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resourcing the future



Caroona Coal Project

Community Workshops August - September 2010

Acronyms and Abbreviations

CCAG	Caroona Coal Action Group
CCC	Caroona Consultative Committee
DECCW	Department of Environment, Climate Change and Water
EPBC	Environmental Protection and Biodiversity Conservation
NEPM	National Environment Protection Measure
NSW	New South Wales

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Executive Summary

In August and September 2010, BHP Billiton held a series of workshops to present up-to-date project information to the community on its Carooona Coal Project. The workshops were held in response to a community desire for clearer communication and closer engagement on a range of concerns about exploration work and any potential mine development.

The key concerns raised during the workshops included:

- groundwater, including hydrogeology, flood modelling and floodplain definition, exploration drilling and underground water, and use and acquisition of water;
- land access, particularly the number of negotiated land access agreements and BHP Billiton's approach to land acquisition;
- protection of agricultural land and the potential for agriculture and mining to coexist;
- the potential cumulative socio-economic and impacts on the region;
- the project approval process and regulatory requirements;
- planning and development, particularly the nature of the mining operation and impacts on infrastructure;
- direct impacts of mining, including subsidence, dust and biodiversity;
- Indigenous issues, particularly employment and protection of cultural heritage; and
- BHP Billiton's approach to community engagement.

This report contains a description of these issues as raised in the workshops, along with BHP Billiton's perspective and proposed actions to address the concerns.

Going forward, BHP Billiton wishes to continue to deepen its community engagement and will be working with interested stakeholders over the coming months to determine appropriate mechanisms to do this. This may include additional workshops, information sessions, further fact sheets or more inclusive participation of interested stakeholders involved in the environmental assessment process through working groups.

BHP Billiton would like to thank those that participated in the workshops for giving their input, insight and time. BHP Billiton continues to seek active engagement with all interested community members to help ensure its activities can contribute to the future economic, social and environmental prosperity of the Carooona region.

BHP Billiton welcomes feedback on this report. Responses can be sent to the Carooona Coal Project team at caroonacoalproject@bhpbilliton.com or by calling (02) 6746 4600 or 1800 216 266.

Introduction

Understanding and resolving community concerns is fundamental for BHP Billiton to achieve broad-based community support for its potential Carooona Coal Project. Since receiving the Carooona Exploration Licence in 2006, BHP Billiton has been working to understand the nature, quality and quantity of the resource to assess its viability.

Since the start of the Carooona Coal Project a number of people have expressed concerns about the project, and BHP Billiton acknowledges that not all of these have been resolved. BHP Billiton has made progress since late 2009 to be more open and inclusive in the way it engages and communicates with the community and this approach will continue through the project.

In August and September 2010, BHP Billiton and environmental consultants, Umwelt, presented up-to-date project information to the community at a series of workshops. The workshops, facilitated by stakeholder engagement firm Futureye, were held in Carooona, Quirindi, Gunnedah and Tamworth. A community meeting was also held at Walhallow. The purpose of the workshops was to:

- present current state of knowledge about the project;
- where possible, answer questions and respond to concerns from community members; and
- provide an indication of future steps in the project.

This report details the feedback and findings from the community engagement workshops.

To ensure the rigour and accuracy of the details of this report, two participants from each workshop were presented with records of issues raised in the workshops to verify the outputs.

This report includes BHP Billiton's proposed plans to address concerns raised through the workshops and broader community engagement. BHP Billiton hopes that the proposed plans demonstrate its commitment to deepening its community engagement.

The purpose of this report is to:

- summarise the issues raised in the five workshops held in August and September 2010; and
- outline BHP Billiton's plans to respond to and address those concerns.

Chapter 1 – Background

A snapshot of the Caroona Coal Project's history from 2006 to today.

In April 2006 the NSW Government granted BHP Billiton a five-year exploration licence (EL6505) to explore coal deposits in the Caroona area.

Since then, BHP Billiton has been working towards an understanding of the coal resource and its relationship to the surrounding environment. It plans to continue exploring until at least 2013. To date, the extensive exploration work has included drilling exploration holes, seismic surveys, aerial sensing and other geological work, as well as environmental monitoring, with a focus on establishing groundwater monitoring sites and gathering data about location and characteristics of aquifers.

Diagram 1 on the following page shows the exploration and potential mine development timeline.

In June 2006, the Caroona Coal Project CCC was formed. The intention of the CCC was to encourage discussion between appointed community representatives, relevant government agencies, other interested stakeholders and the Caroona Coal Project team. The Committee is chaired by Garry West.

In August 2008, BHP Billiton released an Interim Report to Stakeholders. This report identified a targeted area for further exploration. The targeted area represented 126 square kilometres of the 350 square-kilometre exploration licence area and was primarily ridge areas with some areas of flood plain. The target area was meant to reduce the zone of exploration, but not to reflect the mining area until further definitive exploration work was undertaken. The potential mining area will be a smaller area within the target area.

BHP Billiton ruled out open cut mining anywhere in the Caroona project and longwall mining under the floodplain of the Liverpool Plains. To support this commitment, BHP Billiton in conjunction with the NSW Government, agreed amendments (known as Special Conditions) to BHP Billiton's exploration licence. The conditions prevent BHP Billiton from applying for a mining lease in the Caroona Exploration Licence area that include any longwall mining underneath the deep alluvial irrigation aquifers or the floodplain or any open cut mining on the floodplain.

In 2009, the NSW Government established a Ministerial Oversight Group, chaired by former NSW Farmers Association president Mal Peters, to call for tenders for the conduct of the Namoi Catchment Water Study.

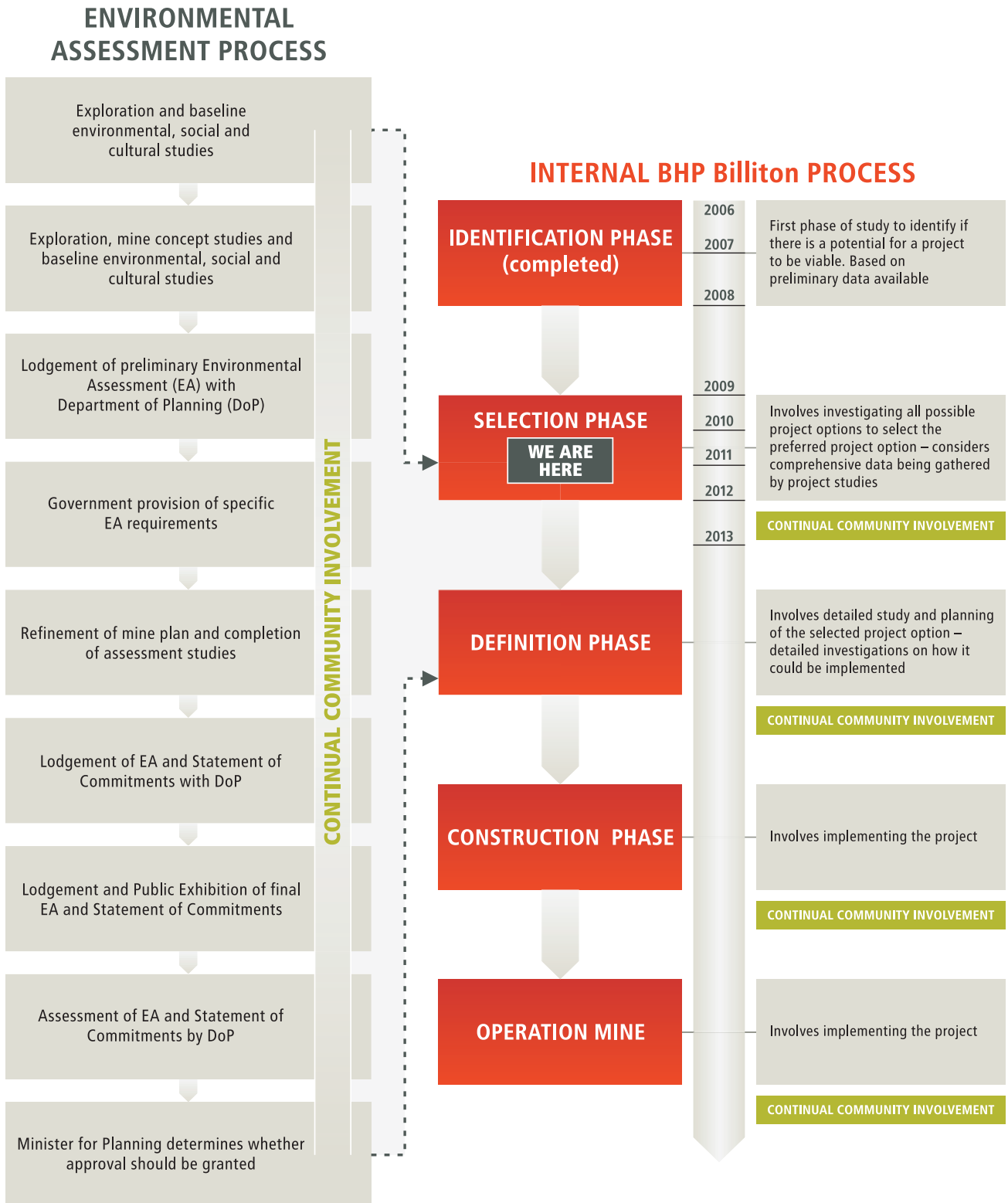
A number of parties have made funding commitments to this independent study, including the Federal Government and mining resource companies (including BHP Billiton). The tender was awarded to Schlumberger Water Services (Australia) Pty Ltd on 1 September 2010, and it is anticipated that the study will be complete in early 2012. BHP Billiton has committed to consider the outcomes of the independent Namoi Catchment Water Study in any future mining proposal. The CCAG has committed to enable exploration on its members' land as soon as the study was commissioned.

Late in 2009, BHP Billiton sought feedback from key stakeholders as part of the Caroona Coal Project's community engagement program. In February 2010, BHP Billiton publicly released the feedback in a Stakeholder Feedback Report. The independent report detailed a range of concerns and attitudes in the community about the Caroona Coal Project.

Some of the initiatives to come from this engagement and dialogue included:

- the commencement of Drilling Forums to work through issues regarding exploration drilling practices with the CCAG and an independent expert;
- an independent third-party review of BHP Billiton's water monitoring program so the community could be assured the BHP Billiton water study built a robust model of the groundwater systems;
- engaging the community in the recent series of workshops about prioritising their issues of concerns; and
- continuing to advocate for the Namoi Catchment Water Study and support its timely commencement.

Diagram 1: NSW Government environmental assessment process and BHP Billiton’s internal exploration and development process



Chapter II – Key Issues and Concerns

This chapter includes a summary of each key issue raised by participants in the five community workshops. A section is devoted to each issue and includes an overview of the concerns raised by community members, BHP Billiton's perspective, and future actions to be taken.

A. GROUNDWATER

Issues

- The possible impact of underground mining on water resources
- Understanding of the aquifer system and its value to local and regional land use
- BHP Billiton's approach to the incorporation of the Namoi Water Study into its project plan
- The potential need for remediation to damaged aquifers
- The definition of the floodplain
- Exploration drilling and underground water
- BHP Billiton's approach to understanding recharge issues and flood modelling

Impacts on hydrogeology

Issues raised

Alluvial aquifers are a significant source of water in the Liverpool Plains region. They sustain extensive irrigated agriculture and are important to the water supply for a number of towns and communities.

At all workshops, concern was expressed that mining activities might impact the quality and quantity of region's extensive aquifer system which in turn may impact agricultural producers. Coupled with this is a concern from some in the community that the State Government (through providing the exploration licence) and BHP Billiton are willing to place this system at risk.

Some stakeholders believe BHP Billiton does not have an adequate understanding of the complexity of the aquifer system, the interconnectivity of water resources or the role of the floodplain. Some are concerned that if the flood plain is not modelled correctly and if BHP Billiton fails to fully investigate the region's hydrogeology, the region's water resource may be compromised.

BHP Billiton's perspective

BHP Billiton understands the importance of underground water to the Caroona area and has focused a considerable amount of its exploration work on understanding the water resource in order to prevent damage or minimise impacts on it.

Cooperation from landholders has been important to help develop an understanding of the underground water resources.

Experts have been undertaking extensive environmental monitoring and investigation of both surface and underground water. This work will continue during the exploration phase, with the knowledge base increasing from ongoing monitoring.

This work is helping to improve the knowledge and data available to understand the underground water resource. BHP Billiton has undertaken to share this data as part of the Namoi Catchment Water Study.

In addition to the technical work that is being undertaken, additional protection of the water resources has also been added to the exploration licence.

As part of the Special Conditions of the exploration licence negotiated with the NSW Government, BHP Billiton is prevented from applying for a mining lease that includes:

- longwall mining underneath the deep alluvial irrigation aquifers;
- longwall mining underneath the floodplain; and
- open cut mining on the flood plain.

BHP Billiton has also committed to the Senate Inquiry into Food Production that any land outside the defined targeted area as set out in the August 2008 Interim Report to Stakeholders is a 'no go zone' for mining of any description.

BHP Billiton agrees that any unacceptable impact to aquifers used for irrigation should be avoided. As stated in its Terms of Reference, the Namoi Water Catchment Study has been commissioned to provide a spatial understanding of ground and surface water flows in the catchment, and to undertake a strategic assessment of the likelihood of potential impacts posed by coal and gas development in the Namoi catchment on the quantity and quality of surface and ground water resources in the catchment.

BHP Billiton supports the study and has committed to make a contribution to its costs. It has also agreed to adjust its project timeline to account for the 18 months required to complete the study. BHP Billiton has said it will wait for the findings of the Namoi Catchment Water Study to consider as part of its mine plan before it lodges a mine development proposal for assessment.

BHP Billiton proposed actions

- BHP Billiton will continue to undertake exploration, monitoring and investigation work in relation to the water asset at Caroona. At the same time it will provide regular updates of its emerging understanding of the water resource in a form to be agreed with the community.

Flood modelling and floodplain definition

Issues raised

Detailed flood modelling is currently being carried out to understand the existing variability of water movement across the plains in different flood events. The model being developed for this area will be able to be used to predict impacts of different mine designs on surface water movement. Definition of the floodplain will consider the outcomes of flood modelling, geomorphology investigations and relevant guidelines.

Stakeholders are seeking information on the framework BHP Billiton will use for flood modelling.

BHP Billiton perspective

BHP Billiton's design of its flood response is divided into two phases. The first phase is to gather technical information to form the model. The second phase is to consult the community regarding model results, including a verification process regarding historical flood records at a selection of landholdings. This process is undertaken by interviewing members of the community.

BHP Billiton proposed actions

- BHP Billiton and relevant experts will continue their work to learn more about the nature of the water resource in the Caroona area.
- At the same time, BHP Billiton will work with relevant industry groups and State Government on basin wide water issues, where appropriate.

Exploration drilling and underground water

Issues raised

Some community members have expressed concern about the impact of exploration drilling on underground water resources. There is particular concern that exploration bores could lead to the cross contamination of aquifers.

BHP Billiton's perspective

Exploration drilling helps BHP Billiton to understand the geology of the area, locate and measure the depth and quality of coal seams and measure the depth and quality of aquifers where present. All monitoring bore holes are licensed with the Department of Environment, Climate Change and Water and are drilled by a licensed water driller.

In accordance with the NSW Government approved Exploration Environmental Management Plan, BHP Billiton seals slim core bore holes when drilling is complete and core samples have been extracted. The holes are sealed with cement which eliminates the potential for cross contamination of groundwater.

BHP Billiton proposed action

- BHP will continue discussions with the CCAG to identify any remaining community concerns about drilling.
- BHP Billiton is willing to reinstate the Drilling Forum with the CCAG to ensure any residual concerns in the community are addressed.

Chapter II – Key Issues and Concerns continued

B. WATER USAGE

Issues:

- BHP Billiton's predicted future water needs
- BHP Billiton's approach to purchasing water
- Impacts of BHP Billiton's size and purchasing power on the price water

Issues raised

Some stakeholders are concerned about the amount of water that will be required to operate a coal mine in the Caroona area. Due to water reforms, including the proposed Murray Darling Basin Plan, and concerns about the impact of climate change, there is a fear that water is becoming increasingly scarce and the development of large scale mining will further impact on the availability of water. Compounding these concerns is a belief by some that mining is an inferior use of water to agriculture.

BHP Billiton's perspective

BHP Billiton's goal is to be a net neutral water user. This means that ideally a future mine would only use water available at the mine site with no or minimal additional water needed from external sources for its mining operations.

However, until further exploration has been conducted, it is too early to assess the potential water balance of a mine at Caroona. In addition, water requirements vary during the life of a mine. It is therefore possible that water would need to be purchased at least some of the time during a mine's life. In the event that extra water is required, BHP Billiton would purchase water from the market.

While mining accounts for only a fraction of NSW's water use at 2 per cent, BHP Billiton understands that expectations of some community members about the volume and efficiency of water use by mining is very high.

Acquisition of water

Issues raised

Some stakeholders are concerned that, as a new entrant into the region, BHP Billiton will use its size and purchasing power to purchase all available water, decrease farmers' access to water and, in doing so, increase the price of water. These fears are compounded by reductions in farmers' water allocations as a result of government policies to address over-allocation of local irrigation sources.

BHP Billiton's perspective

During the Definition phase (refer Diagram 1), BHP Billiton will have developed a water balance for the mine and will know whether or not it needs to acquire water or not. BHP Billiton's environmental assessment will detail its water balance, sources and uses of water.

BHP Billiton's proposed actions

- BHP Billiton is prepared to host an information session or provide other material to explain how water is used in longwall mining and the steps involved in understanding the specific water balance for an underground mine.
- Through consultation, BHP Billiton would like to learn more about the community's expectation of BHP Billiton's use of water in a future mine.
- BHP Billiton will engage the community on the steps it has undertaken (as a company) to reduce its water requirements in its activities.
- During 2011, BHP Billiton is willing to engage with the CCAG to discuss its approach to buying water and to exploring the likely implications for the local farming community.
- As the water balance studies are progressed for this project, BHP Billiton will share the results with the community and seek feedback prior to completion of the environmental assessment.

C. LAND

Issues

- **The true number of negotiated land access agreements**
 - **BHP Billiton's approach to land acquisition**
-

Land access

Issues raised

There is concern among some stakeholders that BHP Billiton is publicising an inflated number of successfully negotiated land access agreements to overstate the size of support for its proposed mine. It is perceived that BHP Billiton is intentionally trying to marginalise and pressure landholders who have not yet negotiated the terms of their land access arrangements as a part of a broader strategy to divide the community.

BHP Billiton's perspective

BHP Billiton has publicly stated that there are currently over 80 land access agreements in place. While technically correct it doesn't reflect the fact that more than one access agreement has been negotiated with some landholders. BHP Billiton has negotiated land access agreements with a smaller number of landholders than this figure of 80 suggests.

BHP Billiton has been in discussions for a number of months with the CCAG, as a representative of some local landholders, about land access arrangements. While BHP Billiton acknowledges that this process has taken longer than the CCAG would like, BHP Billiton is committed to finding an outcome that enables drilling work to continue while satisfying landholders' concerns.

BHP Billiton's proposed actions

- BHP Billiton will work closely and openly with individual landholders and members of the CCAG over the coming months to attempt to clarify land access matters and seek agreement. This may include discussions around expectations and requirements and ideally, will lead to agreement around land access arrangements that are mutually satisfactory.

Chapter II – Key Issues and Concerns continued

D. POTENTIAL OF AGRICULTURAL AND MINING COEXISTENCE

Issues

- The potential impacts on agricultural water supplies
- BHP Billiton's plan to protect agriculture
- How successful coexistence is measured
- BHP Billiton's approach to longwall mining

Protection of agricultural land

Issue raised

A key message expressed in the community workshops was a concern about the potential impact of the expansion of mining in the region on the local agricultural industry and the communities that depend upon agriculture. There are broader concerns about food security and discussion about protecting prime agricultural land for future generations. There is also a belief by some in the community that landholders' rights are perceived as secondary to the rights of miners.

Aspects of underground mining that have the potential to impact on local agriculture include:

- land use changes (on the ridge country) from grazing to mining;
- impacts on water resources;
- subsidence from longwall mining and associated landform changes and impacts on buildings/infrastructure;
- dust and noise;
- use of infrastructure (road/rail) typically used only or predominately for agricultural purposes; and
- increased competition for labour.

BHP Billiton's perspective

Mining and agriculture are considered to be the two most important industries in rural and regional Australia and local communities and economies can benefit if successful coexistence models can be developed.

BHP Billiton has made several decisions about a potential mine in response to community concerns about impacts on agriculture. These include a decision to mine underground (i.e. longwall mine) and the decision to not longwall mine beneath the floodplain. This recognises the importance of protecting prime agricultural land and water resources, which is vital for a prosperous agricultural industry.

In response to concerns about potential impacts of mining on agriculture and water resources, BHP Billiton will not finalise a mine plan until the completion of the Namoi Catchment Water Study and will consider the study as part of its mine planning process.

BHP Billiton will continue to improve its understanding of potential impacts on agriculture and how it can address them. This includes continuing the work with its independent environmental consultants, Umwelt Australia Pty Ltd, to

understand the environmental risks posed to agriculture, as well as the social and economic risks.

As part of Umwelt's work, baseline data will need to be collected in order to determine the basis to measure any impacts on agriculture in the area.

BHP Billiton proposed actions

- BHP Billiton would like to convene a forum or working group to develop a coexistence framework that seeks to address the issue of maintaining a sustainable long-term agricultural industry alongside mining at Caroona. BHP Billiton would propose working closely with the CCAG and other interested agricultural groups to develop the framework. Further definitions of the framework would require development over the coming months, and BHP Billiton is willing to allocate resources to establish an appropriate forum and method to enable that development.
- The coexistence framework would include specific milestones that address community concerns about agriculture and mining coexisting in the Caroona area.
- Umwelt will provide best-practice case studies of agricultural and mining coexistence as input to a locally-based framework.
- The working group would report back regularly to the community via the CCC.

E. SOCIO-ECONOMIC IMPACTS

Issues

- The modelling and assessment of the social impacts of mining, particularly on smaller towns
- Ensuring labour supply and the impact of wage discrepancies on local labour supply
- Utilisation of skilled workers
- Sourcing employees and BHP Billiton's policy on fly-in, fly-out shift schedules

Issues raised

Concerns were raised that the growth of mining in a region can lead to socio-economic impacts such as competition for resources with local, family and farming enterprises. A key theme at some of the community workshops that the development of a mine will create a skills shortage, particularly in trades.

Another concern is the social impact of the shift patterns traditionally associated with the mining industry. It was noted that the shift roster system used by the mining industry may discourage families from moving to the region when it is possible to commute from other areas.

BHP Billiton perspective

Addressing these concerns will require a concerted effort to understand the local agricultural economy. BHP Billiton's Community Fund is one mechanism for addressing or offsetting socio-economic issues, such as developing a functional employment program, indigenous enterprise initiatives and apprenticeship programs.

To date, BHP Billiton has spent or committed over \$3 million across a range of community initiatives in the area, including community development projects, education, health, indigenous development and sport/arts sponsorships.

BHP Billiton has already supported training programs such as the Career Engagement Program (54 students to date) with over 30 students gaining employment through an apprenticeship or traineeship. Another 12 students will start next year. 21 students are currently progressing through BHP Billiton's University Scholarship Program. BHP Billiton will continue to work with education and training providers, as well as local businesses to develop and support skills and employment programs.

BHP Billiton has committed to exploring how to manage its roster system to encourage employees with their families to settle in the region and enhance the local economy.

Although final numbers haven't been determined, BHP Billiton predicts it will require 250 to 300 employees for an operational single longwall mine. While the industry does pay relatively high salaries, BHP Billiton believes that employment conditions such as long shifts, night shifts, working underground and the skills required do not necessarily make the industry an attractive option for everyone. Attracting workers may therefore be difficult.

BHP Billiton's resourcing strategy for Carooona will be to attract workers to settle in the area. To achieve this, BHP Billiton is keen to work with local employers, Councils and business organisations to develop employee attraction and retention strategies for the region and ensure that its future hiring won't cause disruption to local businesses.

Recognising that it will compete with local employers for apprentices in the future, BHP Billiton has also offered to support an apprenticeship program now to increase the available pool for the future.

The potential socio-economic impact on people, families and communities at Carooona will form part of the environmental assessment process which involves consideration of environmental, social and cultural aspects of the project. The process has already begun with the identifying of key focus areas for community investment in consultation with a variety of community stakeholder groups. Every contact with a community member provides useful feedback to BHP Billiton and contributes to a deeper understanding of the terms on which the community will accept the benefits a mine will bring.

BHP Billiton proposed actions

- BHP Billiton will continue to participate in or engage with a number of forums considering socio-economic impacts, including the relevant local government authorities and chambers of commerce.
- BHP Billiton will continue to engage with employment, training and industry stakeholders to seek opportunities for community investment initiatives that build the local pool of skilled tradespeople.
- Further socio-economic analysis will be undertaken as part of the environmental assessment process during the current phase of exploration (Selection phase).

Cumulative impacts

Issue raised

Another concern raised by the community was that of the cumulative impacts of mining across the regions various operations and potential upcoming projects. This concern is based on the fact that a number of companies are in the area exploring both for coal and coal seam gas. As more mining companies become established in the area, the cumulative effect of future mines are likely to result in significant social and environmental impacts.

BHP Billiton perspective

BHP Billiton has acknowledged that developing an understanding of cumulative effects on the local community is essential to any mine plan. A key element of being able to gauge and mitigate cumulative mining impacts will be to consider the affected region as a whole. BHP Billiton will continue to be part of a group trying to develop a better outcome for the whole region.

BHP Billiton proposed actions

- BHP Billiton will continue to participate in or engage with a number of forums considering regional and/or cumulative impacts, including the Minerals and Energy Working Group and the Namoi Regional Organisation of Councils.

Chapter II – Key Issues and Concerns continued

F. PROJECT APPROVAL PROCESS AND REGULATORY REQUIREMENTS

Issues

- How the planning process and regulatory framework operates
- Whether the project will be assessed by the Planning Assessment Commission
- Whether a mining project has ever been stopped by a Planning Assessment Commission process in the past

Issues raised

Many stakeholders believe that the government is increasingly reliant on mining royalties and is therefore predisposed to approving projects. There is a belief among the community that the number of projects that have been accepted despite significant environmental and social issues is an indication that only economic considerations are taken into account.

Some community members feel they do not have a thorough understanding of the planning process, what BHP Billiton is required to do by law, and when and how the community will be engaged throughout the process. Others have a low level of trust that the government and BHP Billiton will be working in the best interests of the community throughout the process.

There is a concern that once an initial mine approval process is complete, the mines operations can be expanded without further approval.

BHP Billiton's perspective

Any application for mine development or subsequent expansion must undergo an environmental assessment to be approved.

Developments of State significance, including coal mining and associated works are considered under Part 3A of the *Environmental Planning and Assessment Act 1979* which is administered by the NSW Department of Planning. The Planning Assessment Commission may be requested to conduct independent review at any stage of the process.

A detailed explanation of the Part 3A planning process can be obtained from the Department of Planning's website.¹

The key steps in the planning process include:

1. consultation with government agencies, community and other stakeholders regarding issues to be addressed, prior to, and during, extensive technical studies as part of preparation of an environmental assessment;
2. exhibition, consultation and review of the environmental assessment; and
3. the Department of Planning's assessment and Minister's determination.

Other than the Part 3A process, other approvals required for mine planning approval include:

- Environment Protection Licence from the NSW Department of Environment Climate Change and Water;
- mining lease grant from Investment and Infrastructure NSW;
- water management approvals from the NSW Office of Water;
- Roads Act approvals;
- permits to occupy or close crown roads; and
- potentially, Federal Government approval under the Environment Protection and Biodiversity Conservation Act.

BHP Billiton is aware that despite these broad and extensive project approval processes, community concerns remain. BHP Billiton wants to achieve broad community acceptance of any future mine development. This will require BHP Billiton to engage more comprehensively than if driven solely by the approvals process.

While BHP Billiton has held the Carroona Exploration Licence since 2006, it is aware that its engagement efforts have not always been effective. The community workshops on which this report is based show BHP Billiton is committed to increasing meaningful engagement so that it can make its best attempt to build a mine that enhances the local economy and respects the environment.

The engagement process has been developed to create accountability mechanisms, increase the level of transparency and increase responsiveness before the project enters the formal assessment process so that any concerns can be resolved.

BHP Billiton proposed actions

- BHP Billiton will hold more community workshops well in advance of any Part 3A approval submission to explain the Part 3A approval process in detail. All ongoing community input as part of the engagement process is extremely valuable in ensuring that the environmental assessment and associated technical studies are scoped in a manner that considers key community concerns.
- These workshops could include a discussion of other legislation required prior to development of a mine.

¹ <http://www.planning.nsw.gov.au/DevelopmentAssessments/Majorprojectassessments/tabid/203/Default.aspx>

G. PLANNING AND DEVELOPMENT

Issues

- Mine life
 - Longwall versus open cut mining
 - No mining under the floodplain
 - Coal transportation
 - Rail usage
-

Nature of the mining operation

Issues raised

Many stakeholders would like to know the details of where the mine will be located, how big it will be and what it will look like. Stakeholders are also interested in what the impact on existing infrastructure such as rail could be. Some stakeholders expressed frustration that BHP Billiton appears to be unable or unwilling to give them the level of detail they are seeking now about future mine development.

Some stakeholders believe that open cut mining is the only way to access the coal reserve at Caroona. Others raised a concern that longwall mining will only remove a fraction of the available coal from the seam and will therefore waste much of the asset.

There is uncertainty from some stakeholders of how BHP Billiton's commitment to not longwall or open cut mine under the floodplain relates to the possible construction of road tunnels under the small area of floodplain at the base of the ridge country in the target area.

BHP Billiton's perspective

BHP Billiton is aware that some stakeholders are seeking firm answers now so that they can make their own assessments and satisfy their own concerns about the impact of mining and the future of the region.

BHP Billiton envisages that a mine would operate for between 20 and 50 years. This period would see the establishment of several longwall mines within the parameters of the target area. BHP Billiton will be able to provide more specific information on proposed mines should the planning move into the Definition phase. This is not expected to happen before 2013 at the earliest.

BHP Billiton has publicly committed to no open cut mining anywhere in the exploration area. The use of longwall mining (i.e. underground mining) is preferred for these particular coal seams on economic and environmental grounds. Recognising that stakeholders are seeking further details, BHP Billiton is willing to continue with community information programs around longwall mining.

BHP Billiton may need to construct some underground roadways beneath the small area of floodplain around the base of the ridges in the target area as part of the mine infrastructure. However, these underground roadways are designed to be stable and not collapse and therefore do not produce subsidence. There is no plan to transport the coal underground from mine to mine (e.g. Doona to Nicholas Ridge).

BHP Billiton proposed actions

- BHP Billiton understands that the community is interested in what the design of a mine might entail. While it is too early to predict aspects of mine design at Caroona, BHP Billiton is willing, in the meantime, to provide opportunities for members of the community to learn more about longwall mining and how mines are constructed and operated.
- The nature of this public consultation could be agreed with interested community members during early 2011.

Infrastructure impacts

Issues raised

A prominent concern raised by the community regarding impacts on infrastructure is increased usage of rail for coal transportation will infringe on the capacity to transport agricultural produce from the region. There is also concern that the requirement for rail upgrade will impact and delay the current agricultural uses of the network. There is a perception that the economic power of BHP Billiton will dominate the infrastructure resources, making it more difficult for farmers to access the rail when needed.

BHP Billiton perspective

The impacts of BHP Billiton on road, rail and other relevant public infrastructure will be assessed in the environmental impact assessment which will consider the existing capacity of infrastructure, the additional use of infrastructure generated by the project and the cumulative impacts, such as other existing or approved usage.

BHP Billiton proposed actions

- BHP Billiton understands that the community is interested in the impacts on local infrastructure of a proposed mine. While it is too early to predict aspects of mine design at Caroona, BHP Billiton is willing to provide opportunities for members of the community to learn more about mine access and infrastructure requirements.
- The nature of this public consultation could be agreed with interested community members during early 2011.

Chapter II – Key Issues and Concerns continued

H. OWNERSHIP OF RESOURCES

Issues

- Ownership of coal resources
- Whether BHP Billiton is in a race for resource access with Santos

Issue raised

Some landowners have expressed a deep sense of dissatisfaction with the regulatory regime that limits the level of control landowners have over their properties, and that while they may own their land, they don't own the minerals resources sitting underneath. This is a point of contention with landowners and partially relates to land access issues between landowners and mining and gas companies that are becoming more prevalent throughout Australia, particularly in NSW and Queensland.

BHP Billiton's perspective

NSW's mineral resources are owned by the State Government (the Crown) on behalf of the people of NSW. Industry and Investment NSW acts as steward of these resources and issues licences or leases which provide access to the resources in return for royalties.

So while a landholder may hold freehold or leasehold title over a parcel of land, any minerals on or below that land belong to the people of NSW via the State Government.

A holder of an exploration licence must negotiate an access arrangement with the respective landholders before exploring on their land. A licence holder must negotiate any compensation payable as a consequence of the exploration activities.

Overlaying BHP Billiton's exploration licence area stands an exploration licence for gas resources which is held by Carbon Minerals Limited. BHP Billiton is not conducting a 'race to the resource' with Carbon Minerals. Each company holds an exploration licence specific to its selected commodity (i.e. black coal and natural gas respectively).

I. SUBSIDENCE FROM LONGWALL MINING

Issues

- Subsidence impacts on water quality, quantity and recharge from non-floodplain land
- Impact of different mining techniques on duration of subsidence
- Subsidence prediction process

Issues raised

One effect of longwall mining is surface subsidence. Some stakeholders have expressed concern that subsidence can be a delayed process taking anything from 10 to 100 years to occur and that this time delay would make it very difficult to mitigate the impact of subsidence in advance.

BHP Billiton's perspective

Subsidence that occurs as a result of longwall mining is reasonably predictable in its magnitude, manifestation and extent.

In modern longwall mines, the effects of subsidence usually appear at about two to three weeks. There may be further subsidence when the neighbouring longwall panels subside.

Underground roadways are constructed so that they do not result in subsidence and would not be constructed outside of the targeted exploration areas. Underground roadways will not be used to link target areas under the floodplain.

Detailed studies of the area to understand the impact of subsidence at Carroona will be undertaken as part of the environmental assessment requirements mandated by the NSW Department of Planning under the *Environmental Planning and Assessment Act 1979*.

Delayed subsidence is a problem that existed with some old mines that used different mining techniques (such as pillar extraction). It is no longer considered a problem with modern longwall mining techniques.

As part of the assessment process, subsidence experts perform a detailed analysis on the proposed mine site and are able to assess the level of potential impact to surrounding areas.

BHP Billiton proposed actions

- Subsidence is a complex technical issue that is highly dependent on geology, topography and mine design. BHP Billiton is willing to host public information forums during 2011 to explain some of the technical aspects of subsidence and how mine design can help to minimise the impacts. The provisions of the Mine Subsidence Compensation Act and other relevant processes for providing for compensation to landholders will also be discussed in these forums.
- Although BHP Billiton is unable to provide specific information about subsidence of a future mine at Carroona until much later (i.e. in the Definition phase), it is willing to keep the community informed of the results of modelling as they become available at that time.

J. DUST

Issues

- **The purpose, function and location of the dust monitors**
 - **BHP Billiton's approach to the impacts of dust on health**
 - **The reason for conducting dust monitoring in the Hunter Valley**
 - **The potential of dust from coal trains**
 - **The anticipated levels of dust production and the regulatory framework**
-

Issues raised

There are concerns in some parts of the community about the impacts of dust from coal mining, that dust from coal mines cannot be reduced and that mining companies avoid responsibility by denying individual contribution toward cumulative or combined impacts. There was also some concern about the baseline monitoring process. A number of stakeholders held the view that BHP Billiton placed monitors alongside a dusty road to demonstrate that dust was already in existence, in order to later deny responsibility for dust levels.

BHP Billiton's perspective

BHP Billiton is aware of concerns relating to dust and is required to undertake baseline monitoring including for dust loads as part of NSW Department of Environment, Climate Change and Water and Department of Planning assessment process. The sites of the dust monitors were selected by environmental advisers Umwelt (Australia) Pty Ltd which used an independent air quality expert Pacific Air & Environment Holmes to decide where to place the monitors, in consideration of available land access at that time. As dust and meteorological data is collected, the monitoring will be refined in consideration of monitoring results, community feedback and further land access availability.

The data collected is used to help predict the impact of a mine development. If BHP Billiton's dust load is anticipated to take the dust levels to higher than the state legislation allows it will need to reduce the project dust emissions to enable its operations to be approved and licensed. The National Environment Protection Measure (NEPM) Ambient Air Quality standards provide a critical frame of reference for air quality. The Ambient Air Quality NEPM introduced in 1998 sought to make the first policy connection between dust particles and health. The National Environment Protection Council determined that a relevant goal that dust concentration did not exceed 50 parts per million (ppm) of particulate matter with a size of 10 microns (referred to as PM10) when measured over 24 hours, more than five times a year.

On the current timeline, BHP Billiton will not decide where to place its infrastructure until the Definition phase and therefore will not be able to identify the possible dust impacts of that decision before then.

BHP Billiton's proposed action

- BHP Billiton welcomes input from the community on the placement of dust monitors. Umwelt, in conjunction with the air quality expert, will consider community recommendations of further monitors for the baseline survey.
- BHP Billiton is happy to provide data to the community from dust monitoring as has already been done through the CCC. BHP Billiton is happy to provide regular periodic updates through a similar process (say every 12 months). Relevant experts could be provided to discuss the results and the potential implications on mine design at Caroona.

Chapter II – Key Issues and Concerns continued

K. BIODIVERSITY

Issues

- The length, format and extent of the ecological study of the region
- Whether ecology at Caroona is significant enough to stop the project
- The availability of the results from the ecological studies
- BHP Billiton's approach to tree felling
- The role of the *Environment Protection and Biodiversity Conservation Act 1999* to the area and when it will be triggered

Issues raised

Some stakeholders are concerned about the impacts on the ecology of exploration drilling and of an underground mine and how the environment is protected. Some stakeholders want to be involved in flora and fauna mapping as part of the ecological studies.

BHP Billiton's perspective

Umwelt (Australia) Pty Ltd is currently conducting baseline ecological surveys aimed at ensuring the impact on ecology is minimised.

In accordance with the exploration environmental management plan (a State Government requirement), ecologists inspect each proposed exploration drilling location, identifying ecological values and provide recommendations. To date, recommendations have been made about site specific rehabilitation and relocating drilling sites to avoid significant ecological features.

Where possible, exploration drilling sites are located in areas previously cleared or disturbed by existing land uses (such as agricultural activities, road construction and forestry) to minimise impacts on ecological values.

As the project progresses, further detailed ecological studies will be undertaken including flora surveys, day and night bird surveys, spotlighting, reptile and amphibian surveys, mammal sampling and tracking, and aquatic flora and fauna surveys. The results of these studies will be considered in project design and development of specific ecology management processes, including potential offsets to compensate for impacts on biodiversity values.

The assessment process includes a focus on species and communities that are listed as threatened or endangered in accordance with the NSW Threatened Species Conservation Act. It is also likely that the proposed mine will also require federal approval before it can proceed. Under the *Environment Protection and Biodiversity Conservation Act 1999*, projects that are likely to have an impact on a matter of national environment significance may require approval from Federal Government Minister for the Environment before they can proceed. Whether this approval is required depends on several factors, including the extent of the impact. One of the eight matters of national environmental significance (or EPBC triggers) is an impact on listed threatened species and ecological communities.

BHP Billiton and Umwelt understand that as with all studies that contribute to the environmental assessment process, the ecological studies should involve thorough engagement with the community and other relevant stakeholders. They have previously undertaken to explain the detailed process of their ecological studies to interested stakeholders.

Umwelt is also considering ways to involve interested stakeholders in the ecology data collection and aspects of field survey process so that local knowledge can be incorporated into shaping knowledge of the area. This will not only allow interested community members to have insight into the process but will also contribute to the accuracy and veracity of the ecological studies.

BHP Billiton proposed actions

- BHP Billiton would welcome community engagement to discuss its ecological survey work to date, results of the studies, planned further work and to provide a means for local knowledge to be considered in the process. BHP Billiton has requested that ecology be included as a key agenda item for an upcoming CCC meeting. Results of survey work could also be shared on an ongoing basis via an acceptable process with follow up engagement on results shared with the community as appropriate.

L. INDIGENOUS ISSUES

Issues

- Indigenous employment
 - Protection of Aboriginal cultural heritage
-

Indigenous employment

Issues raised

Some stakeholders are interested in whether opportunities presented by the development of a new mine would be available and accessible to the indigenous population. BHP Billiton has been working with indigenous groups and a number of agencies to find opportunities for indigenous people for the duration of the project.

The indigenous community wants to be assured that the potential mine will not impact on cultural heritage or the community's way of life.

BHP Billiton's perspective

BHP Billiton has committed to encouraging and facilitating Indigenous employment in the future. However, it is too early to begin an official interview process, or to start allocating employment opportunities in connection to the mine project.

Partly in response to community concern about the survival and prosperity of indigenous employment, BHP Billiton has set up the Caroona Coal Project Community Fund. A key focus area of the fund is to significantly improve the ability of the local indigenous community to join the workforce and be economically independent.

Eligible projects for funding consideration include:

- programs that build life skills in the local Indigenous community, particularly in during early stages of mine development;
- projects that assist/support the BHP Billiton Caroona Coal Project designated communities of Liverpool Plains and Gunnedah Shires;
- programs that build local indigenous labour supply; and
- programs that contribute to encouraging and improving indigenous education standards and job readiness.

Protection of Aboriginal cultural heritage

As BHP Billiton advances its mine proposal, a further detailed assessment of the Aboriginal and archaeological values of the area will be undertaken, covering both direct and indirect impacts. As part of the exploration process, inspections have been conducted of potential drill locations, with representatives of the Wallhallow Aboriginal Local Aboriginal Land Council and an archaeologist. These inspections have been very valuable in ensuring avoidance of Aboriginal sites during the drilling process and are also building the knowledge of aboriginal sites in the area. Once further exploration is complete, and assuming BHP Billiton continues working on project concepts for potential mining, more detailed surveys

will be conducted following a detailed consultation process with Aboriginal stakeholders, in accordance with detailed DECCW guidelines regarding this process.

BHP Billiton proposed actions

- BHP Billiton will continue to engage with the Aboriginal community in the local area in relation to:
 - employment opportunities, training and other support programs;
 - ongoing management of the exploration process; and
 - in the Definition phase, the process of, and involvement in, an extensive assessment Aboriginal cultural heritage and archaeological assessment.

Chapter II – Key Issues and Concerns continued

M. COMMUNITY ENGAGEMENT

Issues

- Timing of BHP Billiton's engagement process
- Maximising community involvement in the development
- Process for informing the community on an ongoing basis

Issues raised

BHP Billiton has been criticised by some sections of the community which were unwilling to participate in earlier two-way communications processes. There was a sentiment among them that BHP Billiton had lost the opportunity to build community trust and support. However, coupled with these criticisms appear to be an acknowledgement voiced at the community workshops that the recent steps taken by BHP Billiton to engage the community are well intentioned and genuine.

BHP Billiton's perspective

BHP Billiton is aware that some sections of the community have not been satisfied with the level of engagement and communication over the last four years.

BHP Billiton has committed to improve its communication and engagement with this section of the community and has implemented a number of new initiatives, which included the community workshops.

The community workshops were designed to answer as many questions as possible that the community wanted and to understand the community desires for future engagement. They represent a turning point in BHP Billiton's approach to engaging with the community. In going forward, BHP Billiton's objective is to listen to community members and take their concerns into account in order to develop a clear idea of what it would take to have a social licence to operate.

The community workshops identified a number of remaining questions and concerns that BHP Billiton is not able to currently address. While BHP Billiton understands that people want answers, it is not always able to provide responses to some questions because work has not yet been undertaken or because information is incomplete. In some cases BHP Billiton may not be able to provide answers to these questions until much later in the exploration process, e.g. during the Definition phase of a future mine planning process.

BHP Billiton recognises, however, that the community is seeking assurances on many aspects of exploration and mining, and it will endeavour to provide a meaningful timeline of when it might be able to provide answers to the issues raised in the community workshops.

At the same time, BHP Billiton asks in return that community members continue to involve themselves in the engagement process to ensure that all matters of concern are raised and addressed as far as possible. BHP Billiton believes that this will ensure the best outcome for the community in relation to future mining activity in the area.

BHP Billiton proposed actions

BHP Billiton is committed to deepening its community engagement in relation to the Carooona Coal Project. As a first step after the community workshops, BHP Billiton is sharing this report and proposing actions to address the concerns identified.

BHP Billiton will develop a clear, consistent timeline for answering remaining questions and concerns. The approach will include holding workshops, prioritising the community's issues of concern and validating a path forward to seek resolution to these issues. These workshops will commence in 2011.

Once finalised, the action plans and priority issues will be monitored and reported accountably to ensure BHP Billiton demonstrates its commitments.

Based on the views expressed in the community workshops, BHP Billiton Carooona Coal Project has made the following commitments in relation to its future engagement and communications approach in relation to the Carooona Coal Project:

- to be transparent in its engagement with local communities by establishing clear objectives and procedures around community engagement on issues of concern;
- to provide as far as practicable an opportunity for all views to be represented and to challenge all stakeholders to be effectively engaged in the consultation process to increase the legitimacy and credibility of the process;
- to respect the views and contributions of all stakeholders in the community consultation process;
- to continually seek feedback as to whether the community consultation process is delivering the outcomes the community is seeking; and
- to provide feedback to the community on the underlying rationale of decisions taken in relation to matters of community concern.



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