of mining. That to have proceeded in that way is not best practice, is contrary to the objectives of the Upper Hunter Strategic Land-use Plan and contrary to the public interest.

Air quality

65. The National Environment Protection Measures, of no more than 50 micrograms per cubic metre of 10 micron particulate matter averaged over a 24 hour period (and having a target goal of no more than 5 breaches of that standard over a 12 month period) has already been exceeded in the Muswellbrook township and grossly exceeded in the Singleton township. The putative standard for the potentially more harmful 2.5 micron material has been exceeded substantially more in the Muswellbrook township.
66. The standard sets a limit beyond which experts agree that human population health is intolerably compromised.
67. The proposed development will contribute additional dust to the Upper Hunter air shed in circumstances where human health has already been intolerably compromised. The Proponent's air quality methodology avoids assessing the cumulative impact of its emissions on the tolerance threshold created by the standard in circumstances where the air shed has cumulatively exceeded the threshold. Council submits that the development will have an intolerable impact on human health and development approval should be refused.
68. Further, and in the alternative, Council submits that the Proponent's application falls well short of best practice dust management.
69. Council understands the preference of Drayton to use a smaller truck fleet due to the physical constraints of the site; however the following comment is made in relation to dust emissions.
70. Wheel generated emissions are ranked as the primary source of TSP and PM_{2.5} emissions¹⁰ (Katestone 2011). The 2011 NSW Coalmining benchmarking study further states:

Mining Particulate matter emissions are proportional to the vehicle kilometres travelled (VKT) by haul trucks (i.e. lower VKT will result in a lower emission rate of particulate matter). Using larger capacity haul trucks can reduce the number of trips required to transport the same amount of material. Therefore, overall emissions can be reduced by replacing smaller capacity trucks with larger ones.
71. The *Katestone* report indicates that the most cost effective dust control measure is to replace the current fleet with larger-capacity vehicles. The proposal to reduce the size of trucks in the approved fleet is contrary to current best-practice recommendations suggested by *Katestone* that is the basis of the Pollution Reduction Program currently being implemented through Environmental Protection Licences. While it is noted that the air quality assessment indicates that the modelled dust levels are within the typical ambient dust levels, it is considered that this option does not represent "best endeavours" or "best practice".
72. Further, Council notes that 12:00pm to 12:00am dust readings have typically been higher than daytime readings. A mix of different operational methods

¹⁰ *Katestone*, 2011.

during the night together with air inversion compressions is likely to be contributing factors.

73. Council notes that the night mining close to townships is a challenging environment but notes that routine high levels of dust emission during the night offset by lower day emissions (so as to approach but not exceed the daily average) is not best practice.
74. Council notes that a condition requiring a maximum standard for night dust emissions and the use of larger capacity vehicles be imposed.

Planning and regulatory capacity

75. While not being the consent authority, legislative change has repealed Part 3A, Council makes, on behalf of its community, comprehensive submissions as part of the approval process for all major developments – including recommending specific conditions of consent. Council's submission is invited by reason of statute and as consent authority for various attendant matters relating to the development.
76. The process is exhaustive of staff time. Council is not appropriately resourced to conduct the important task of evaluating complex and lengthy applications – particularly in the absence of cumulative data. Council receives no application fee to offset the cost of the assessment of mining applications and the direct cost of that process is therefore directly borne by the community.