Nature Conservation Council of NSW
The voice for the environment since 1955

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Belinda Parker
Mining and Industry Projects
Department of Planning
GPO Box 39
Sydney NSW 2001

SUBMISSION OF OBJECTION
Hunter Valley Operations North – Carrington West Wing Extension
DA 450 – 10 – 2003 MOD 3

Dear Ms Parker,

The Nature Conservation Council of NSW (NCC) is the peak environment organisation in NSW. NCC objects to the proposed modification of Hunter Valley Operations North (the proposal) for the following reasons:

1. There is insufficient technical assessment of the potential impacts of the proposal to make an informed decision on its merit.
2. The proximity of the proposal to a stand of River Red Gums listed as an endangered ecological community.
3. The proposal will destroy additional alluvial river flats in closer proximity to the Hunter River.
4. The loss of base flows to the Hunter River has been underestimated.
5. Destroyed alluvial aquifer systems cannot be rehabilitated.
6. Cumulative impacts of open cut and longwall mining operations on the Hunter River system and loss of alluvial river flats have not been adequately considered.
7. The income from an additional 17 million tonnes of coal mined over a six year period has not been considered in the context of permanent loss of production from prime agricultural land and permanent loss of alluvial aquifer function.
8. Increase in greenhouse gas emissions.

A proposal such as this with complete destruction of alluvial aquifers and a certainty of interfering with the base flow of the Hunter River cannot be approved.

More detailed information on these matters of objection is attached.

Yours sincerely,

Pepe Clarke
Chief Executive Officer
Nature Conservation Council of NSW

SUBMISSION OF OBJECTION

1. ***There is insufficient technical assessment of the potential impacts of the proposal to make an informed decision on its merit.***

NCC has major concerns about the lack of detail presented in the proposal in relation to the permanent destruction of 137ha of the alluvial floodplain and groundwater system within 200m of the Hunter River resulting in loss of base flows to the river.

The number of piezometers used to collect data on hydrology and hydraulic functions of the alluvial aquifer system are insufficient. The paleochannel is a very complex geological system with subsurface gravel braids with permeabilities well in excess of 100 metres per day.

1.1 Seepage Issues

The modeled predicts that 0.05ML/day will be lost to base flows with the construction of a barrier wall.

It is predicted that this loss will reduce as water table recovery occurs in the final void. The recovery and equilibration to the 'evaporative sink' or final void are expected to take more than 50 years, assuming average rainfall conditions. It is also predicted that substantial wet periods, such as the June 2007 event (high rainfall and localized flooding), can be expected to mitigate leakage losses for extended periods of time.

High rainfall events could, in fact, increase the level of seepage and cannot be used as a mitigating influence. Loss of base flows will still occur regardless of weather conditions.

These predictions do not take into account that over a period of more than 50 years loss of base flows could amount to over 900 ML lost to the river system.

The proposal identifies that seepage will be offset in accordance with regulatory requirements but does not explain how or for how long. If licenses are required to be purchased to offset aquifer interference it is unclear what will occur after close of mining. If licenses are to be relinquished, there is no explanation of the process by which this could occur.

1.2 Barrier Wall

The modeled loss of base flows drops from 0.2ML/day (or 3.65GL over 50 years) to 0.05ML/day with the proposed construction of a bentonite barrier wall. There is no detailed description of the proposed wall including construction, composition, permeability or a detailed assessment of the performance of the existing wall recently constructed. There is no indication of performance criteria or risk assessment of the barrier failing.

Measures to mitigate failure or compromise of the barrier to prevent larger base flow losses to the Hunter River have not been identified.

1.3 Significance of base flows

The proposal has failed to recognise the significance of base flows to the environmental integrity of river systems.

In an address to the Groundwater 2010 Conference in Canberra, CSIRO Water for a Healthy Country Flagship scientist, Dr David Rassam, stated that groundwater discharge from shallow aquifers to surface water systems represents an environmentally critical component of the flow in most rivers.

The interconnection of groundwater to surface water in the Hunter system is significant. The micro-organisms that have evolved around the interconnection have an important function in the aquatic food chain and have not been recognised in the assessment of the impacts of the proposal.

2. ***The proximity of the proposal to a stand of River Red Gums listed as an endangered ecological community***

The proposal requires the enlargement of the 'evaporative sink' or final void approved in the original project in 2003. This will bring the sump within 500m of a protected stand of endangered Hunter River Red Gum that are under a previous approval agreement.

Previous approvals to destroy a section of the Carrington alluvial terrace resulted in an agreement with Department of Land and Water Conservation (DLWC) and Department of Environment, Climate Change and Water NSW (DECCW) to protect and restore the endangered stand of Hunter River Red Gum. The proximity of the enlarged sump to the endangered ecological community, the Carrington billabong ecosystem and the Hunter River itself is a major threat to the riverine ecology.

A breach of the sump in a major flood could cause highly saline and contaminated water to impact on these significant conservation values. The proposal assessment does not address or mitigate this possible impact.

3. ***The proposal will destroy additional alluvial river flats in closer proximity to the Hunter River.***

The current Hunter Valley Operations North has been given approval to destroy a large area of alluvial river flat in the past. In the mid-90s a section of the same floodplain was irreversibly damaged by Rio Tinto mining operations as part of the Hunter Valley No 1 Alluvial Lands project. The next stage included approval to excavate through a distal section of the Carrington floodplain under the negotiated agreement referred to above. This caused the sacrifice of a portion of the alluvium beyond a 500m limit from the Hunter River.

This proposal seeks approval to destroy a further 137 ha of Class 1 and Class 2 primary production land that has previously been used for irrigated crops. The claims made that 63ha at the adjacent

Alluvial Lands project was successfully rehabilitated to Class 1 and Class 2 lands with crop yields at least equivalent to those on nearby farms need to be substantiated. The condition of the soil and reinstatement of the associated alluvium has not been clearly demonstrated. The level of ongoing inputs and management required to maintain the 63ha reclaimed river flat has not been outlined.

The NSW government has been operating under the draft policy Management Stream/Aquifer Systems in Coal Mining Developments – Hunter Region since 2005. This draft policy has protected alluvial floodplains from the impacts of mining by imposing a minimum 150m buffer zone between the high wall of mining operations and alluvial aquifers. It also protects alluvial flats.

This policy should be finally adopted by the NSW government to direct decision making on the increased pressure being exerted by the coal industry to excavate every last known volume of coal regardless of the long term legacy.

This proposal to mine into the alluvium up to 200m proximity to the Hunter River should be rejected outright. It is setting a dangerous precedent which will leave all remaining areas of alluvial floodplain open to mining pressures.

4. ***The loss of base flows to the Hunter River has been underestimated.***

The proposal identifies that the eastern and northern channel alluvium of the paleochannel have been largely removed through previous approvals. These mining activities have caused the prevailing hydraulic gradients within the alluvium to reverse from a southward flow into the Hunter River to a northward flow into the mine. This has caused an increase in leakage from the river.

With increased drawdown from the proposed extension modelling predicts that flow rates in the paleochannel alluvium will be in the order of 0.2ML/day or 73ML per annum. The construction of a barrier wall is proposed with the hope that this will limit average loss of base flows to 0.05ML/day.

The groundwater report (App C) notes that limitations and constraints are imposed by numerical modeling and that all predictions in the proposal are based on simulations.

It is quite common after approval of mining developments to find predictions of water impacts have been greatly underestimated. In this case, the construction of a barrier between the open cut pit and the highly saturated alluvium adjacent to the river channel cannot be expected to be fail safe during extreme weather events.

The predicted loss of base flow in the proposal is very conservative and has been underestimated in relation to the cumulative impacts of current disturbance of the paleochannel alluvium.

5. ***Destroyed alluvial aquifer systems cannot be rehabilitated***

It is impossible for rehabilitated open cut pits to contain the same qualities and functions as an alluvial aquifer. The materials used to back fill the pits do not contain the same structure, porosity or layers as an alluvial aquifer laid down over time. The fact that a paleochannel is proposed to be excavated gives an indication of the age of the materials to be disturbed and the timeframe of the aquifer development.

The ability of the rehabilitated pit to hold water and slowly release over time in a similar way to a functioning alluvial aquifer, thus storing base flows over time, has not been demonstrated. Any

rainfall infiltration is likely to move directly through the back fill materials straight into the river. The loss of storage of base flows from the 137ha of disturbed alluvium is unlikely to be replaced.

6. ***Cumulative impacts of open cut and longwall mining operations on the Hunter River system and loss of alluvial river flats have not been adequately considered.***

Past, current and proposed impacts on the groundwater and surface water systems associated with the Hunter River have not been adequately identified in the proposal. The number of coal mining operations currently active in the Hunter Valley, plus those proposals still within the planning system, have a major cumulative degrading impact on the health and functionality of the Hunter River system.

The ongoing loss of groundwater connectivity, base flows, and surface stream integrity through diversions associated with mining operations from Ulan to Muswellbrook through to the Jerrys Plains and Singleton areas have not been seriously considered or clearly documented.

Coal mining proposals such as the extension of the Ashton mine downstream at the confluence of Glennies Creek, cannot be considered in isolation. Nor can this proposal. Both will have compounding, irreversible impacts on the Hunter River system.

The ongoing loss of alluvial river flats and associated aquifers is irreplaceable and causing a significant cost to current and future generations.

7. ***The income from an additional 17 million tonnes of coal mined over a 6 year period has not been considered in the context of permanent loss of production from prime agricultural land and permanent loss of alluvial aquifer function***

An economic value has not been given to the 137ha prime agricultural land or the associated groundwater over time. The level of inputs and management required to maintain a similar level of food production from rehabilitated mine land over any period of time has not been calculated.

Rio Tinto has existing approvals that allow large volumes of coal extraction until 2025. This ambit claim for an additional 17m tonnes to be extracted over a six year period is not necessary for the economy of the company, the region or the state. There is no shortage of employment in the mining industry, in fact, companies are competing for a workforce.

The irreversible environmental damage to be caused by this proposal must be given a value over the long term.

8. ***Increase in global greenhouse gas emissions***

The proposed increase in greenhouse gas emissions of 37.6Mt of CO2-e over the life of the operation is unacceptable and contrary to the NSW government policy to reduce emissions by 2020.

Naomi Nelson - DA 450-10-2003 MOD 3 - Hunter Valley Operations North - Carrington West Wing Extension

From: "Denis Wilson" <deniswilson23@bigpond.com>
To: <plan_comment@planning.nsw.gov.au>
Date: 3/11/2010 9:18 PM
Subject: DA 450-10-2003 MOD 3 - Hunter Valley Operations North - Carrington West Wing Extension

On behalf of the Australian Water Campaigners Inc, I wish to lodge an objection to the Rio Tinto proposal covered by DA 450-10-2003 MOD 3
Hunter Valley Operations North - Carrington West Wing Extension.

- It is my understanding that the proposal contravenes the draft Management Plan for Stream/Aquifer Systems in Coal Mining Developments 2005. That plan gives alluvial aquifers a 150m buffer from mining activities. This is not adhered to in this proposal, and as such the proposal fails the most basic environmental assessment - it poses a real threat to the groundwater systems of the Hunter Valley.
- As groundwater provides base flows which sustain the Hunter River this is unacceptable.
- A healthy Hunter River system and its productive river flats is worth more to society in the long term than 17m tonnes of coal. That principle has been established recently by the PAC reviewing the Bulli Seam proposal in the Southern Coalfields.
    - **"The Panel is of the view that it is no longer a viable proposition for mining to cause more than negligible damage to pristine or near-pristine waterways in drinking water catchments or where these waterways are elements of significant conservation areas or significant river systems. As noted in the Metropolitan PAC Report 1 this level of damage would not be acceptable in any other assessment of water resource use. The analysis reported in Chapter 17 shows that the benefits of protecting significant natural features in the eastern and southern areas are likely to be of a similar magnitude to the mining profits that would have to be given up to ensure that protection. So while protection of the significant natural features would involve lower mine profitability, it is likely that society as a whole would gain more from the environmental protection recommended than it would lose in terms of foregone profits." (p394)**
    - Different river, but same principle of valuing potential private gain ahead of the loss of benefit to the community of a permanent asset - namely a major NSW river and an important aquifer.
- We call on the Department of Planning to act consistently with the findings of the Bulli Seam PAC.
  Furthermore, I would draw your attention to a recent report by CSIRO, released at a Groundwater Conference in Canberra this week.
    - "Groundwater threat to rivers worse than suspected". Reference: 10/132
    - http://www.csiro.au/news/Groundwater-threat-to-rivers-worse-than-suspected.html
    - **"Excessive groundwater development represents a greater threat to nearby rivers and streams during dry periods (low flows) than previously thought,** according to research released today by CSIRO."
- If approved this proposal will set a precedent threatening the rest of the Hunter alluvium. The proposal will destroy the alluvial aquifer

- The proposal will result in a cumulative loss of class 1 & class 2 agricultural land in the Hunter Valley.

The Australian Water Campaigners Inc calls on the Dept of Planning to reject this application on the basis of environmental threats, social losses (loss of [productive farming land denied to society) and on social equity basis - namely those principles addressed by the Bulli Seam PAC.

Cheers

Denis Wilson
Chairman
Australian Water Campaigners Inc
PO Box 3158
Robertson NSW 2577

From: Barrie Griffiths <bgriffiths@harboursat.com.au>
To: <plan_comment@planning.nsw.gov.au>
Date: 5/11/2010 11:55 am
Subject: DA 450-10-2003 MOD 3

North East Forest Alliance
Hunter Region
P.O. Box 9 Singleton 2330

November 5th 2010.

Department Planning, NSW

Regarding DA 450-10-2003 MOD 3
Hunter Valley Operations North - Carrington West Wing Extension

We have just been informed of yet another Hunter Valley coal mine extension proposal - that of Rio Tinto, seeking to mine 137 ha to extract 17million tonnes of coal.

We do not have time to look at the details of this proposal, or inquire as to the features and natural values of the site. We are informed this is prime alluvial river flat within 200m of the Hunter River.

Along with many community and environment groups, we have been urging for years that coal mining in this valley should cease, that there are overwhelming grounds for responsible authority to reject proposals for new mines or for extensions to existing mines, because of massive and unacceptable impacts of the natural environment and the health and well-being of communities, and because of the urgent necessity for forthtright action to address human-induced climate chaos. Once again, on these grounds we urge this proposal be rejected.

Moreover and specifically it appears this proposal should be rejected because it

* will destroy the alluvial aquifer and remove base flows from the river

* contravenes the /Draft Management Stream/Aquifer Systems in Coal Mining Developments 2005/ which gives alluvial aquifers a 150m buffer from mining activities.

* will result in a cumulative loss of class 1 & class 2 agricultural land in the Hunter Valley

Approval would not merely be irresponsible because of environmental/ecological impacts: it would be extremely short-sighted economically, to gain merely polluting coal in return for such substantial long-term losses.

Yours sincerely

Barrie Griffiths.

fax : 02 9228 6466
email : plan_comment@planning.nsw.gov.au

2nd November, 2010

NSW Government Planning
Major Projects Assessment
Mining & Industry

ATTENTION M/s Belinda Parker

Dear Sir,

RE: Proposed Modification Hunter Valley Operations North Carrington West Wing Extension Modification – DA 450-10-2003 MOD 3.

The Jerry's Plains and District Progress Association objects to the above mentioned extension on the following grounds:

1. **Increase in Dust and Noise on Jerry's Plains and Districts.**
   The Northern Sydney Central Coast Area Director for Public Health, Dr. Peter Lewis has made a submission to the Department of Planning about Wallarah No 2 Mine and states "Any increased exposure to particulate pollution is associated with increased adverse health outcomes, even if the levels are below the current guidelines".

   Jerry's Plains and districts are surrounded by Coal Mines and Power Stations and is already subjected to pollution from these activities. The extension would also mean increased road traffic, coal trucks, mine blasts and coal trains in the area which would also increase noise levels and disruption to the agricultural balance of the area.

2. **Influence of a Levee Bank on Hunter River Flows in times of Peak Flows**
   - Elevated Water levels upstream of levee
   - Increased water Velocity downstream of levee

3. **Potential Disturbance to Water Quality.**
   As a consequence of disruption to water table and aquifers that feed into the Hunter River. Plus loss of Hunter River water use from agriculture to mine.

4. **Damage to Alluvial Land and Loss of Prime Agricultural Land.**
   Also the potential for a precedent being set for further mining of alluvial lands.

Yours faithfully,

Don Barry
President

"JUNBURRA"
JERRYS PLAINS NSW 2330
Phone: 02 6576 4068

Hunter Environment Lobby Inc.

PO Box 188
EAST MAITLAND NSW 2323

4 November 2010

Major Project Assessment
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam

Submission - Hunter Valley Operations North:
West Pit Consent 2003 Modification 3 - Carrington West

I refer to the exhibition of the environmental assessment for the Hunter Valley Operations North project, specifically the Carrington West project. This modification would affect alluvial lands forming part of the Hunter River and associated groundwater systems.

The Hunter Environment Lobby is an established regionally based environment group and has made many submissions about the proposed mining and infrastructure development in the Hunter Region.

The group has reviewed the environmental assessment, and strongly objects to the proposal. The Hunter Environment Lobby objects to the project for the following reasons, and requests that the project be refused consent:

Adequacy of consolidation of existing consents

1 The environmental assessment inadequately considers the regional significance/context of the proposal in all but a few specific aspects. Issues of regional scale such as visual impacts, night lighting effects on biodiversity, environmental monitoring, and threatened species and biodiversity considerations have not been taken into account at the appropriate regional/landscape scale to allow for meaningful decision-making.

2 The environmental assessment does not comply with the Environmental Planning and Assessment Regulation in that it does not analyse feasible alternatives adequately, and does not adequately assess the proposal in accordance with ESD principles.

Compliance with planning objectives

3 Carrying out of the mine does not comply with one the principal aims of the Singleton Local Environmental Plan 1996 (LEP). Clause 2(g) of the LEP seeks "to encourage adoption of land management practices which are sustainable over long periods of time without degradation of natural environmental systems". This proposal is clearly contrary to that aim. Similarly, the development does not conform with the zone objectives outlined in Clause 10b of the LEP.

Biodiversity issues

4 This proposal will contribute to the loss of important habitat for NSW listed threatened species, and for nationally listed species under the Environment Protection and Biodiversity Conservation Act 1999. Further clearing of remnant vegetation is totally unacceptable and is contrary to the objects of the Native Vegetation Act 2003 and to NSW Government policy. Together with other proposals such as the extension of the Warkworth Mine, the proposed development should be rejected unless adequate long term offsets can be provided which will ameliorate these impacts.

5 Appropriate biodiversity offsets should be provided, with secure offset areas in perpetuity. Any commitment by the applicant company cannot be accepted, given that other Hunter Valley projects including Mt Owen Mine and Warkworth have not met their legal commitments to offsets and are now mining, or proposing to mine in areas that have been committed for biodiversity offsets.

Water issues

6 The development of the mine represents unsustainable water use within the Upper Hunter Valley. Failure to properly assess and document water impacts in the environmental assessment means that the proposal is fundamentally flawed. It should not be approved without an independent technical expert assessment.

7 Specifically, the proposal by the company to mine alluvial lands, and thereby to extract water from the river system are contrary to the NSW Government approved water sharing plans. Furthermore, the policy of the former Department of Infrastructure, Planning and Natural Resources was for no mining within 150 metres distance from the boundary of river alluviums. This project does not comply with this guideline which represents a minimum prudent, precautionary approach.

8 Proposed extraction of water from the river will not be able to be metered and therefore compliance with the terms of the water sharing plan and the Water Management Act 2000 cannot be evaluated. The risks to groundwater and the Hunter River system are too great. An independent technical review of this issue must be undertaken, including a risk assessment undertaken by the insurance industry which can provide financial compensation in the event that the assurances in the environmental assessment fail to eventuate.

Environmental monitoring and management

9 The general environmental monitoring program the company proposes to implement if the project is approved is inadequate to be able to assess the development within a regional context, and to link with other regional air quality monitoring programs. This requires a program of regional monitoring undertaken by an independent authority. Ongoing management commitments given by the company are vague and unenforceable.

Cumulative impacts

10 The overview of cumulative impacts considers impacts only from a site specific perspective, and provides an inadequate assessment of cumulative impacts at the appropriate scales. In particular, greenhouse, biodiversity and water quality impacts are not appropriately considered because for a cumulative impact assessment these must be considered at the national, regional and catchment scales respectively.

Greenhouse and energy issues

11 There are significant continuing greenhouse gas emissions from the project. Greenhouse gas issues are given inadequate attention in the environmental assessment, notwithstanding the fact that the direct and indirect contribution of the proposal to greenhouse gas emissions is substantial and may be the most important single environmental impact of the proposal. These issues should be crucial to the determination of the ecological sustainability of the proposal, and whether or not it should be approved.

The Hunter Environment Lobby objects to the proposed development and expects that on the basis of any reasonable assessment of impacts, the project must be refused consent..

Thank you for your consideration of the above. Please advise the Group of the receipt of the submission, and of the progress with the consideration of the development application.

yours sincerely

Jan Davis (President)

Minister for Planning,
Box 39 GP0,
Sydney, 2001

November 1st 2010

A response to the Carrington West DA 450-10-2003

Rivers SOS objects to the proposal to mine the alluviums of a Category 1 Stream

General Comments

Rivers SOS is an alliance of over 40 environmental and community groups concerned with the wrecking of rivers in New South Wales by mining operations. Rivers SOS policy calls on the NSW government to mandate a safety zone of at least 1 kilometre around all rivers in the state, to protect them from further permanent damage through the effects of mining under, or too close to, river beds. This safety zone would also offer some protection to tributary creeks and streams, dozens of which have already disappeared and/or been drained by mining operations.

The integrity of our water supplies has never been more threatened, with predicted climate change- induced drought and damaging impacts on the catchments due to longwall and opne cut coal mining of an extent and intensity never seen before. Of major concern is the level of impacts predicted and deemed as acceptable by mining companies. There is a huge difference between stakeholders, the mines, environment groups, the government agencies and water users as to what level of impact is acceptable and how to best manage them.

Acccording to a DECC document (Paper for DECCW executive meeting of 28 May 2008 EPRG Coal Mining Project) a major concern is the level of impacts predicted and deemed as acceptable by mining companies and DPI. There is incongruence between the different stakeholders, particularly between DPI and DECCW when considering what level of impact is acceptable and how best to manage for the likelihood of certain impacts. It has been suggested that any impacts to water courses or water dependent ecosystems should be avoided. DECC also expressed concerns in that paper, with respect to available remediation techniques, should such deleterious impacts eventuate.

This is a view also supported by the NSW Office of Water in their draft policy Guidelines Management of stream/aquifer systems in coal mining developments. (2005).

Rivers SOS takes the view that any impact to watercourse, alluvium or water dependent ecosystems should be avoided. The Rivers SOS Alliance calls on the NSW Government to mandate a safety zone of at least 1 kilometre around all river systems in the State, to protect them from further, permanent damage through the effects of mining under, or too close to, the rivers, aquifers and wetlands that feed them. This safety zone would also offer some protection to tributary

creeks and streams, dozens of which have already disappeared and/or been drained by mining operations. Cracking and pollution of our rivers caused by poorly regulated mining operations is only one cause, albeit a major one, of the degradation of NSW's rivers. However it is one problem which is easy to fix, simply by applying an adequate safety zone around rivers.

We note that numerous man-made structures of heritage or utility value are protected from subsidence damage by such safety zones, and we argue that our precious water supplies in these rivers are of even greater value. They can never be re-built. Remediation attempts are inadequate and not effective in the long term.

Climate change is one of the critical impacts on waer sustainability. Our river systems and drinking water supply catchments must be protected in an era of water shortages. In the past decade maintaining and managing the integrity and quality of water resources has been a major project across the State. Since large-scale irrigation for agriculture commenced in the 1960s, water policy has evolved significantly. Water security, its supply, sharing and sustainable use is now part of the mainstream environmental or political agenda. Before the Water Management Act 2000, which had the intention to provide for the protection, conservation and ecologically sustainable development of the water resources of the State, water resources were seemingly abundant and largely unregulated. Widespread and severe drought in the 1980s in particular raised awareness of the issue, prompting concern that the state could not sustain the historical level of water extraction. A proposal such as this with complete destruction of alluvial aquifers and a certainty of interfering with the base flow of the Hunter River cannot be approved.

The scale of this project and its impacts is enormous. Other mining operations in the area and in the Hunter as a whole are equallly enormous. Together the devastation is difficult to comprehend. Whether it be biodiversity issues, water impacts or issues surrounding air quality, health, amenity and property values the assessment of the likely significant consequences is so complex that it is time that a moratorium be placed on open cut mining in the region untill the full cumulative effects are properly and scientifically understood.

Rivers SOS supports the call for such a moratorium from the NSW Farmers Association, The Hunter Valley Water Users Association and the Thoroughbred Industry. No mining plans including modifications should be approved until the Strategic Review of Coal Mining in the Hunter is completed and thoroughyly reviewed.

Specific Objections to Carrington West Proposal.

A. Mining of the Alluviums

The site of the proposed new pit is on prime agricultural, floodplain land which in the past supported intensive agricultural dairying enterprises. At the end of mining it will have become a spoil filled pit loosely covered with topsoil which over a short period of time will resettle into the spoil and cause an undulating topography unsuitable for farming. The alluvial groundwater will be gone and the water table become salty. Rehabilitation cannot be relied on to return it to the class 1 or 2 agricultural land it once was as the amount of money required to sustain it at that level would be economically unviable for any farming enterprise.

B. Impact on the Hunter River

The Hunter Regulated River is already categorized as the most stressed coastal river due to a combination of land use and climate change.

The success of isolating the mining operation from the alluvial groundwater system is very complex and presents unacceptable risks. That is why Rivers SOS support calls for a mining exclusion zone.

This operation has the potential to have a major impact on the Hunter River base flows and alluvial system, particularly the potential for water loss through fracture interception, upsetting the balance between water needs of users and the environment.

Carrington West pit is too close to the river to offer adequate environmental protection. This proposal includes plans to mine through the connected alluviums which provide easy pathways for groundwater to move to and from the river. Interruption to these pathways has not been adequately assessed.

The fact that a levee and bentonite barrier wall are necessary indicates that there are serious potential problems. Previous mining in that area has depressurized the groundwater system and water is seeping into existing pits. The supporting EA for this development has not quantified this seepage or reported the pump out rates and volumes. There is no piezometric data in the EA or the AEMRs which would support the claims that the bentonite wall is a reliable barrier and that seepage from the river will not occur under and around it. Unexplained water losses from the Hunter River are reported to the Water Users from State Water. Until it can be categorically demonstrated that these losses are not caused by mining then there must be a complete embargo on all mining that seeks to interfere with the Hunter River, its creeks and alluviums.

There is no technical information about the barrier. Its performance has been inadequately explained as to how it is expected to provide the required protection. Rivers SOS contends that its success has been grossly overestimated. Given the important role it is to perform this omission cannot be allowed to stand. The absence of any performance assessment for the existing barrier and performance criteria for the future wall must be addressed. The likely impact to the Hunter River could have been disguised by the failure to release data to demonstrate its reliability in preventing seepage from the river into mine workings or spoil coming either under or around the barrier.

A new EA with this information must be prepared and put out for public comment. The absence of this information abut the barrier wall and its past performance means the EA is not, sufficiently specific to reveal to any potential objectors all the possible environmental consequences of the proposed development.

Rivers SOS argues that this omission in the EA is substantial and serious enough to prohibit its lawful assessment; that the EA does not meet the basic standard required by the EP&A Act. In failing to demonstrate it has considered and adequately resolved all matters affecting the environment the EA must be rejected and resubmitted. Whereas we accept that EAs do not have to be perfect they should be comprehensive. The EA is also deficit in failing to give *"a full description of the measures proposed to mitigate any adverse effects of the development or activity on the environment arising from the failure or compromise of the bentonite wall or levee."* The purpose of the EA is to alert the decision makers and the informed and reasonable public of all the inherent problems of the proposed development. This EA does not do this.

To demonstrate the efficacy of the barrier the mine must provide data on current seepage rates, pump out rates from existing pits and piezometric data for monitors near the existing wall. Previous audit reports and assessment of the barrier and levee must be provided.

Rivers SOS submits that the groundwater modelling in the current EA is unreliable and needs to be assessed by an independent expert who has been given accurate current data. We believe there is a serious discrepancy between the predicted seepage rates into the pits and the current water pumped. The predicted .048ML/day. must be verified.

The Hunter Valley contains multiple complex and unpredictable geological features. Geologically the Hunter area sits on a fault zones which affect hydraulic conductivity in unknown ways. Assumptions made about the area geology have too great a margin of error. Swarms of faults some quite large and deep and vertical can influence groundwater behaviour and these can be encountered unexpectedly. Faults and fractures can act as main groundwater transmission mechanisms. The full extent of these on the mine and water behaviour has not been adequately described. Nor has

there been any analysis of what will be done if they are unexpectedly encountered and the amount of seepage/ drawdown increases beyond the predicted rate. This must be addressed. The mitigation and remediation measures in this EA are generally inadequate in their scope and efficacy.

There are no triggers in the water management plan for this mining proposal for ceasing operations and remediation if and when serious damage is likely to occur. This must be addressed.

C. Creek diversion

Rivers SOS opposes any interference with a natural water course. Artificial channels will not match the natural tributary in hydraulic, ecological and geomorphological values and will not behave in a manner to provide best environmental outcomes. The process of diversion will disrupt the flow of aquatic organisms and will be unable to reestablish a vegetative cover that matches the original stream in a timely manner. Years between diversion and mining would be required to achieve a satisfactory diversion that will not be challenged by the mining operations or by climate change. Rivers SOS notes that there was no Riparian or Aquatic impact assessment for the unnamed tributary. This is a serious omission and must be rectified.

Open cut mining can impact on the quality and quantity of surface flows allowing sediment to enter the diversion channel. This is particularaly relevant during periods of rainfall with stormwater drainage. Normal water catchment hydrology when altered dramatically will behave in an unpredictable manner. The channel may receive less or more water as a result of the diversion. There is insufficient data provided about flow rates of the original stream and the proposed longer channel to give confidence that these unacceptbal environmental impacts will not occur particularly alteration to the flow rates of the receiving Hunter River.

D. Impact on Water Sharing Principles.

The Water Act 1912 no longer applies to water extraction from the Hunter River. The Hunter River and the Unregulated Streams and Groundwater are all covered by WATER Sharing Plans under the 2000 Water Management Act. The EA completely ignores the Water Management Act and the Water Sharing Plans for the Hunter River and Hunter Unregulated Streams and Alluviums. Under this legislations it is both an offense to cause harm to the rivers and to take water without licence to do so. The risk is great that this project will breach the WM Act 2000 and the Hunter WSPs. The Water Management Act 2000 is not legislation over which Part 3A takes precedence.

Mining puts pressure on natural surface and groundwater systems by competing with other water users and the environment. Mining can also impact on the quality of these water sources. As the coal is mined water in the coal seam is released. It is generally very saline water and contains dissolved minerals that can discharge into groundwater and detrimentally affect downstream watercourses. The danger of this magnifies in high rainfall if and when the water storage proves inadequate.

The Evaporative Sink needs further assessment for its capacity to give complete protection against polluted run-off and seepage from hard rock aquifers finding its way into the Hunter River. Rivers SOS objects in principle to long term groundwater sinks being established in the post mining landscape.

For areas where the *Water Management Act 2000* has commenced, Water Access Licences issued under Part 2 of Chapter 3 of the *Water Management Act 2000*, which are required to take water from a water source. A WAL entitles its holder to 'shares' in the available water within a water source and to take water, at specified times, at specified rates or in specified circumstances and in specified areas or from specified locations Mine water seepage does not constitute a legitimate use of a WAL Licence. State Metering Policy cannot be met by mines accounting for water lost from seepage;

cease to pump orders cannot be followed; reductions in entitlements cannot be regulated by the mine or enforced by the Government Department.

Fracturing or cracking of surface water sources and their alluviums by mining related activities can significantly affect those water sources and other water users that rely on those water sources and the environment. These impacts are likely to be exacerbated when the mine is close to are beneath third order or higher streams. Where these exist mining should be avoided.

E. Cumulative risk Assessment

The cumulative impact assessment in the Groundwater Report failed to take into consideration the future impacts of mining development beyond this extension. This needs to be addressed.

D. Flooding and Risk Assessment

This proposal has the potential to impact on flood flows and floodplain behaviours. None of this has been tested with any degree of reliability. It is another unacceptable unknown. The EA confines its flood ssessment only to the lease area. Maps and diagrams do not show impacts upstream or downstream; we are reqire to take on trust the claim that there will be no additional impact. A 1 cm additional rise is the conclsudion drawn. A q cm rise even if this were true would mean a flood spreaing over additional hectares off the mine lease. The mine must be made to moddel flood behaviousr wiht more accuracy. The 1955 flood must be factored in as there ws 2 to 2.5 metres of water over the mine site in that year. A flood of this magnitude agains woud be disastrous both to the mine and envionmentally to surrounding areas.

E. Sustainable Development

This project must take into account the *Principles of Ecologically Sustainable Development*. The economic costs of mining impacts have not been adequately considered. Mining companies take a short term economic view but the long term impacts can be long lasting and a legacy for future generations. The environment should be valued as more than just an opportunity for wealth creation. The principle of Intergenerational Equity must be applied when consideringas in this DA loss of prime agriculltural alnd and its future potential for food production. The principle of Intergeneraltion Equity is a notion that views the human community as a partnership among all generations. Each generation has the right to inherit the same diversity in natural and cultural resources enjoyed by previous generations and to equitable access to the use and benefits of these resources. Surface and groundwater resources are relied on in this region to support the agricultural indstry , provide drinking water for townships and to sustain the values of the aquatic ecosystems. They must not be put at risk. When assessing impacts to the environment the coal industry must be as sustainable as possible. In the EA for this extension the true cost of rehabilitation as well as the impacts to natural features and ecosystems as well as coexisting and surrounding land uses has not been adequately assessed Under part 3A once an approval has been granted it can be in effect for up to 20 years. With such long term approval periods there is greater importance on the principle of intergenerational equity.

Carol Russell
Rivers SOS Hunter Regional Representative
"Dargin's Farm"
Mt Thorley
Singleton. 2330

Carol Russell

Hunter Valley Water Users Association

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Assessment type 3A
Application Number DA-450-10-2003 Mod 3

Hunter Valley Water Users Association Submission to Dept of Planning re HVO complex north-west pit Modifications (Carrington West Wing)
Objection to the above Proposal

Hunter Valley Water Users Association represents the water users of the regulated sections of the Hunter Valley as well as co-operating with water user's associations on unregulated streams and ground water systems throughout the Hunter Valley. The Association is also represented on the Hunter Salinity Trading Scheme Operations Committee and the State Water Coastal Valleys Customer Service Committee and is a full member of NSW Irrigators Council.

We have a long and respected history of working with various authorities, including State, Regional and local governments as well as regional and local organizations. We are aware that the Hunter is blessed with being arguably the safest and best river system in NSW and appreciate the various protections afforded by both the Hunter regulated River WSP and the Hunter Unregulated and Alluvials WSP gazzeted by the NSW Government over recent years.

These two water sharing plans provide essential security to all users of the water sources of the valley including (but not limited to) the local environment, the largest electricity generators in this state, most of the urban domestic and industrial users in the valley, various mining companies, large scale tourism operators and of course one of the richest agricultural valleys with premium alluvium in the world for its size. The rural industries alone include world class and well known horse studs, a major dairy industry, major beef and poultry industries, many cropping and horticultural enterprises and mixed farming irrigated farms.
Of course the Hunter Valley wine industry with its associated tourist developments has international importance and apart from the individual enterprises has significant water infrastructure in the two private irrigation districts, the Polkolbin pipe line and the Broke Fordwich irrigation district.The Hunter Valley Wine Industry processes over 39 million litres of premium wine annually. This product is packaged and sold under Hunter Valley brands to over 50 countries worldwide and throughout the domestic market. The sales value of this wine is estimated at over $270 million per year with flow on affects of over $230 million. There are 125 wineries and over 6,000 hectares of vineyard situated in the Hunter which has been producing wine since 1830, and is Australia's oldest wine region. Over 2.8 million tourists visit the wine growing area per annum. These tourists are estimated to generate over $560 million

worth of business in the region. The tourist market is catered for by 75 cellar doors, 55 restaurants, 3 major golf courses, 3,000 beds, and masses of infrastructure that allows for a complete tourism experience for the visitor.

All of these enterprises are of course sustainable over the much longer time frame and will still be here long after the mining industry has departed providing of course the hydrological assets of the Hunter have not been sacrificed.

Whilst this association is aware of the value of the coal industry to the Hunter Valley and all of NSW we are also very aware of the overriding importance of the surface and groundwater systems which form the lifeblood of the valley and firmly believe that water assets must be fully protected at any cost and any further expansion of mining throughout the Hunter must not be allowed to put these assets at risk.

HVWUA does not have the financial and professional resources to fully analyse the contents of the Environmental Assessment provided by the proponents but does has real concerns with some of the proposals and in fact do not consider this project should be approved.
Our major areas of concern include:

- We do not believe there should be any further mining by open cut methods of the rich alluvial flood plains of the Hunter River. We are not convinced that these class 1& 2 soils can be restored to their previous productive condition. Obviously restored land can support some crops but not at a sustainable and economical level.
- The Hunter River must never be compromised by mining operations in close proximity. Destruction or damage to this river and its aquifers could never be rectified and would lead to untold environmental, social and economic losses to this region, the state and in fact Australia. Similarly all due care must be taken to ensure that the river is not contaminated by mining, now or in the future.
- Alluvial aquifers once destroyed cannot be replaced even years after cessation of mining.
- The proposed flood levies have only been designed for the 1 in 100 year flood. It is only 3 years since we saw the dramatic pictures of dragline booms just showing when the flood that would never happen did happen in Queensland. Similarly in Victoria open cut mines became the bed of the river.
- The proposed levy has the potential to raise flood levels down stream. Even if this is only a minor rise it can still cause serious damage to down stream infrastructure and landowners.
- We are not convinced of the effectiveness of the so called impervious barrier currently constructed and proposed extensions to it. We have not seen any reports as to any leakages that may have occurred.
- We do not completely understand the possible ramifications of the proposed extension of the evaporative sink footprint.
- We do not believe there should be any further approvals on mines in the Hunter until such time as the cabinet committee announced by the premier to develop a whole of government approach to mining has reported.

- We strongly believe that the following documents prepared by DIPNR in 2005 should be the **minimum** standard adopted (currently NSW Office of Water):
  Draft Stream Guidelines April2005.pdf 505kb
  Draft Stream Guidelines Implementation Manual April 2005 .pdf 811kb
- The EA naturally only looks at this proposal but figure 1.2 of Volume 1 clearly demonstrates why the cumulative impacts must also be considered and reinforces the need for a pause until the whole of government approach is essential.

I trust the department will note our various concerns with this proposal and in light of these refuse consent or at least provide for a Planning and Assessment Commission of enquiry to be instituted to examine the proposal.
Please note there are a number of other problems with this proposal such as air quality, noise, and ecology which we have not commented on but instead have confined our remarks to both ground and surface water as well as soil and land issues.

Yours Sincerely
Arthur Burns
President
5/11/2010

SINGLETON SHIRE HEALTHY ENVIRONMENT GROUP

November 2nd 2010

skeeta13@bigpond.com

Department of Planning
DA 450-10-2003 MOD3

SSHEG is a community based group concerned with:

This is a submission against approval of the Carrington West proposal DA 450-10-2003 MOD3 on the grounds it fails adequately and directly to address the issue of risk to human health.

The Air quality of the Hunter Region is so bad at the present that all additional industrial developments should be required to make no net increase in volume of TSP or fine particulate matter PM2.5 or less.

We acknowledge that there is no endorsed NEPM standard for PM2.5s or agreed testing methods but still argue PM 2.5 monitoring should be required. Baseline data for future reference will be useful. An essential element of best practice sustainable mining is where measures are taken to mitigate adverse impacts, that go beyond regulatory requirements.

Dr Peter Lewis, the Northern Sydney Central Coast Area Director for Pubic Health, was reported in the Newcastle Morning Herald , October 30th, as having submitted to NSW Planning that "exposure to coal dust particulates can harm peoples health even if the pollution is within state guidelines. Increased particulate exposure could cause deaths, require hospital admission and make children have more chest colds, nightly coughs and trips to the doctors."

We refer the Minister to our Submission dated November 2009 titled Is Air Quality Adversely Affecting the Health of Singleton Shire Residents? An urgent call for an independent scientific study to ascertain the relative health status of residents and the risk imposed by poor air quality in which we predict similar outcomes and draw attention to the present air quality of the Hunter Valley.

The Director General's Requirements for all Air Quality and Health Risk Assessments should be based on no more than a 2.5ppm criteria. A health risk assessment should be a given for any assessment and taken into account all cumulative effects given the enormous load the community is bearing. This application fails.

The Carrington West proposal has the potential to increase the fine particulates in the air and this is unacceptable to us. We demand a full and independent investigation of the health of the residents of Singleton and the link to particulate and air toxics. We do not accept the Regional Air Monitoring Network in any way as a substitute for health assessment which goes beyond those implicit in the NEPM standards.

We support the call for a moratorium on coal mining developments by the NSW farmers, the HVWUA and the Thoroughbred Industry until the completion and public assessment of the Strategic Review of Coal Mining in the Hunter Valley.

Specifically the Carrington West EA was unclear as to the method of cumulative assessment eg. What other local sources of dust were included in their monitoring. The data presented was misleading especially that for the background levels. The cumulative impact of other large adjoining mines was not convincingly dealt with.

The EA recognised the chemical composition of the dust was as important as fraction size but made no commitment to assess the dust for its chemical composition.

No details were given as to how the impacts from blasting were included in the modeling.

Air Quality at the site is to be managed though a range of dust controls but they do not say what these are. Too great a reliance is placed on Zones of Acquisition to address dust impacts. While this might be of value to those included in the zone, it does nothing to address the concerns of the wider community.

John Drinan
For the Singleton Shire Healthy Environment Group.

Belinda Parker - Online Submission from David Eyre of NSW Farmers' Association ()

From: David Eyre <eyred@nswfarmers.org.au>
To: Belinda Parker <belinda.parker@planning.nsw.gov.au>
Date: 05/11/2010 14:58
Subject: Online Submission from David Eyre of NSW Farmers' Association ()
CC: <assessments@planning.nsw.gov.au>

Ms Belinda Parker

In your absence we spoke to Ms Kate MacDonald for an extension for a detailed submission which we expect to send in by Wednesday 10 November.
Ms MacDonald advised that we submit our concerns in bullet points indicating that a detailed submission will be coming in due course.

The NSW Farmers? Association (the ?Association?) is Australia?s largest state farming organisation representing the interests of the majority of commercial farm operations throughout the farming community in NSW. The Association also represents the interests of rural and regional communities in relation to natural resource management and trade. Through its commercial, policy and apolitical lobbying activities, it provides a powerful and positive link between farmers, the Government and the general public.

The Association is writing to register its objection to DA450-10-2003 MOD 3 H V North West Pit Extensions on the grounds that:

? The impacts of the extension on aquifers and water resources have not been adequately researched
? Insufficient information has been provided to assess the likely effectiveness of risk management measures
? Valuable agricultural land will be permanently destroyed
? There has been no attempt to assess and address cumulative impacts

Please note that the Association will be elaborating on the above issues in our detailed submission.

Kind regards
David Eyre

Name: David Eyre
Organisation: NSW Farmers' Association

Address:
66 Goulburn Street
SYDNEY NSW 2000

IP Address: mx.nswfarmers.org.au - 61.14.96.5

Submission for Job: #3621 HVO North - West Pit Consent 2003 - Modification 3
https://majorprojects.onhiive.com/index.pl?action=view_job&id=3621

Site: #52 Hunter Valley Operations Complex
https://majorprojects.onhiive.com/index.pl?action=view_site&id=52

Growing the Business of Farming

NSW Farmers ASSOCIATION

Matt Brand
Chief Executive Officer

Ref: 032110mb

12 November 2010

Ms Belinda Parker
NSW Planning
Major Project Assessments
GPO Box 39
SYDNEY 2001

RECEIVED
12 NOV 2010

Dear Ms Parker

Re: DA450-10-2003 MOD 3 H V North West Pit Extensions

The NSW Farmers' Association (the 'Association') is Australia's largest state farming organisation representing the interests of the majority of commercial farm operations throughout the farming community in NSW. The Association also represents the interests of rural and regional communities in relation to natural resource management and trade. Through its commercial, policy and apolitical lobbying activities, it provides a powerful and positive link between farmers, the Government and the general public.

Further to our preliminary submission of 5th November and as discussed with Kate MacDonald, the Association seeks to make more full and detailed submissions regarding the above mentioned DA.

The Association is writing to register its objection to DA450-10-2003 MOD 3 H V North West Pit Extensions on the grounds that:

- The impacts of the extension on aquifers and water resources have not been adequately researched
- Insufficient information has been provided to assess the likely effectiveness of risk management measures
- Valuable agricultural land will be permanently destroyed
- There has been no attempt to assess and address cumulative impacts

Impacts on water resources

"Seepage into the Cheshunt Pit is predicted to range from 0.7 ML/day to 7.3 ML/day and is dominated by water contained within the material disturbed by mining. This range does not include the potential 100% variability in initial stages of mining." (page 203).

The above statement from the EIS is representative of the generally vague and inadequate approach to hydro-geological impact assessment. The proponents are presenting an order of magnitude range of water loss into the mine then further qualifying this with a caveat of 100% variability. Compounding the vagueness is that the EIS does not clearly stated where the seepage will be coming from. Clearly, the consultants have made a cursory desktop study, relying on old data which has little or no specific relevance to the site. Based on Office of Water evaluation of the impacts of existing mines in the area, it is likely that the mine will cause permanent damage to the integrity of the hydro-geological system leading to loss of water from the Hunter River and contamination of ground and surface water.

To fully understand the likely impacts of the proposal and to provide confidence regarding the long term adequacy of mitigation measures, detailed three-dimensional study of the specific hydrogeology would be required.

Impact management measures

A relate issue is the paucity of information regarding the mitigation measures and the lack of scientific support provided for the adequacy of the measures. It is proposed that contamination of aquifers and the Hunter River will be controlled by impermeable barriers. There is no information, however, given regarding the time scale for the effectiveness of these barriers, or the measures that will be undertaken to assess and insure their long term effectiveness. Such barriers can break down or fail entirely, as was seen with the collapse of the Yallourn Batter in 2007 which resulted in the Latrobe River diverting into the mine pit.

It is unclear why development so close to a major river is even being considered. In this regard it is noteworthy that the proposal is in breach of NSW Office of Water policy on groundwater and alluvium protection which advises against mining alluviums close to a category 3 stream such as the Hunter River. A buffer zone of 150 metres between the river and the edge of the alluviums is stipulated. The EIS is silent on this matter.

The treatment of dust impacts is equally inadequate

"Some residences in the Warkworth Village area are also predicted to experience 24-hour PM_{10} levels above the DECC's 50 µg/m³ 24-hour assessment criterion"

"The air quality impact assessment predicts that some residences in the Western Dieu area will experience some exceedances of the DECC's 50 µg/m³ 24-hour assessment criterion due to emissions from HVO South alone. These will need to be managed via the real-time monitoring and air quality management system" (page 182).

In the first place, a 24 hour assessment averages dust levels over the period and disguises the intensity of events. Secondly, there is no detail provided regarding the 'air quality management system' referred to.

The experience of our members in the region is that permitted noise and dust levels are routinely exceeded with no enforcement action taken by government. As you will be aware, significant health concerns have been raised by the local medical profession in relation to air pollution caused by existing mines. The proposed extension will only aggravate the health impacts and on this ground alone should be refused.

Prime Agricultural land

It is noteworthy that the 130 hectares targeted by the proposal is excellent alluvial land with reliable water supply. This land was once occupied by highly productive dairy and agricultural enterprises which have been driven from the area by the existing mines.

The proponent claims that it will restore the land to Class 2 agricultural land after mining.

Before accepting claims of the rehabilitation potential of the land, the Department should commission detailed assessment of the past success of rehabilitation works on similar lands.

The Association is advised that it is literally impossible to rehabilitate aquifers and certain soil types to their former state and inherent productivity. Both aquifers and soils are complex three dimensional systems, which would need to be reassembled, layer by layer. In reality, the mining industries approach to rehabilitation is to pile undifferentiated mine spoil into the

pit, replace some top soil, and throw money at achieving some kind of cosmetic regrowth. The Association is not aware of any crops that have been produced profitably on such land.

Cumulative impacts

The EIS does not address the cumulative impacts of existing mining activity and projects which have been approved but which have not yet commenced, but which will also impact the general project area. In entirely avoids the critical question of how much more mining the ecosystem and the people living in it, can reasonably be expected to tolerate. As you may be aware, the Association is calling for general reforms to mining approval which involve upfront strategic planning and formal cumulative impact assessment at landscape/catchment scale. A summary of Association policy in this regard is available at: http://www.nswfarmers.org.au/__data/assets/pdf_file/0007/67633/Mining_Brochure_small.pdf

In conclusion, the Association believes that full assessment by the Planning Assessment Commission is required for this proposal. Additionally, given that the proposal will result in significant aquifer interference, it is essential that proposal be independently assessed for Aquifer Interference Approval by the Office of Water under clause 91 (c) of the Water Management Act 2000. A referral under the strictures of Part 3A is inadequate to allow the Office of Water to conduct such assessment.

Yours sincerely

Matt Brand
CHIEF EXECUTIVE

Political donations disclosure statement

NSW GOVERNMENT
Department of Planning

Office use only:

Date received: 12/11/10

Planning application no. DA 450-10-2003 mod 3.

This form may be used to make a political donations disclosure under section 147(3) of the *Environmental Planning Assessment Act 1979* for applications or public submissions to the Minister or the Director-General.

Please read the following information before filling out the Disclosure Statement on pages 3 and 4 of this form. Also refer to the 'Glossary of terms' provided overleaf (for definitions of terms in *italics* below). Once completed, please attach the completed declaration to your planning application or submission.

Explanatory information

Making a planning application or a public submission to the Minister or the Director-General
Under section 147(3) of the Environmental Planning and Assessment Act 1979 ('the Act') a person:

(a) who makes a *relevant planning application* to the Minister or the Director-General is required to disclose all *reportable political donations* (if any) made within the *relevant period* to anyone by any *person with a financial interest* in the application, or

(b) who makes a *relevant public submission* to the Minister or the Director-General in relation to the application is required to disclose all *reportable political donations* (if any) made within the *relevant period* to anyone by the person making the submission or any *associate of that person*.

How and when do you make a disclosure?
The disclosure to the Minister or the Director-General of a *reportable political donation* under section 147 of the Act is to be made:

(a) in, or in a statement accompanying, the relevant planning application or submission if the donation is made before the application or submission is made, or

(b) if the donation is made afterwards, in a statement of the person to whom the relevant planning application or submission was made within 7 days after the donation is made.

What information needs to be included in a disclosure?
The information requirements of a disclosure of reportable political donations are outlined in section 147(9) of the Act.

Pages 3 and 4 of this document include a Disclosure Statement Template which outlines the information requirements for disclosures to the Minister or to the Director-General of the Department of Planning.

Note: A separate Disclosure Statement Template is available for disclosures to councils.

Warning: A person is guilty of an offence under section 125 of the *Environmental Planning and Assessment Act 1979* in connection with the obligations under section 147 only if the person fails to make a disclosure of a political donation or gift in accordance with section 147 that the person knows, or ought reasonably to know, was made and is required to be disclosed under section 147.

The maximum penalty for any such offence is the maximum penalty under Part 6 of the *Election Funding and Disclosures Act 1981* for making a false statement in a declaration of disclosures lodged under that Part.

Note: The maximum penalty is currently 200 penalty units (currently $22,000) or imprisonment for 12 months, or both.

Glossary of terms (under section 147 of the *Environmental Planning and Assessment Act 1979*)

gift means a gift within the meaning of Part 6 of the *Election Funding and Disclosures Act 1981*. Note. A gift includes a gift of money or the provision of any other valuable thing or service for no consideration or inadequate consideration.

Note: Under section 84(1) of *the Election Funding and Disclosures Act 1981* gift is defined as follows:

gift means any disposition of property made by a person to another person, otherwise than by will, being a disposition made without consideration in money or money's worth or with inadequate consideration, and includes the provision of a service (other than volunteer labour) for no consideration or for inadequate consideration.

local councillor means a councillor (including the mayor) of the council of a local government area.

relevant planning application means:

a) a formal request to the Minister, a council or the Director-General to initiate the making of an environmental planning instrument or development control plan in relation to development on a particular site, or
b) a formal request to the Minister or the Director-General for development on a particular site to be made State significant development or declared a project to which Part 3A applies, or
c) an application for approval of a concept plan or project under Part 3A (or for the modification of a concept plan or of the approval for a project), or
d) an application for development consent under Part 4 (or for the modification of a development consent), or
e) any other application or request under or for the purposes of this Act that is prescribed by the regulations as a relevant planning application,

but does not include:

f) an application for (or for the modification of) a complying development certificate, or
g) an application or request made by a public authority on its own behalf or made on behalf of a public authority, or
h) any other application or request that is excluded from this definition by the regulations.

relevant period is the period commencing 2 years before the application or submission is made and ending when the application is determined.

relevant public submission means a written submission made by a person objecting to or supporting a relevant planning application or any development that would be authorised by the granting of the application.

reportable political donation means a reportable political donation within the meaning of Part 6 of the *Election Funding and Disclosures Act 1981* that is required to be disclosed under that Part. Note. Reportable political donations include those of or above $1,000.

Note: Under section 86 of *the Election Funding and Disclosures Act 1981* reportable political donation is defined as follows:

86 Meaning of "reportable political donation"

(1) For the purposes of this Act, a reportable political donation is:
  (a) in the case of disclosures under this Part by a party, elected member, group or candidate—a political donation of or exceeding $1,000 made to or for the benefit of the party, elected member, group or candidate, or
  (b) in the case of disclosures under this Part by a major political donor—a political donation of or exceeding $1,000:
    (i) made by the major political donor to or for the benefit of a party, elected member, group or candidate, or
    (ii) made to the major political donor.

(2) A political donation of less than an amount specified in subsection (1) made by an entity or other person is to be treated as a reportable political donation if that and other separate political donations made by that entity or other person to the same party, elected member, group, candidate or person within the same financial year (ending 30 June) would, if aggregated, constitute a reportable political donation under subsection (1).

(3) A political donation of less than an amount specified in subsection (1) made by an entity or other person to a party is to be treated as a reportable political donation if that and other separate political donations made by that entity or person to an associated party within the same financial year (ending 30 June) would, if aggregated, constitute a reportable political donation under subsection (1). This subsection does not apply in connection with disclosures of political donations by parties.

(4) For the purposes of subsection (3), parties are associated parties if endorsed candidates of both parties were included in the same group in the last periodic Council election or are to be included in the same group in the next periodic Council election.

a person has a financial interest in a relevant planning application if:

a) the person is the applicant or the person on whose behalf the application is made, or
b) the person is an owner of the site to which the application relates or has entered into an agreement to acquire the site or any part of it, or
c) the person is associated with a person referred to in paragraph (a) or (b) and is likely to obtain a financial gain if development that would be authorised by the application is authorised or carried out (other than a gain merely as a shareholder in a company listed on a stock exchange), or
d) the person has any other interest relating to the application, the site or the owner of the site that is prescribed by the regulations.

persons are associated with each other if:

a) they carry on a business together in connection with the relevant planning application (in the case of the making of any such application) or they carry on a business together that may be affected by the granting of the application (in the case of a relevant planning submission), or
b) they are related bodies corporate under the *Corporations Act 2001* of the Commonwealth, or
c) one is a director of a corporation and the other is any such related corporation or a director of any such related corporation, or
d) they have any other relationship prescribed by the regulations.

Political Donations and Gifts Disclosure Statement to Minister or the Director-General

If you are required under section 147(4) or (5) of the Environmental Planning and Assessment Act 1979 *to disclose any political donations or gifts (see page 1 for details), please fill in this form and sign below.*

Disclosure Statement Details

Name of person making this disclosure statement	Planning application reference (e.g. DA number, planning application title or reference, property address or other description)
MATTHEW BRAND	DA450-10-2003

Person's interest in the application (circle relevant option below)

You are the APPLICANT YES / (NO) OR You are a PERSON MAKING A SUBMISSION IN RELATION TO AN APPLICATION (YES) / NO

Reportable political donations or gifts made by person making this declaration or by other relevant persons

** State below any reportable political donations or gifts* ***you have made*** *over the 'relevant period' (see glossary on page 2). If the donation or gift was made by an entity (and not by you as an individual) include Australian Business Number (ABN).*

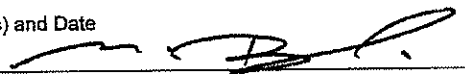
** If you are the* ***applicant*** *of a planning application state below any reportable political donations or gifts that you know, or ought reasonably to know, were made by any persons with a financial interest in the planning application, OR*

** If you are a* ***person making a submission*** *in relation to an application, state below any reportable political donations or gifts that you know, or ought reasonably to know, were made by an associate.*

Donation or gift?	Name of donor (or ABN if an entity); or name of person who made the gift	Donor's residential address or entity's registered address or other official office of the donor; address of person who the made the gift or entity's address	Name of party or person for whose benefit the donation was made; or person to whom the gift was made	Date donation or gift was made	Amount/ value of donation or gift
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	30/11/08	$681.82
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	31/12/08	$1,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	19/02/09	$600.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW (Millennium Forum)	19/02/09	$5,000.00

Please list all reportable political donations and gifts—additional space is provided overleaf if required.

By signing below, I/we hereby declare that all information contained within this statement is accurate at the time of signing.

Signature(s) and Date  12/11/10

Name(s) MATTHEW BRAND

Cont...

Political Donations and Gifts Disclosure Statement to Minister or the Director-General

Donation or gift?	Name of donor (or ABN if an entity); or name of person who made the gift	Donor's residential address or entity's registered address or other official office of the donor; address of person who the made the gift or entity's address	Name of party or person for whose benefit the donation was made; or person to whom the gift was made	Date donation or gift was made	Amount/ value of donation or gift
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	11/03/09	$1,363.64
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Australian Labor Party - NSW	01/05/09	$909.09
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	18/05/09	$4,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	29/05/09	$500.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW (Millennium Forum)	18/06/09	$5,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	27/08/09	$272.73
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	08/09/09	$2,045.45
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	22/10/09	$1,363.64
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	26/10/09	$90.90
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	29/10/09	$454.55
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	14/01/10	$2,727.27
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW (Millennium Forum)	19/01/10	$5,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	09/02/10	$2,727.27
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	16/03/10	$1,200.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	16/03/10	$2,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	31/03/10	$5,500.00

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Political Donations and Gifts Disclosure Statement to Minister or the Director-General

Donation or gift?	Name of donor (or ABN if an entity); or name of person who made the gift	Donor's residential address or entity's registered address or other official office of the donor; address of person who the made the gift or entity's address	Name of party or person for whose benefit the donation was made; or person to whom the gift was made	Date donation or gift was made	Amount/ value of donation or gift
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	28/04/10	$6,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	31/05/10	$5,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	31/05/10	$227.27
Gift	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The National Party - NSW	10/06/10	$1,165.27
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW (Millennium Forum)	29/06/10	$5,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	29/06/10	$1,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	07/07/10	$1,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW Wollondilly SEC	15/07/10	$3,000.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	26/08/10	$250.00
Donation	31 000 004 651	Level 25, 66 Goulburn Street, SYDNEY NSW 2000	The Liberal Party – NSW	26/08/10	$909.09

Mining and Energy Division

Review of Environmental Assessment

Hunter Valley Operations North – West Pit

Consent 2003 Modification 3

Reference No: DA 450-10-2003 MOD 3

Submission

Construction Forestry Mining and Energy Union

(Mining and Energy Division)

Northern District Branch

November, 2010

On 23 April 2010, Coal & Allied Operations Pty Limited applied to the Minister for the Department of Planning seeking approval to extend its existing approved mining operations at Carrington Pit. Approval to extract these resources is being sought from the Minister for Planning, by way of a modification to the existing development consent for HVO North, DA 450-10-2003 under section 75W of Part 3A of the EP&A Act.

The Director General made the Environmental Assessment publicly available on the 8 October 2010, at the DoP Information Centre Sydney, Singleton Shire Council Offices and Nature Conservation Council Newtown.

The Union is pleased to take the opportunity to comment on the Hunter Valley Operations North proposal and related activities Environmental Assessment.

The Mining and Energy Division is a Division of the CFMEU under the Federal Workplace Relations Act 1996, with over 120,000 members, one of the largest in Australia. The Division covers several industries including the coal industry, coal ports, metalliferous mining industries, electrical power generation, oil and gas and the Nation's small coking industry.

The Northern District Branch of the CFMEU Mining and Energy Division, being the branch that on behalf of the organisation which is making the submission is the principal Union representing coal miners in the Northern District Coalfields of New South Wales. The Hunter Valley Operations (HVO) Complex with its site approximately 24 kilometres north-west of Singleton is wholly within the State's Northern District Coalfields.

The Union is familiar with the HVO Complex site and engaged the services of an Environmental Consultant with extensive experience in local government and environmental assessments on coal mining related projects.

After reviewing all the material and taking advice, the Union supports on balance the HVO North – West Pit Consent 2003 - Modification 3 Application Reference No. DA 450-10-2003 MOD 3.

Project Overview

Coal & Allied propose to extend the existing approved Carrington Pit by approximately 137 ha to the south-west, and extract approximately 17 Mt of in-situ coal from this area. The proposed extension of mining will have a life of approximately six years and is expected to be completed within the existing development consent period, which is currently approved to 2025.

Overburden is proposed to be emplaced in-pit, and two out-of-pit overburden emplacement areas are to be established on previously disturbed and rehabilitated land located immediately north of the proposed extension area. The proposal also comprises the following:

- The approved footprint of the Carrington evaporative sink will be extended, for long term groundwater management purposes;
- The impermeable groundwater barrier wall previously assessed for the western paleochannel will be realigned further south, to prevent groundwater migration from the Hunter River into the mine and migration of water from the mine into the Hunter River alluvium;
- A two stage, temporary levee and diversion system will be established to ensure that the proposed extension area is protected from flooding, and to enable the temporary diversion of an unnamed tributary of the Hunter River that presently runs in a southerly direction across the proposed extension area;
- A service corridor will be constructed along the southern boundary of the proposed extension area, which may incorporate water pipelines, an all weather access road and other services.

Consultation

Consultation was undertaken with the DoP, Department of Environment, Climate Change and Water (DECCW) and I & I NSW according to the proponent throughout the project design phase, and during the preparation of the EA.

The community has also been consulted during the development of the EA. This has been through existing C & A engagement tools, as well as community information sessions with project information available.

A summary of the issues raised by the community during the consultation process is detailed:

- Potential impacts on agricultural land;
- Land classification of alluvial river flats within the proposed extension area;
- Mining of alluvial river flats;
- Potential flooding impacts associated levee system;
- Potential noise and dust impacts, including amenity impacts;
- Siting for out-of-pit emplacement areas;
- Cumulative impacts;
- Provision of monitoring results to the community;
- Process and timing of proposal consultation and notification;
- Water quality testing for private storage tanks (potential dust impacts);
- Potential ecological impacts;
- Potential water impacts;
- Requirements for additional Aboriginal heritage surveys; and
- Appropriate recognition and offsetting of site CM-CD1.

The potential environmental risks were assigned a qualitative risk rating which details:

- High – groundwater;
- Medium – surface water, soils and land classes, noise and vibration, air quality and Aboriginal cultural heritage;
- Low – ecology, visual amenity, greenhouse gas emissions, traffic and transport, non-indigenous heritage, and socio economics.

Groundwater

Consultants Mackie Environmental Research conducted a groundwater study for the proposal.

Of note is the considerable existing groundwater information available for the regional and local area, derived from previous groundwater investigations, modelling and monitoring.

Geology over the majority of the proposed extension area consists of unconsolidated alluvium that immediately overlies the Permian coal measures. The majority of the proposed extension area lies within the western arm of the paleochannel. The paleochannel is characterised by shallow soil, and sandy-silty sediments overlying a clay layer of 2 to 6m thickness, which in turn overlies a mixed clayey, silty gravel sequence of similar thickness.

Existing groundwater monitoring data indicates that groundwater within the paleochannel alluvium is generally poor quality in its natural state.

Rainfall infiltration and recharge to the shallow alluvium have been limited over much of the defined paleochannel area due to the widespread occurrence of a thick and impermeable clay layer.

Overburden emplaced within the pit shell exhibit different hydraulic properties to the in-situ overburden and coal measures. Whilst the overburden materials are reshaped and rehabilitated they permit rainfall to infiltrate and percolate downwards to the floor of the pit shell. In order to inhibit spillage, a final void evaporative sink has been incorporated in the Carrington Pit closure plan.

The potential mining-related impacts on the groundwater systems within the paleochannel and the underlying hard rock regime have been previously assessed by the proponent using computer-based aquifer modelling techniques.

The proposed mining will require the removal of alluvium to access the coal. Saturation within the alluvium currently varies from zero at the northern boundary of the proposed extension area to about 3m deep along the southern boundary where a barrier wall is proposed.

The relatively low seepage rates are attributed to the strata depressurisation already evident around the Carrington Pit. It is noted that the hard rock seepage rates represent complete drainage of the mined strata based on porous media flow.

The quality of groundwater entering the mine pit is expected to reflect an average of water quality for the alluvium and coal measures generally. All seeped water will remain within the mine water management system.

Pre-mined groundwater flows are in a southerly direction towards the Hunter River. Recent monitoring (2010) indicates that the flows are now northward towards the existing mining pit (as predicted by MER in 2005).

The installation of the barrier wall will restrict the northwards leakage through the alluvium. However, subsequent to the installation of the barrier wall, there will still be sustained leakage via the coal measures, where deeper depressurisation induces downward flow from the alluvium.

The predicted future loss of Hunter River base flow of 0.05ML/day is calculated to represent 0.3 per cent of the very low river flow condition. This loss will reduce as water table recovery occurs in the final void. Seepage will be offset in accordance with regulatory requirements.

The approved evaporative sink will be extended to comprise a maximum surface area of about 100ha. The proposed long term steady state free standing water elevation for the evaporative sink is 40m above Australian Height Datum.
The void water is predicted to exhibit salinity in the very long term (+50 years). Since the pit shell and evaporative sink will be isolated from the Hunter River and the adjacent alluvium, and given the natural saline conditions of the paleochannel, it is improbable that water qualities beyond the final pit shell will be measurably affected. If anything according to the proponent they would be improved due to the reduction in saline groundwater that may occur under natural conditions.

There are no identified private boreholes or wells within the predicted zone of depressurisation and dewatering.

The only identified groundwater dependent ecosystem in proximity to the proposed extension area, is the population of River Red Gums (*Eucalyptus camaldulensis*) along the bank of the Hunter River and in the Carrington billabong area immediately south of the existing Carrington Pit. There will be no impact on the groundwater levels within the alluvium hosting this ecosystem.

The Union considers groundwater management and monitoring commitments to be implemented by the proponent, including the establishment of benchmarks against which impacts can be measured, trigger action protocols developed and mitigation strategies actioned to be adequate to ensure the integrity of this criterion.

Surface Water

A surface water study was prepared by consultants WRM Water & Environment and Water Solutions to assess the potential impacts of the proposal on surface water.

Surface water quality is monitored for HVO at 22 locations, in on-site dams and surrounding natural watercourses, including the Hunter River.

The proposal is potentially affected by regional flooding from the Hunter River to the south and local flooding from the Unnamed Tributary. Temporary levees, referred to as the Stage 1 (Years 1 to 3) and Stage 2 (Years 4 to 6) levees are proposed to protect the extension area from flooding.

At the conclusion of mining, the levees would be removed and the ground levels across the proposed extension area returned as close as possible to the pre-mining landform. Therefore, the existing conditions model represents the 'End of Life' scenarios.

The main findings from the flood assessment detail:

- The Stage 1 and 2 flood levees would effectively prevent flooding of the proposed extension area for events up to the 100 year ARI event;
- Runoff from the Unnamed Tributary catchment would be effectively conveyed around the levees by the proposed diversion. The proposed diversion would effectively convey the 10 year ARI within its banks;
- The 2 year ARI Hunter River design flood would generally be confined to the main channel. The Hunter River flood flows would exceed the capacity of the channel and inundate the floodplain in the vicinity of the proposed extension area for the 5 year ARI design event;
- There is negligible impact on flood levels along the Hunter River main channel for floods up to the 10 year ARI design flood, and a minor impact on the floodplain immediately adjacent to the proposed levee for the 10 year ARI design flood;
- The extent of the flood impact for the 100 year ARI design flood is confined to C & A owned land on the Hunter River floodplain immediately south of the proposed levee. The 100 year ARI flood levels along the proposed diversion drain would be up to 0.14m higher than existing conditions. It is expected that elevated flood levels would remain in these areas for 12 hours to 48 hours, depending upon the duration and severity of the flood event;

- Flood velocities along the Hunter River channel, with the levees in place, would generally remain unchanged from existing conditions.

Rehabilitation will be undertaken progressively across the mined area and will incorporate surface water management considerations.

The final void evaporative sink, located in the northern section of the existing Carrington Pit, has been designed to facilitate evaporative losses at a rate which is greater than the accumulation of groundwater within the pit shell.

Additional pit water would be generated by the collection of surface water runoff from areas draining to the open cut pit area and groundwater inflow to the pit. All water accumulated in the pit would be re-used and recycled in the HVO mine water management system.

There will be no increase in erosion potential of the Hunter River channel as a result of the proposal.

During the life of the proposed extension, relative reduction in the Hunter River flows due to the proposal would be small compared to the total flows in the Hunter River.

Management measures will be implemented to ensure there are no measurable adverse impacts on riparian and ecological values of watercourses within or downstream of the project area.

Soils and land classes

A soils and land resource study for the proposal was completed by consultants GSS Environmental.

The project area is located over lands owned by C & A. Land capability for most of the proposed extension area was identified as Class II and III, both of which are suitable for a range of agricultural uses. Post mining, this land will be rehabilitated back to similar to the existing capability. The majority of out-of-pit emplacement areas are Class III and VI land prior to mining. This land will be transformed to Class IV and VI land post mining, which will require land management practices to ensure maintenance of ground cover.

Nearly 50 per cent of the proposed extension area is Class 2 agricultural land prior to mining. This land will be transported back into Class 2 land post mining. Extensive land and soil management and investment by the proponent are proposed to achieve this rehabilitation outcome. An estimated 60 per cent of the out-of-pit overburden emplacement areas, post-mining, will be Class 4 land, and the remainder will be Class 3 land. Class 4 land is still marginally productive, suitable for low productivity grazing.

Noise and Vibration

An environmental noise and vibration study was prepared by consultants EMGA Mitchell McLennan was prepared for the proposal.

Blasting at HVO North occurs once per day; however it is not uncommon for two blasts to be undertaken in one day at larger mines or mines having multiple pits.

The potential noise overpressure and ground vibration from proposed blasting in the proposed extension area was determined using empirical formula. The results show that Receptor No: 10 will be too close to allow for any practical blasts to occur and therefore arrangements must be made well in advance of any blasts within 900m of this residence.

While the proposal is predicted to result in similar noise levels to the existing Carrington Pit, the approach to the management of noise from the whole of HVO North has been considered, including the implementation of both pro-active and reactive mitigation measures.

Noise modelling has indicated that under calm wether conditions, consent operational limits are satisfied at all private residences that are not already within a zone of affectation. During adverse INP weather conditions, predicted mine noise levels without mitigation are above the operational consent noise limits for eight of the assessed locations, and marginally above the consent acquisition limits at five of the assessed locations. After applying restrictions to the operation of some plant, noise levels are predicted to satisfy or be within 2dB of the consented operational noise limits at all assessed locations, and consent acquisition limits satisfied at all private residences that are not already within a zone of affectation.

Air Quality

An air quality study for the proposal was prepared by consultants PAE Holmes.

Air modelling undertaken by PAE Holmes has shown that the proposal is not predicted to result in any exceedances of the relevant DECCW or DoP criteria for annual average PM_{10}, TSP or dust deposition. The modelling included the predicted emissions from HVO North, as well as from surrounding mines and other particulate matter sources in the area.

The DoP 24-hour average PM_{10} acquisition is not predicted to be exceeded. A minor ($0.5\mu g/m^3$) exceedance of the DECCW maximum 24-hour average PM_{10} criterion is predicted to occur at one privately owned residence during year 1 of mining. This is only predicted to occur on one day over a one year period. No other exceedances of the DECCW criteria for 24-hour average PM_{10} are predicted.

Aboriginal Culture Heritage

An Aboriginal cultural heritage study for the proposal was completed by Central Queensland Cultural Heritage Management.

The entirety of the proposed extension area has been the subject of Aboriginal cultural heritage investigations. From these studies, a total of nine cultural heritage places have been identified as being located within, or immediately adjacent to the proposed extension area and which have not previously been destroyed under a finalised NPW Act s90 consent.

The management of five of these (CM1, the remaining portion of CM2, CM19, CM32 and CM-CD1) is variously covered by the CM-CD1 'Cultural Heritage Indigenous Management Agreement and/or the current development consent conditions. The remaining four (HVO-1121-1124) were identified during recent fieldwork completed in 2009-2010.

According to the proponent following extended consultation with the local Aboriginal community of the Upper Hunter Valley through the Cultural Heritage Working Group, a series of general and specific management actions were agreed for these places. Rio Tinto Coal Australia and Coal & Allied have committed to implement these management actions in full in co-operation with the CHWG.

Ecology

Numerous ecological surveys and investigations have previously been completed at HVO North. Surveys were carried out using a combination of habitat-based assessment and targeted sampling techniques.

While the majority of the study area is already cleared of native vegetation, there is some remaining vegetation, which will be cleared for the proposal, including approximately 0.89 ha of woodland. The proposed rehabilitation includes elements to mitigate impacts of vegetation clearing in the longer term, most notably, the rehabilitation of more than 50ha of woodland across the project area.

Diversion of the Unnamed Tributary will result in the loss of some poor to marginal aquatic habitat and riparian vegetation. Direct impacts to riparian vegetation as a result of the proposal are considered to be negligible due to the current absence and/or poor condition of existing riparian vegetation along the Unnamed Tributary, and the fact that the proposal does not include removal or direct impacts to any Hunter River riparian vegetation.

One EEC under the TSC Act was recorded in the study area, being the Central Hunter Box – Ironbark Woodland. Of the approximately 1.06ha of the community that occurs in the study area, approximately 0.89ha will be cleared and some 0.17ha may be indirectly impacted. This EEC was considered to be in a moderate to poor condition. Given the small area involved, the current degree of fragmentation of this patch of vegetation, and the proposed post mining rehabilitation of 4ha of this community, it is considered unlikely that the proposal would result in a significant impact on this community.

Two plant species recorded in the study area, Tiger Orchid and River Red Gum, are listed under Schedule 1 of the TSC Act. Measures to avoid the disturbance of the Tiger Orchid have been investigated and are not possible. Translocation of the specimen is proposed to mitigate the potential impact to this species. Similarly, avoidance of the single River Red Gum specimen was investigated but not possible. Mitigation measures include the ongoing management of existing nearby populations will be implemented, and it is considered highly unlikely that the proposal will have a significant impact on the endangered population of River Red Gums.

Visual Amenity

The potential impacts of the proposal on visual amenity have been assessed by considering visibility of proposed project components to surrounding areas, the visual absorption capacity of the area with respect to these components.

In the short-term, the appearance of the project area will change from rural to mining. The proponent indicates mining developments are a common feature of the local and regional setting, and the project area is contained within and immediately adjoining existing mining areas. It will only be visible from a small number of sensitive viewpoints.

The visual sensitivity of the area is assessed as being low to moderate, given that only a small number of people will be affected, all of whom have existing views of active mining areas which are similar in appearance to the proposal.

Progressive rehabilitation will occur to restore the rural character of the area, consistent with the surrounding landscapes. Accordingly, visual impacts of the proposal will be temporary and are not expected to be significant.

Greenhouse Gas Emissions

Estimates and assessment of GHG emissions from the proposal carried out by PAE Holmes found that GHG emissions from the proposal were unlikely to have any measurable environmental effect.

Traffic and transport

The proposal does not involve any changes to employee numbers or coal production, or any haulage on public roads. All vehicle movements for coal and overburden haulage will be internal and product coal will continue to be transported by rail to Port Waratah.

A section of Lemington Road will be temporarily closed when blasting occurs in the vicinity. During mining within the western portion of the proposed extension area, and in line with current practices, Lemington Road will typically be closed three to five times per week. These closures will be managed with a Road Closure Management Plan and Traffic Control Plan. Potential lighting impacts on Lemington Road users will be managed through Coal & Allied's existing environmental

standards and procedures. Closure of Old Lemington Road within the project area will not have any significant impact.

Non-Indigenous Heritage

A Non-Indigenous heritage assessment and consultation was undertaken by consultants ERM (2005a) for the project area.

This assessment found that there are no items or places of non-indigenous heritage significance located within or adjacent to the project area. Accordingly, no non-indigenous heritage management or monitoring measures are necessary for the proponent.

Socio-Economics

According to the proponent the proposal will result in a range of costs and benefits to society. The net production benefits of the proposal are estimated at a minimum of $482M. The proposal is also estimated to provide direct and indirect stimulus to the regional and State economy from the additional purchases by C & A and its employees.

It is considered that the proposal is justified, for the following reasons.

- It will allow the efficient transition from mining within the Carrington Pit into the adjacent extension area. It will enable the efficient extraction of an economic resource and provide for continued regional and local economic benefits;
- The site is suited for its proposed purpose and all lands are owned by the proponent;
- No significant adverse economic, social or environmental impacts are anticipated, subject to the implementation of the ministration, management and monitoring measures;
- The proposal is generally consistent with the relevant object of the EP & A Act.

In conclusion the proponent details the benefits of the proposal which sufficiently outweigh any costs.

In Summation

Through consultation a range of key issues were identified by the community. Each of these issues has formed a detailed component of the proponents EA. Based on comparative analysis of the key elements detailed in the Hunter Valley Operations North Statement of Environmental Effects, it is considered the Modification Activities to build on the attributes of existing project approval through the progression of mining onto land currently owned by the proponent. An appropriate risk assessment has been undertaken to identify any potential environmental impacts associated with the proposed Modification Activities. This risk assessment identified that there will be minimal environmental impacts associated with the proposed activities and that these can be avoided, further mitigated or controlled through the implementation of existing environmental management procedures or additional procedures that have been identified for these particular activities.

The Union on balance supports the HVO North – West Pit Consent 2003- Modification 3 Reference No: DA 450-10-2003 MOD 3 and asks the consent by granted.

Grahame Kelly
DISTRICT SECRETARY