

SRE
Environment and Development

1 June 2012

Att: Colin Phillips
Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Sir

(10_0178) SUBMISSION - COALPAC CONSOLIDATION PROJECT, CULLEN BULLEN

At its ordinary meeting of 14 May 2012 Council resolved not to object to the Coalpac Consolidation Project on the basis that "appropriate controls need to be put in place, particularly in regard to noise, dust, blasting and a regime of building inspections 'pre' and 'post' blasting. **Mining is not to take place within 500 metres of the village, residents residing outside of the village and the cemetery itself.**"

The Council also requested "That the company be required to lodge a substantial guarantee in a special fund (bond) that will be forfeited in the event that their standards are not met."

Please find appended to this submission:

- a copy of Council's resolution;
- each submission made to Council on the project, including a petition and surveys Council distributed at its public meeting held on 24th April 2012; and
- a summary of the issues raised in those surveys.

Council requests the opportunity to provide conditions following a Response to Submissions report being submitted by the Proponent, should an approval from the Department of Planning and Infrastructure become imminent. However, please find below comment on a number of issues pertaining to the project following assessment by Council staff:

Voluntary Planning Agreement (VPA): Council has undertaken **confidential** negotiations with Coalpac regarding a potential VPA that would be entered into should the proposal gain approval. The parties have agreed in principle that Coalpac will contribute \$250,000 per year to Council, \$200,000 a year of which would contribute towards sewerage reticulation to the township of Cullen Bullen and \$50,000 a year which would contribute towards local projects. It was agreed that consultation would be held with the community on such projects, however the final say would lie with Council. Discussion was also held regarding potential works in kind to be undertaken by Coalpac for the rehabilitation of the Cullen Bullen Waste Disposal facility following its closure, which may replace any Section 94 Contributions required for the development. Such negotiations are yet to be formalised in writing.

Red Springs Road: The EA indicates that a level crossing is proposed for Red Springs Road, which would enable Coalpac to access its Hillcroft Reserve with large mine vehicles. Council has held discussions with Coalpac on the issue, and a number of options were proposed by Coalpac such as a temporary closure of the road or a rail style level crossing. However, Council considers the most appropriate option discussed involved a temporary road realignment into the railway reserve, which would underpass the proposed railway bridge. This would eliminate a conflict of public traffic and mine vehicles, however it would need to be agreed to by the railway authority given that it would be located on their land.

Air Quality: It is understood that an Environmental Management Plan will be prepared which will deal specifically with the issue of dust. However, at Council's public meeting it was apparent that there is a perceived impact on the community by way of dust from the current operations. Given that the Environmental Assessment (EA) indicates that there will be an exceedance of the air quality criteria at a number of residences, the project design requires a proactive approach by the Proponent to potentially alter their operations hourly based on real time monitoring. Accordingly, this process needs to be clear, transparent and reportable.

It is also considered that the process of constructing the bund walls (which will help mitigate visual and noise impacts) will have the potential to create additional dust impacts that will need to be appropriately mitigated. Further consideration should also be given to sealing the internal haul road to help minimise dust impacts, as the road would be in place for the 21 year period of mine operation.

Noise Quality: It is understood that an Environmental Management Plan will be prepared which will deal specifically with the issue of noise. It is also understood that a blanket background noise level of 30dBA has been applied to properties greater than 550m away from the highway based on background measurements taken 550m from the highway and the Industrial Noise Requirements. However, it is considered that a nominal figure of 30dBA may not be reflective of the actual background noise level at many of the properties greater than 550m from the highway, given that night time measurements at a number of places are shown as within the 20-30dBA range. In this context, exceedance of the set 35dBA Adopted Intrusive Noise Criteria will in reality result in an increase of over 10bBA at night time for some residences.

This will mean that regardless of whether Coalpac achieves compliance with the levels set within the EA, there will be a perceived impact which could result in ongoing complaints regarding noise depending on the location of mine works and the regularity of night time rail loading. Also, it may mean that some affected parties would not be afforded a landholder agreement or the compulsory acquisition process as the EA indicates a compliance with the criteria at their property.

Blasting: A management plan will be required that deals directly with blasting in proximity to the Cullen Bullen Cemetery as it is proposed not to blast during any funerals. This management plan will need to be prepared in consultation with Council to ensure that a workable notification process is in place.

Council considers an independent process should be implemented for any community requested dilapidation surveys, whereby residents are able to chose who undertakes the survey of their home from a panel of experts.

Note: Council would like to be consulted prior to the adoption of an Environmental Management Plan for the project that deals with air quality, noise and blast management.

Landholder Agreements: There are a number of impacts that will result from the proposal, that are to be mitigated through individual agreements with affected land holders. It is understood that some of the content of these agreements may be private between Coalpac and the land holder, however the operational content of these agreements will need to be reportable. It is unclear at this stage as to how these agreements will be administered, and how compliance with the content will be measured and reported upon. Also a process would need to be put in place to deal with a potential break down in communication between parties, should it be considered that an agreement is not being upheld or land ownership changes hands. Such a process may need to include mediation.

At the time of exhibition, Coalpac had not yet entered into agreements with all the affected landowners. The EA does not indicate how the impacts will be mitigated should an affected landowner and Coalpac be unable to reach an agreement.

Land Acquisition Process: The EA indicates that some affected land owners would be able to request Coalpac to compulsorily acquire their land even if they have a written agreement. It is considered that the legal process of acquisition should be understood by all parties prior to the project commencing. Council considers that as a minimum, fair compensation should be provided based on the likely value of the land as if it were not impacted upon by mining.

Further, in the context of Council's previous comments regarding noise, there may be land holders that will be affected by the proposal that are not identified within the EA as there is no "predicted exceedance". This may mean there would be affected land owners that have not been identified as being entitled to request compulsory acquisition.

Effluent Disposal: It is considered that in the context of the proposed staff increase and increased hours of operation, an assessment of the current adequacy and capability of the existing on-site effluent disposal systems should be undertaken. This is particularly relevant to the system that involves on-site spray irrigation. Such an assessment should also detail the capability of the systems to handle the additional load, and if any upgrades are required separate approval will need to be obtained from Council.

Sand Haulage: Council would like to acknowledge that Coalpac have committed to not hauling any sand through Lithgow and via the Bells Line of Road, which is considered to be appropriate. However, Council would like to raise the issue of the additional 128 trucks per day hauling sand along the Great Western Highway, particularly between South Bowenfels and Mount Victoria. There is significant uncertainty regarding an upgrade of this section of potentially dangerous highway, and it is considered that a process of reinforcing safe driving and reporting on incidents should be implemented by Coalpac.

It is also understood that sand trucks will not be travelling through the township of Cullen Bullen as they will use the internal haul road that will bypass the township. Council considers that this procedure should be backed up with a Statement of Commitment or through any conditions of consent, to ensure that trucking of sand does not commence prior to the completion of the Castlereagh Highway overpass.

Bund Walls: The EA provides minimal information on the proposed bund walls heights, widths, rehabilitation and construction material. Discussions with Coalpac indicated that in some places "freeway style" fencing may also be proposed to screen the development from the Castlereagh Highway. It is considered that further detail will need to be provided on the final design and location of the bund walls, and that Council would like to be consulted prior to the final approval of the proposed walls. In particular Council would like to be able to assess the visual impact of the proposal from the Castlereagh Highway. Council considers that the timing of the bund wall construction should either be conditioned or included within the Statement of Commitments.

Fish River Water Supply: The project will at some stage involve a relocation of the Fish River Water Supply. Council considers that this relocation should be undertaken without significantly impacting upon the continuity of the water service.

Subsurface heating: Council acknowledges that a management plan already exists for subsurface heating which will continue to be implemented as part of the project. Council considers that it would be appropriate for such a management plan to include a procedure in the event that old workings are opened up (due to inaccuracies in the old plans showing the existing workings) that may result in subsurface heating elsewhere on site.

Rehabilitation: The timing of rehabilitation is shown within the EA, however Council considers that such timing should be backed up with a Statement of Commitment or through any conditions of consent.

State Forest Access: The project will involve mining within a State Forest and at times this will result in certain access points being unavailable to the general public. Council considers that Coalpac should implement a process that provides alternative access and advisory signage of such alternative access, in consultation with State Forests.

Conditions/Advisory Notes: As previously mentioned, should an approval be imminent, then Council would like the opportunity to provide conditions of consent. Many of the issues covered in this submission could potentially be addressed via conditions. Also, the issue of what type of works would require Construction Certificates and approval under the Local Government Act would be clarified.

Please do not hesitate to contact Skye Ellacott on (02) 6354 9999 in Council's Environment and Development Department should you have any queries in relation to this matter.

Yours faithfully

Mr Andrew Muir
GROUP MANAGER ENVIRONMENT AND DEVELOPMENT

Project Revised Statement of Commitments

Ref	Commitment	Section
Mining Operations		
7	Conduct and document regular inspections associated with the highwall joint conditions, joint orientations and overall stability of the highwalls, to be undertaken by appropriately qualified geotechnical specialists. Geotechnical mapping of highwalls and regular pagoda and escarpment inspections via physical or photogrammetric methods will be carried out as design and risk assessment inputs.	RTS 4.1.2
8	The Project Highwall Mining Management Plan (see EA SOC Ref 8) will include at least the preparation of: <ul style="list-style-type: none"> • A Hazard Map (vertical elevation) of the highwall, defining and locating any significant hazards and potential zones of localised (small scale) instability. The highwall mining layout will be aligned with a surveyed baseline. This baseline will be set out and validated by the mine surveyor. Any other localised hazards or restrictions to work practices shall be included on the Hazard Map; • Highwall Mining Plan (plan view) showing the pillars and Barrier Pillars, survey baseline, toe position, crest position, surface features including pagodas and escarpments/cliffs and any other significant features; and • Risk Assessment specifically addressing the risk of instability of the highwall (large scale) that could threaten any surface cliff and pagoda features, and the risk of pillar instability and surface subsidence >20 mm (the design criteria). 	RTS 4.1.2
9	Coal production will not increase from the currently approved volume of 2.2 Mtpa (combined Cullen Valley Mine and Invincible Colliery volumes) to the 3.5 Mtpa sought for the Project until attenuated mobile equipment is on site.	RTS 4.5.4
Air Quality and Greenhouse		
16	A proactive real-time air quality monitoring system will be installed prior to increasing production above currently approved limits.	RTS 4.2.1
17	Coalpac will manage dust emissions from haul trucks travelling on the internal haul road by the use of water carts (including Level 2 watering).	RTS 4.2.3
18	Air quality KPIs and associated review periods from the existing Coalpac PRPs will be adopted for Project operations and included in the AQMP.	RTS 4.2.4
19	Coalpac will implement the air quality management controls for the MPPS conveyor and haul truck sizes as noted by the EPA in their submission, consistent with the EA.	RTS 4.2.19
Noise and Blasting		
23	The additional noise attenuation works for the ICPP as described in the AIA and EA will be undertaken by Year 2 of the Project.	RTS 4.5.1
24	Any plant and equipment found to have defective or missing sound attenuation components will not be used operationally until repaired/reinstated.	RTS 4.5.4
25	Coalpac will implement leading practice management measures to ensure that residences and properties predicted to receive mild noise impacts during at least one modelled year for the Project do not receive noise impacts above 35 dBA (whilst an Agreement is not in place).	RTS 4.5.5
26	The predictive meteorological component of the Air Quality Management System to be implemented for the Project (Section 4.2.18) will be used to proactively identify the areas of the site where operations will need to be modified to meet predicted air quality criteria.	RTS 4.5.5
27	Coalpac will revise the Draft Noise Management Procedure for the Project in consultation with EPA on a six-monthly basis.	RTS 4.5.14
28	Coalpac will implement a real-time monitoring system for the Project, enabling blast management decisions to be made as weather conditions change.	RTS 4.6.1
29	Coalpac will offer all private residences within 2 km of active blast areas for the Project an independent baseline structural survey prior to Project mining upon receipt of a written request from the landowner. The independent contractor would be approved by DP&I prior to the surveys being undertaken.	RTS 4.6.3
30	Blasts required for any mining activities within 500 m of the Cullen Bullen General Cemetery (the closest point being a distance of 178 m) will be designed to manage vibration and overpressure levels. No blasting will occur on days when formal services are scheduled at Cullen Bullen General Cemetery; and no mining or coal haulage within a 1,500 m radius will occur within two hours of formal services at Cullen Bullen General Cemetery.	RTS 4.12.1
Ecology		
37	As part of the Revised BOS, Coalpac commits to providing indirect offsets through	RTS

	<p>contributions towards recovery actions for the following threatened species:</p> <ul style="list-style-type: none"> • Broad Headed Snake; • Brush-tailed Rock Wallaby • Woodland Birds; and • Koala. <p>Coalpac will provide support to the indirect offset measures outlined above totalling \$300,000 to be spent equally for these four species in the first five years of the Project.</p>	4.13.2.2, 4.13.5
38	Targeted searches for the Squirrel Glider will be conducted on Biodiversity Offset Properties as part of the BOMP. In addition, nest boxes targeted to provide den sites for the species will be used in mine rehabilitation	RTS 4.13.5.4
39	The Project Biodiversity Offset Properties will be permanently conserved via a Voluntary Conservation Agreement (VCA), or other suitable arrangement to protect flora and fauna values in the long term within two years of Project Approval.	RTS 4.13.14
40	Coalpac will also engage a dedicated Biodiversity Offset Manager to implement the BOMP commitments for both existing Compensatory Habitat Areas and the offset properties proposed for the Project under the Revised BOS. Coalpac will liaise with traditional owners of the land to encourage involvement in restoration practices.	RTS 4.13.15
Water Resources		
50	Groundwater monitoring will continue to allow the assessment of the condition of the historic flooded underground workings of Old Invincible Colliery to confirm that this storage will not be significantly impacted by the Project. This additional data (for a period of two to five years) will be used to validate the key findings of the surface water and groundwater assessments undertaken for the Project.	RTS 4.1.2, 4.9.5
51	If monitoring data shows that the Project adversely impacts on groundwater water at a private receiver, Coalpac will provide reasonable compensation in consultation with the relevant landowner.	RTS 4.9.5
Rehabilitation		
53	Coalpac will also include the consideration of PAF material management measures and provide detail on a PAF monitoring and management in the Rehabilitation and Landscape Management Plan for the Project. This plan will be prepared in accordance with the most recent version of the DRE Mining Operations Plan guideline.	RTS 4.10.2
54	Local native species will be used during the rehabilitation and seed collection programs to ensure collection from a suite of species to encourage species diversity.	RTS 4.13.9
55	Coalpac will establish an appropriate Rehabilitation Security Deposit for the Project, to the approval of DRE. Coalpac will inform LCC once this process is complete, as part of the annual review meeting on site.	RTS 4.17.22
Traffic		
62	Coalpac will continue discussions with regulatory agencies and the relevant landholder to formalise an agreement around any works on Red Springs Road to allow access to the Hillcroft mining area.	RTS 4.14.3
63	Coalpac will ensure that appropriate management measures for Castlereagh Highway traffic will be put in place during the construction of the overpass bridge infrastructure, in consultation with RMS.	RTS 4.14
64	Coalpac will obtain the relevant approvals under Section 138 of the <i>Roads Act 1993</i> prior to the construction of the haul road bridge over the Castlereagh Highway.	
65	The haulage of sand for the Project will not be undertaken via the Cullen Valley Private Haul Road at Cullen Bullen.	RTS 4.14.8
66	B Double trucks will not be used for the haulage of sand to market via the Great Western Highway.	RTS 4.22.6
67	During the life of the Project, Coalpac will maintain the existing access point in the south of the Project Boundary for the Gardeners Gap Track (as shown on Figure 5 of the EA). Coalpac will also create a northern access route within the Project Boundary to allow for public access to the Ben Bullen State Forest, in consultation with Forests NSW.	RTS 4.18.1
Community		
70	Coalpac will use best endeavours to seek agreement with landholders identified in the EA as being predicted to receive adverse amenity impacts above relevant criteria. These include those private residences and properties discussed in Sections 8.3.3 and 8.6.3 of the EA where impacts above Project amenity criteria	RTS 4.22.3

	will still occur despite best practice management of noise and dust impacts being adopted by Coalpac. All formalised agreements will be provided to the DP&I and LCC (without commercially inconfidence information) only with the permission of the private landholder.	
71	Coalpac will continue to work with relevant individuals to minimise any inconvenience due to blasting required within a 500m radius of a residence. Any blasting event within this radius shall be planned and the landholder notified with 7 days, and any inconvenience on the day of the blast shall be limited to no more than one hour.	RTS 4.22.6.6
Waste		
72	Coalpac will commission an audit to identify any required upgrade to the existing mine sewage system to facilitate the additional workforce and operational areas proposed. This audit will be undertaken by an independent specialist in consultation with LCC.	RTS 4.15.1

NSW Health - Nepean Blue Mountains Local Health District

Category	Issue
Air Quality	Air quality issues due to mining activities Health impacts from coarse particulate matter emissions associated with mining operations are of concern to NSW Health. As mine impacted populations are generally small compared to populations subject to urban air pollution it has been difficult to conduct robust health studies of mine affected communities. Nevertheless there is a growing body of evidence that populations subjected to elevated coarse particulate matter emissions from mines have an increased risk of adverse health outcomes, particularly on the respiratory system. 1.2 Preliminary investigations by NSW Health in the Hunter Valley have also found an indication that mine emission affected communities may also be subject to increased rates of cardiovascular disease, a concern which is undergoing further investigation.
Air Quality	The annual average background levels for PM10 and dust deposition used in the Air Quality Assessment were derived from monitors that are in close proximity to the township of Cullen Bullen and were established as: - Annual average PM10 = 12.8 µg/m ³ , and - Annual average dust deposition = 0.9 µg/m ² /month Air Quality R5 65 The annual average TSP was estimated from PM10 concentrations to be 31.9 µg/m ³ . These values include existing mining operations in the area and reflect the generally good level of air quality currently enjoyed by this community.
Air Quality	We note that several residences within the boundary of the project (195, 196, 197, 198 and 199) are predicted to be subject to particulate matter impacts from the project that exceed DECCW assessment criteria and are already under Agreement, or under negotiation toward an Agreement. Due to the predicted high level particulate matter impacts from mining these properties should not be leased or otherwise occupied during the period they are subject to mine emissions.
Air Quality	Beyond the project boundary there is also concern for long-term cumulative particulate matter exposure on the town of Cullen Bullen. For each of the years modelled (years 2, 8, 14 and 20), there is a predicted incremental annual average PM10 in Cullen Bullen of 30 - 100%. This represents up to a doubling of the exposure to dust particles in the township and its community and thus an increase in the risk of residents experiencing respiratory problems known to be associated with coarse particulate matter exposure such as asthma. The World Health Organization guidelines indicate that an incremental exposure to PM10 of this magnitude could be associated with an increase mortality risk of 3%.
Air Quality	We are concerned that the proposed "real-time management system" to reduce peak particulate matter emissions will have no impact on reducing the overall increase in long-term exposure to particulate matter for local residents. We recommend that Coalpac conduct further evaluation into measures to prevent or minimise dust impact. This may involve a change to the staging of the project so that the intensity of particulate matter impacts on the Cullen Bullen residents is reduced. We note that Coalpac also proposes to discuss with the other mines in the area ways to develop management measures when elevated dust levels are identified. However, there is no evidence or explanation within the proposal of how Coalpac and the other mines will conduct their operations if elevated dust levels are recorded and environmental conditions are unstable.
Blasting	Air quality issues due to blasting The Environmental Assessment does not include any local evaluation of the impact of blasting on air quality for the township of Cullen Bullen. With the expansion of the mine operations there will be a very significant increase in the number of major blasts (up to 20 per month), and more frequent smaller blasts. Blasting for coal mining in the Hunter Valley is of great concern to that community. Several incidents have occurred where people have reported acute health effects in relation to mine blasts.
Blasting	Due to the close proximity of Cullen Bullen including the public school to much of the proposed mining activity we recommend that a thorough site-specific health risk assessment of blast emissions is undertaken and that systems are in place to receive and respond to community concerns in relation to blast emissions.
Noise	Noise and Vibration We are concerned that the predicted mining noise levels as reported in the Acoustics Impact Assessment (Appendix H) will significantly affect the community of Cullen Bullen, especially the local school and the private residences that are predicted to have noise impact above the intrusive criteria. These noise assessments include normal mining activity, coal handling and processing, train loading, idling locomotives and operation of the product conveyor to Mt Piper Power station.
Noise	Two residences are expected to experience mild noise impact during the daytime, while

	<p>this increases to 13 and 14 residences during the day/evening and evening. A higher number of residences are affected when measuring noise impact over 25% of property area. Eighteen properties reportedly may experience moderate noise impact above the intrusive criteria at night, and 4 residences may experience significant noise impact. This increases to 9 residences that may experience significant noise impact when assessing noise impacts over 25% of the property area.</p>
Noise	<p>The amenity criteria LAeq in Table 15 Adopted Operational Noise Criteria has been calculated based on the INP for rural residential as the type of receiver. No assessment appears to have been made for the Cullen Bullen Public School (Receiver 272) located within the township of Cullen Bullen. The INP, in Table 2.1 Recommended LAeq Noise Levels from Industrial Noise Sources, suggests that acceptable noise levels in a school classroom (internal) at the noisiest time of day should not exceed 35 dBA LAeq (1hour) with a recommended maximum of 40 dBA LAeq (1hour). These suggested acceptable criteria would be exceeded if the 50 dBA LAeq during the day amenity criteria is adopted (taking into account the reduction in noise level of approximately 10 dBA LAeq for inside the classroom).</p>
Noise	<p>There is increasing evidence internationally that environmental noise exposure may cause risk to public health, and is recognised by international bodies such as World Health Organisation (WHO) and the US Centre for Disease Control (CDC). There is some suggestion of the long-term effects of environmental exposure to noise on annoyance, sleep disturbance, children's performance at school, hypertension and ischemic heart disease.</p>
Blasting	<p>The Acoustics Impact Assessment states that on some occasions up to 40 blast events per week or 10 events per day may be required for limited time periods. The ANZECC Guidelines, Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (1990), recommends that blasting should only occur from 9am to 5pm, Monday to Saturday, excluding public holidays and that blasting should generally take place no more than once per day. (This requirement would not apply to minor blasts such as for clearing crushers, feed chutes, etc.).</p>
Blasting	<p>The proposed Blast Management Plan should take into account the operational hours of the local primary school and avoid multiple blasts during school hours.</p>
Blasting	<p>Furthermore with the mine operations increasing to 24-hrs, for 7 days a week, and with the proposal for increasing the number of blasts, Coalpac has not indicated how it plans to mitigate such impacts on community living and quality of life in the township of Cullen Bullen.</p>
Social	<p>The health status of people living in the Lithgow LGA is on many measures worse than in other parts of NSW. Communities such as Cullen Bullen already have high levels of relative disadvantage, making them more susceptible to additional health impacts from environmental stressors such as air and noise pollution.</p>
Recommendations	
<ul style="list-style-type: none"> - That measures are required to minimise the increment in annual average PM10 in Cullen Bullen as far as feasible; - That residences where predicted air quality impacts exceed DECCW criteria are not occupied. - That a detailed health risk assessment of the potential impacts of blasting on Cullen Bullen is undertaken; - Further evaluation of the proposed noise control measures and recognition of the importance of short- and long-term monitoring of noise impact at the project boundary and surrounding areas, with a commitment to further mitigate the impact of noise on the community. - That measures to minimise exposure of local residents to blast emissions are implemented. - That noise and blasting impacts on occupied homes and Cullen Bullen Primary School are reduced as far as feasible. 	