



# AUSTRALIAN COAL ALLIANCE

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## RESPONSE TO SUBMISSIONS

Strategic Inquiry into  
Potential Coal Mining  
Impacts in the  
Wyong LGA

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## INTRODUCTION

We consider that our submission and determinations presented to the Inquiry were commensurably pertinent to the subject matter of discussion: KORES Wallarah 2 Project (W2CP). No similar evidence was displayed in the KORES submission, which we believe, is seriously deficient in supportive documentation to their claims and, in particular, critical matters of community concern, which was evident in their Preliminary Report of November 2006.

After study and consideration of all submissions submitted to the Expert Panel for the Strategic Inquiry into the W2CP in the Wyong Local Government Area, the Australian Coal Alliance draws the attention of the Panel to a number of matters relevant from these submissions.

The Dooralong and Yarramalong valleys, their wetlands, creeks, floodplains and State Forests represent the “**jewels in the crown**” for the Central Coast. In particular, their function as the major water resource of the Central Coast cannot be overstated. The ravages and scourge arising from inadequate supervisory and regulatory application of longwall coal mining “*has been the passport*” to serious environmental destruction within NSW coalfields. This declaration can be associated with the following statement by the NSW Minerals Council in their submission No. 8 pages 19-20. Item 6.1 (p.20):

*“ . . . where the net production benefits of coal mining exceed environmental costs and hence the project is desirable from an economic efficiency perspective, some net production benefits can be used to mitigate and remediate environmental impacts to an acceptable level.”*

Attention is also drawn to the EPA Board submission, page 5 Quote k in response to the Mineral Councils quote. *The bureaucracy display and/or are misguided in their very poor understanding of environmental management and its priorities where remediation is just not possible. Habitats, ecosystems and environmental integrity should be inviolate but sadly, this is not the case as Australia continues to destroy these valuable attributes which is irreversible.*

It also noted during the Kores presentation by Mr. Peter Smith, when the Panel asked a question in regards to subsidence, their expert from ERM (Mitchell McCotter) said that sections of Jilliby Jilliby Creek would be subsided.

The Australian Coal Alliance reiterates that after earlier exhaustive research, undertaken for the compilation of our own submission, we see no reason whatsoever to resile from our stated observations, objectives and/or determinations which were fully supported from detailed and recorded references.

## CONCERNS IN RESPONSE

### KORES SUBMISSION DOCUMENT W2CP August 2007

There is a serious lack of detailed information in the KORES W2CP Submission: pages 1-5 and 1-6 relate to nine (9) critical key issues, which form the whole basis of this mining project. There appears to be a deliberate attempt to defer attending to and/or providing for release, of essential and critical information, to the concerned communities until 2008. There is a *presumptuous expectation* by KORES to securing a request from the Director General of Planning to submit an Environmental Assessment (EA) and not to provide substantive evidence of their claims prior to the release of an EA.

As previously indicated, the community and the Community Liaison Committee has still not been informed by KORES in detail of their intended practices, methodology and engineering determinations to enable the communities of Wyong LGA to consider the implications arising from this project and its impact upon the rural and urban environments. Social, economic and medical implications (dust) arising from W2CP give cause for public concern and anxiety to residential and business communities that are potentially affected by this problem.

Intensive investigations within the project area were undertaken by BHP Billiton and C.O.A.L (1996-2002) and it was expected that KORES would submit an in-depth detailed submission in the pursuit of their coal recovery programme, yet, further excuses are again offered:

Quote . . . *“the risk assessment review process has placed a high priority on 9 community issues which are still to be completed, with a range of other minor issues, to identify the potential impacts of the W2CP project.”*

Quote . . . *“the EA process to date has highlighted issues that require mitigation measures to be incorporated into the proposal so as to ensure that impacts are reduced to an acceptable level. Where there are residual impacts, W2CP will develop a range of offsets.”*

Quote . . . *“subsidence implications for water supply, groundwater issues, flooding within the valleys, social and economic issues, noise impacts, air quality, ecological issues and greenhouse emission will be addressed in the EA.”* (W2CP Submission p.1.5., p.1.6 Aug. 2007). Why?

After months of repetitive procrastination the *nine critical issues of direct public concern are still unresolved*. This failure to comply is indicative of a company that is unable to satisfy and demonstrate that it is able to undertake an Ecological Sustainable Development on the W2CP. This is demonstrably evident by reference to the EPA and DECC condemnatory submissions, which will be the subject of comment later in this document.

The Central Coast Water Supply regimes and mining subsidence remain, amongst others, as the critical unresolved problems in the W2CP mining zones. The Australian Coal Alliance has drawn on two reports from independent Hydrologists (Appendix 1) who were commissioned to consider the valleys public water regimes. The expertise and experience of these two hydrologists are pertinent to our own water determinations within the water catchment area. It is fortuitous there is a common understanding of the paucity of critical information of water resources and their flow regimes throughout the catchment. KORES remark that their mining *“foot print is only 4.7% of the catchment”* and would therefore would not impact on the

water catchment area is misleading. Kores fail to state that this footprint would be at the end of the Dooralong and Yarramalong Valleys, between the junction of the two river systems and directly beneath the valley's flood plain – the major water flow-through of the aquifers. This is the most significant and critical part of our water catchment area from which is drawn 50% of the entire Central Coast's drinking water supply.

## Section 7. Potential Mining Related Effects

### 7.1.6. Integrated Subsidence Prediction Approach (p. 7-8 to 7-10)

**p.7-9.** Quote . . . *“It was concluded from numerical modeling that the incremental subsidence profiles that are likely to result from longwall extraction in the W2CP **will be very similar in shape to those of the Southern Coalfield though greater in magnitude.** This is due to the lack of massive units in the study area compared to the rest of the Newcastle Coalfield combined with the occurrence of a relatively weaker roof-pillar-floor system compared to that of the **Southern Coalfield.** This outcome enabled the W2CP team to then engage in an iterative process of layout designed to define the optimum balance between panel width, chain pillar size, and extraction height **to provide surface subsidence control** within the proposed mine area.”*

**p.7-10.** Quote . . . *“Whilst this re-evaluation of subsidence predictions **has suggested greater levels of subsidence than were initially predicted,** the inbuilt conservatism and narrower error bands due to the site - specific nature of modeling, suggest that the **current predictions will be “worst-case”** thereby providing for a more cautious approach to subsidence management process.”*

It is now clearly evident there is a potential probability of increased subsidence levels in the W2CP. The hypothesis of Dr Lax Holla (deceased) brought this to notice in his own assessments, yet still advised of caution in his own determinations. Dr Holla predicted subsidence between 1.6 to 2.4 metres, and his predictions were partly based on his claims that the land curves in the valleys were the same as those in the NSW southern coalfields, where similar subsidence has occurred.

Further, the Department of Environment and Climate Change (DECC) and the Environment Protection Agency (EPA) criticised the extensive damage from longwall coal mining in their submissions. The DECC placed little credence on the predictive capability for ecological and cultural impacts from longwall coal mining and said: *“given that the capability to predict impacts on ecological values is clearly low the Precautionary Principle should be evident in the mine layouts until this capability is significantly improved.”*

The Australian Coal Alliance has detailed 16 coalfields in NSW that have been subjected to excessive uncontrollable damage, loss of rivers and creeks and environmental degradation.

## Section 1. Executive Summary

### P.1-12 Social and economic significance of any underground coal mining to the local community, the region and State

Quote . . . *“With approximately 300 direct jobs and a minimum of 700 indirect jobs, the project would provide significant economic benefits to Wyong, the region and the State.”*

The Australian Coal Alliance rejects this statement. We also reject jobs from the multiplying effect. Mines currently operating in the northern part of Wyong Shire source all their ancillary needs from companies established in the Newcastle area. It is highly unlikely that these companies would relocate to the Central Coast to service the proposed mine, nor would it be likely that they would need to employ additional employees.

Local business is concerned at the impact the mine will have on the local economy, in particular a downturn in the housing industry, and clean industry. The sighting of a coal crushing and loading facility adjacent to a clean industrial zone (Wyong Employment Zone - WEZ) would have a negative impact. (This has been previously outlined in greater detail in our submission to the Inquiry.)

Recent investigations, however, has shown a decline in interest in the WEZ because of the potential impact of a coal loading facility and coal mine. Woolworths, a major investor and employer, on the southern end of the WEZ has expressed their concern in writing to the Panel.

#### **8.4.11 Dust Management P. 8-14 to 8-15**

Quote . . . *“Dust controls to be implemented for the W2CP will conform to current best practice and will include a range of measures such as automated dust suppression sprays on all stockpiles, three quarter enclosed conveyor systems, enclosed train loading bin and dust suppression at all conveyor transfer sites.”*

Dr Fuchun Xiao, when completing his PhD Thesis in 2000 on *‘Respirable Coal Dust in the Mining Environment’* (School of Safety Science, University of NSW) concluded:

*“Coal dust is commonly suppressed by water sprays but suppression efficiency is not high because dust tends to travel in the air flow around the water droplets rather than being captured by them.”*

The Australian Coal Alliance rejects Kores claims that airborne coal dust can be completely controlled and considers their statement, made in their submission to the Inquiry, that dust can be contained within the boundaries of their coal loading facility as being reckless and irresponsible.

Their claim (as quoted above) that **dust controls will conform to current best practice** does not guarantee that airborne coal dust will not present a health problem and exacerbate and see a greater incidence of respiratory ailments. Dust control continues to be a problem within the mining industry, despite **best practice** and **the latest technology**.

We reiterate our research and evidence in our submission in respect of airborne coal dust problems within the mining industry and wind patterns in the Wyong Shire.

## DECC's SUBMISSION

### Impacts on aquifers/groundwater and Lakes. p. 16/17

We draw attention to the recognition by DECC of the study undertaken by *Northern Geoscience* in 2005. KORES have failed to produced any evidence whatsoever in this matter and we are unaware of any other interpretative research undertaken in these two valleys by KORES. The environmental degradation arising from subsidence to Lake Munmorah and Kalongra Swamp, and the reference of the dewatering of rivers and creeks and its impact on Tuggerah Lakes and its ecology, reconfirm our own understandings that were clearly detailed in the Australian Coal Alliance submission.

#### P.23. Risk-based decision making

Although it is clearly apparent that *the DECC place little credence on the predictive capability for ecological and cultural impacts with respect to longwall coalmining*, we cannot endorse the recommended adoption of a ***Risk-Based decision making approach proposal*** which is completely incompatible with sound environmental management. Such a risk policy could see total destruction of communities of flora and fauna in their terrestrial and aquatic environments. This risk proposal is designed to alleviate environmental responsibility and is fundamentally a seriously flawed and dangerous proposal and contrary to ecological sustainable development and environmental management directives.

#### P.24. Prevention as a primary management consideration

The DECC Quote . . . *“given that the capability to **predict impacts** on ecological values **is clearly low** the **Precautionary Principle (PP)** should be evident in the mine layouts until this capability is significantly improved.”*

The Australian Coal Alliance expresses concurrence with this assessment and draws attention to how assumptive longwall coal mining subsidence determinations is. The **Precautionary Principle (PP)** is significantly absent within the current assessment system as illustrated by the damage to 16 rivers and creeks in NSW. These types of events were first identified and recorded in 1995 by the *State Scientific Committee* under the *Threatened Species Legislation* and have been buried for a number of years to the serious environmental detriment and cost to the current NSW coal mining areas.

#### P36. Conclusion

The DECC view Quote . . . *“there is a need for significant improvement to the environmental planning and assessment processes, as well as subsidence management planning and remediation if the impacts arising from longwall mining on natural and cultural assets are to be reasonably addressed.”*

**This is an extraordinary admission of the failure now recognised and the incompatibility of this whole process over the past 12-15 years.** Severe irreversible damage has been recorded throughout NSW longwall coal mining areas and has continued unabated as protective acts and regulations have been ignored and/or circumvented. The full responsibility for this occurring rests with the Department of Primary Industries.

## **NSW MINERAL COUNCIL SUBMISSION**

### **3.2 Central Coast Water Supply p. 5-6 para. 4**

The following statement is quite extraordinary and irregular:

Quote . . . *“in the unlikely event that impacts exceed those predicted and accepted as part of the project approval and negative impacts to the surface water and groundwater resources within the Mardi Dam catchment were to occur, the risk of significantly compromising the water supply of the Central Coast is minimal.”*

The Australian Coal Alliance condemns statements of this nature, which are flawed and reckless in the extreme. No evidence is presented in support of these determinations and, as KORES is still unable to submit an agreed working plan and/or understanding of the water regimes within the catchment area, from what authority did the Mineral’s Council ascertain these observations. Most surely, the criticism of mining procedures detailed in the DECC and EPA submissions are clearly very relevant in respect of the Kores proposal. We must criticise the Mineral Council for promoting such irregular presumptive information for public dissemination.

#### **4.1.3. Groundwater p. 8 para. 1**

A clear connectivity has been established by Australian Coal Alliance hydrologists and is detailed in our submission.

#### **4.2.4 Subsidence impact and mitigation minimisation p. 11**

It is clearly obvious that the proposed setback of 154 metres from Wyong River is inadequate. Since subsidence can extend some hundreds of metres (EPA Board p.1. para.1) this would clearly put Wyong River/Creek within the subsidence zone. History clearly records throughout NSW that longwall mining this close to river beds compromises the integrity of the water flowing in that stream. The ACA considers that the setback from rivers should be no less than one (1) kilometre.

#### **4.2.6. Subsidence impact remediation p. 12. para. 4**

Quote . . . *“while remediation can minimise the long term impacts of mining there remains a period during active subsidence where short term impacts under low flow can still eventuate.”*

This is the “**unknown factor**” in subsidence assessment, which is indeterminable and irreversible irrespective of all attempts at modeling for an outcome at some 400-500 metre depth.

### **Determining the future of mining in the Wyong LGA, Section 6, p.19**

The following statement raises serious questions in relation to current practices:

Quote . . . *“There is a stringent regulatory regime in place for mining approvals in NSW. The approval process contains numerous measures **to ensure rigorous environmental assessment** of proposed mines taking into account the circumstances particular to each situation.”*

Current evidence of serious damage in the Northern, Southern and Western coalfields of NSW must surely reflect upon “*an inadequate assessment*”. Twenty-three (23) rivers and creeks in NSW have been severely damaged by longwall coal mining, water regimes destroyed and disastrous environmental degradation has occurred. This criticism was reinforced by the EPA Board’s Submission, which put forward similar determinations. These are inexcusable outcomes from a **so-called** enforced “**stringent regulatory regime**” that would have appeared to regulate in accordance with promulgated protective NSW Acts.



## CFMEU SUBMISSION

The Australian Coal Alliance considers that this submission is quite misleading and of little credit.

Quote . . . *“The Union submits to the expert panel that there are no environmental impacts of any underground coal mining concerns, with particular emphasis to “**hazard risks**” of subsidence impacts, especially on drinking water supply and flooding that would act against underground Coalmining being acceptable practice in the Wyong LGA.”*

It would appear that the CFMEU statement has been made in ignorance of the Kores determination and statement in regards to subsidence.

Quote . . . *“incremental subsidence profiles will be similar in shape to the Southern Coalfields though greater in magnitude.”*

Attention is drawn to **Water Plan 2050**, a long term water supply strategy for the Central Coast. This document was prepared by the Joint Water Authority (Wyang Shire Council and Gosford City Council) in December 2006, and formally adopted in July and August 2007. Water 2050 encompasses the importance of the water resource of the Dooralong and Yarramalong Valleys, and it would appear, from statements made in their submission, that the CFMEU is unaware of this document.

Quote . . . *“ The Gosford and Wyong Council’s are committed to protecting the environmental values of the rivers, coastal lakes and estuaries on the Central Coast and to operating in a sustainable manner. Environmental flows are provided by either deliberately releasing waters from storage or by rules which both limit the volume and timing of river extractions by water uses . . . ”* (Water Plan 2050, Sect. 7. Water for the Environment p. 37. Item 7.1)

The CFMEU statement in their submission does not take into account Water Plan 2050, and it is doubtful that they are aware of the Joint Water Authority’s decision to provide additional water resources to meet community growth in the region.

The Australian Coal Alliance submission, Section 6.3.2. Groundwater Withdrawal p, 16-17, is relevant to this matter.

**SUBMISSION by MR. M. CAMPBELL, OAM**

Mr. Campbell has illustrated serious deficiencies in the Department of Primary Industries (Mineral Resources) over the past 12 years. The 30 references in the bibliography of the *NSW Scientific Committee*, to list *Alteration to Habitat* following subsidence due to longwall coalmining as a *Key Threatening Process in Schedule 3 of the Act*, is a damning indictment.

To the best of our knowledge, the contents of this determination and/or production of these documents were never produced or acted upon.

There is a serious lack of transparency within the Department of Primary Industries (Mineral Resources) which is injurious to that department and serious omissions have caused a litany of calamitous impacts arising in longwall coal mining areas in NSW, which are well documented by the Department of Primary Industries (Mineral Resources). Their own publication Primefacts No. 21 is ignored! This criticism is not directed at personnel, but to the questionable decisions arising within the Department of Primary Industries (Mineral Resources) and their methodology and practices arising at these decisions.

## NSW EPA BOARD SUBMISSION. EDO7/989

The EPA Board demonstrates that it is fully conversant and critical of the current legislation, and is damning in its reflection upon, and understanding of, current longwall mining practices and their resulting subsidence damage within NSW. These assessments clearly register very serious deficiencies in the application of this mining legislation and its application to coalmining proposals.

The environmental degradation arising from longwall coal mining is condemned and illustrates that inappropriate assessment/s have been endorsed, contrary to public expectation and evidential documentation. The following statements are relevant to this matter:

- a) Quote (p.1) . . . *“there is significant evidence of the impacts resulting from current operations in the Southern coalfields including extensive irreversible damage that has been well documented.”*
- b) Quote (p.1) . . . *“The EPA Board considers that current impacts contravene the intended outcomes of Priority E4 in the State Plan which include statewide natural resource targets that stipulate an improvement in the condition of riverine ecosystems and groundwater dependent ecosystems.”*
- c) Quote (p.1) . . . *“failure to address impacts resulting from current practices and appear to disregard the NSW Government River Flow Objectives and Water Quality Objectives.”*
- d) Quote (p.1) . . . *“a major concern that there is insufficient assessment of underground mining impacts at the approval stage.”*
- e) Quote (p.1) . . . *“the present Subsidence Management Plan (SMP) does not appear to be adequate as it occurs after the mining strategy has already been planned.”*
- f) Quote (p.1) . . . *“the DECC does not have the expertise needed nor the technical resources to adequately review highly technical voluminous SMP documents referred to it.”*
- g) Quote (p.1) . . . *“the environmental impacts of LWCM associated with mining subsidence can be detected up to several hundred metres from longwall panels and most severe when natural features such as rivers, wetlands, swamps and cliffs are directly undermined.”*
- h) Quote (p.2) . . . *“the current standard of practice does not reflect the requirements under the EP&A Act that principles of ecologically sustainable development, including the precautionary principle and protection of biodiversity and ecological integrity, are a fundamental consideration in making decisions under this legislation.”*
- i) Quote (p.2) . . . *“the EPA Board believes that where there is found to be a high risk of environmental damage due to subsidence that mining approval should not be granted.”*
- j) Quote (p.3) . . . *“the EPA Board is concerned that to date, the monitoring of impacts of longwall mining has been inadequate.”*
- k) Quote (p.4) . . . *“the EPA Board does not view after-the fact remediation as a viable option when dealing with subsidence surface impacts in landscapes or sandstone formation. To the EPA Boards knowledge no attempt at remediation by a coal mining company responsible for subsidence to a river or any other significant natural feature has produced satisfactory results.”*

- l) Quote (p.4) . . . *“the state of coal resources however, balanced against this is the social and economic significance of the natural environment landscapes and water supply catchments overlying coal resource. **The EPA Board considers these enduring values are not being adequately recognised or considered due to partiality towards economic value of one-off extractions of coal.**”*

The EPA Board is congratulated in presenting an outstanding assessment of longwall coal mining problems arising from subsidence and other matters relevant. These matters, which have been clearly documented over very many years, have failed departmental scrutiny and/or were ignored in the false understanding that remediation was a practical and preferred alternative. It has never been and never will be.