The Bowen Basin Coal Growth project—Caval Ridge Mine

Coordinator-General’s change report on 100 per cent fly-in fly-out operations workforce

Application for project change, number 4

September 2011
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Synopsis

The Bowen Basin Coal Growth Project: Caval Ridge Mine—Coordinator-General’s evaluation report for an environmental impact statement (EIS) was released on 9 August 2010. The report required BM Alliance Coal Operations Pty Ltd (BMA), the project proponent, to ensure its non-resident operations workforce for the Caval Ridge Mine (CRM) did not exceed 70 per cent.

On 14 June 2011, BMA applied to the Coordinator-General for a change to conditions to allow an increase to the proportion of the CRM’s non-resident operational workforce, from 70 per cent to up to 100 per cent.

Under the proposed change, BMA would implement a single-shift roster system, under which workers would work seven days on, then seven days off. BMA also plans to accommodate all non-resident workers in the proposed Buffel Park Accommodation Village, located 17 kilometres south of Moranbah (BMA 2011a, p. 21).

In evaluating the proponent’s application for change, the Coordinator-General sought comment from the public and advisory agencies. He also sought supplementary information from BMA on future accommodation arrangements for its operations, the expected growth of resident workers in the Bowen Basin, the social impacts of long-distance commuting arrangements, economic benefits to the regions and community relations strategies.

The Coordinator-General has evaluated the environmental effects of the proposed change and other related matters, and prepared this Coordinator-General’s change report. The key findings are summarised below.

Worker choice

For the CRM, the Coordinator-General accepts the need to recruit from outside the region, given the labour market challenges faced by resource companies. While some workers may prefer to retain their home base, it is desirable that workers are offered the choice to relocate their families if this is a viable option.

The Coordinator-General’s view is that employees should have a choice of where and how they live, where practicable. However, where that choice is available, it would be difficult to predict or manage the number of long-distance commuters as a proportion of the total workforce within a particular operation. It is not the Coordinator-General’s role to regulate the number of long-distance commuters for a worksite; rather, it is his role to facilitate workers’ choice of their accommodation arrangements. Accordingly, the requirement for BMA to ensure that 30 per cent of its CRM operational workforce resides in Moranbah has been removed. Instead the Coordinator-General is requiring BMA to maintain a residential workforce across its operations in line with current practice—in which approximately 80 per cent of employees reside locally—by requiring BMA to provide substantial investment in employee housing. This will deliver choice of worker’s accommodation arrangements, taking into account of the need in the future to source workers for expanded operations.
BMA has submitted that accommodation choice for an individual worker is offered within its overall operations. This is a reasonable approach and generally aligns with the principles of the Major Resource Projects Housing Policy.

Housing

Moranbah’s housing market is under increased pressure due to the rapid growth of the resource sector. The lack of affordable housing (and the subsequent impacts this has on the local economy), and the liveability of Moranbah are important issues for the community. The shortage of housing is also a barrier to offering workers a broad range of accommodation options.

BMA has made a significant financial contribution to addressing the housing affordability and availability issues in Moranbah over the past five years. However, BMA still has an obligation to offer location and accommodation choices to workers.

Coordinator-General conditions for the CRM already require BMA to develop a housing plan for its Bowen Basin Coal Growth project. In anticipation of that plan, the Coordinator-General has imposed a condition requiring BMA to construct additional houses, in line with historical data on worker’s preferences. The condition requires BMA to facilitate the provision of permanent residential style accommodation at the minimum rate of eight dwellings for every ten new operational workers in the CRM. Based on the requirement for 500 operational full time equivalent positions for the CRM, 400 new dwellings are to be constructed.

Social

The concerns of resource communities about their long-term sustainability have been recognised in recent government policy announcements. Community concern about an upward trend in long-distance commuting arrangements should be allayed by the Coordinator-General’s requirement for BMA to construct houses for its residential workforce. The expansion of BMA’s economic activity should see an associated expansion of the populations of resource communities.

BMA has already made a substantial financial contribution to the community of Moranbah and has committed to continue contributing to its growth. A summary of BMA’s commitments to Moranbah is included in Appendix 3 of this report.

The Coordinator-General acknowledges that the State government and other service providers are responsible for providing adequate social infrastructure and services. However it is considered that, where mining companies have facilitated rapid growth in a specific area, there is a shared responsibility to manage the shortfall in services. Accordingly, it is expected that BMA will incorporate specific measures in the SIMP, to mitigate the impacts of increased pressure of the construction and operational workforce on non-government community services including healthcare, counselling, childcare and education/training. This should also consider housing support for service providers.
Economy

Several submitters raised concerns that, under a 100 per cent fly-in fly-out model, any economic benefit from the CRM would bypass Moranbah when the predominantly non-resident workers returned to their home base. The Coordinator-General’s requirement for BMA to continue to provide housing for its growing workforce should address some of those concerns.

BMA has already begun implementing its Local Buying Program, which allows small businesses in Blackwater, Emerald, Moranbah and Dysart, with fewer than 15 full-time employees, to register their interest in tendering to supply goods and services. This initiative will allow small businesses to share in the significant economic benefits that the CRM is expected to deliver to the local area. The Coordinator-General has imposed a condition to ensure BMA implements, monitors and reports on the program.

Appendices

The new and amended conditions are shown in Appendix 1 of this report; a new recommendation is also included at Appendix 2. A summary of BMA’s commitments to Moranbah is included in Appendix 3 of this report.

Keith Davies
Coordinator-General
2 September 2011
1 Introduction

1.1 The project

The proponent for the Caval Ridge Mine (CRM) project is BM Alliance Coal Operations Pty Ltd (BMA) (the proponent).

The CRM project is part of the four-phase Bowen Basin Coal Growth (BBCG) project, involving two new coal mines at Daunia (Phase 1) and Caval Ridge (Phase 2); an expansion of the existing Goonyella Riverside mine (Phase 3) and the relocation of the Moranbah Airport (Phase 4). The CRM component proposes a new 5.5 million tonnes per annum (Mtpa) open-cut coal mine, six kilometres south of Moranbah in Central Queensland.

1.2 Application for project change

The Bowen Basin Coal Growth Project: Caval Ridge Mine—Coordinator-General’s evaluation report for an environmental impact statement (EIS) (Coordinator-General’s report) was released on 9 August 2010 (Department of Infrastructure and Planning 2010a).

On 14 June 2011, BMA submitted application for project change (APC) number 4 to the Coordinator-General, to assess a proposed change to the project, under Division 3A, section 35B, of the State Development and Public Works Organisation Act 1971 (SDPWO Act). In accordance with section 35C of the SDPWO Act, the Coordinator-General has evaluated the environmental effects of the proposed change, and other related matters, and prepared this Coordinator-General’s change report.

1.3 Public notification

In accordance with section 35G of the SDPWO Act, the Coordinator-General must decide whether or not the proponent is required to publicly notify the proposed change application and any effects on the project.

The Coordinator-General determined that the project should be publicly notified, and accordingly, advertisements were placed in The Courier Mail and The Weekend Australian on 16 July 2011 and in the Miners MidWeek on 20 July 2011. The public consultation period commenced on 16 July 2011 and closed on 15 August 2011.

1.4 Prior applications for project change

The proponent has previously requested three changes to the conditions for the project, as follows:

- **Change request number 1**—accommodation village location and capacity for the CRM operational and construction workforce. The request was for 2500 permanent accommodation rooms at Buffel Village. The Coordinator-General did not approve the
request in its entirety, supporting only 445 rooms for village operations and maintenance (instead of 500), including 95 rooms (instead of 150) for additional workforce and visitor accommodation, for a recommended period of 30 years. The change report was released on 18 February 2011.

In April 2011, the Isaac Regional Council (IRC) refused the development application for the accommodation village, on the grounds that the application was inconsistent with the planning scheme.

On 8 June 2011, the Treasurer and Minister for State Development and Trade, the Hon. Andrew Fraser, called in the development application for the Buffel Park accommodation village, on the grounds of state interest. The development application was approved by the minister on 2 September 2011.

• **Change request number 2**—amendment to conditions relating to granting the environmental authority for the project. The Coordinator-General’s change report for this change was released on 16 November 2010.

• **Change request number 3**—timing of social impact management plan and administrative arrangements associated with completing the housing study (Condition 18(f)–(j)). The Coordinator-General’s change report on this change was released on 8 July 2011.
2 The proposed change

BMA has requested an increase to the percentage of the CRM’s fly-in fly-out (FIFO)\(^1\) operations workforce—from 70 per cent to up to 100 per cent. Condition 18(a)–(d) of the report imposed conditions regarding worker accommodation, specifically that:

The proponent must not accommodate more than approximately 70% of its total CRM operational workforce in operational accommodation village(s) or other fly-in-fly-out (FIFO), bus-in-bus-out (BIBO), drive-in-drive-out (DIDO) arrangements (BMA 2011a, p. 168).

Under the proposed FIFO arrangement, BMA would implement a single-shift roster system for its entire CRM workforce, where primarily non-residential (FIFO) workers would work seven days on, then seven days off (BMA 2011a, p. 3).

BMA also proposes to accommodate all workers employed under a FIFO arrangement in the Buffel Park Accommodation Village, located approximately three kilometres south-west of the CRM site and 17 kilometres south of Moranbah.

2.1 Reasons for change

BMA’s APC lists five reasons for the proposed change and these reasons are summarised below.

(a) Securing the operations workforce for the CRM in a tight labour market
- BMA currently has approximately 750 vacancies (13 per cent) in its existing employee workforce of 5800 people.
- High vacancy rates affect the whole resource sector, with approximately 4000 job vacancies across the mining, oil and gas industries in Queensland.

(b) Minimising impacts from CRM on BMA’s existing operations
- BMA will be able to secure the workforce required without drawing workers from its existing mines.
- BMA wish to have the ability and flexibility to determine its workforce arrangements for the CRM workforce, with regard to labour market factors, the impact on existing operations and operational needs.

(c) Ensuring effectiveness at the CRM and improved road safety outcomes
- BMA wishes to implement one set of shift rosters at the CRM, which they claim is essential for operational effectiveness and workforce cohesion.
- The arrangement would result in reduced road travel.

(d) Spreading the employment and economic benefits from the CRM throughout Queensland

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\(^1\) In this report, the terms fly-in fly-out (FIFO), long-distance commuting (LDC) and non-resident workers are used interchangeably.
Recruit its workforce from other parts of the State with high skills availability (and often with higher levels of unemployment). BMA is currently assessing Cairns/North Queensland, the Sunshine Coast, the Gold Coast, Toowoomba and Brisbane as potential sources of FIFO workers.

BMA would consider recruiting up to half of the workforce from North Queensland, if feasible, and recruiting the balance from Southern Queensland.

(e) Upside for Moranbah

BMA list a range of benefits to the Moranbah community including:

- Last financial year, BMA spent $2 million each week ($100 million in total) on new housing in Moranbah. BMA will provide further significant investment in new housing to support new employees at its existing operations who choose to live in the township.

- Expansion of the Peak Downs Mine, which relies on the CRM, will also add markedly to the housing stock in Moranbah as it will have a primarily residential workforce.

- BMA invested a further $54.2 million into Bowen Basin communities in 2009 and 2010, with Moranbah accounting for more than half of this, including $14 million in 2010. BMA has increased its commitment further this year with an additional $13 million for a Moranbah community support package.

- BMA will increase its community contribution to Moranbah from around $14 million in FY10 to approximately $85 million over FY11 and FY12.

- The economic contribution to the Moranbah area from the CRM and the expansion of the Peak Downs Mine is estimated at up to $35 million per annum. Additionally, the Moranbah community will receive further support from BMA’s existing operations, through the implementation of the new Local Buying Program launched earlier this year (BMA 2011a, pp. 2–3).
3  Background and context

Mining and mineral processing industries contribute significantly to the Queensland economy. In 2008–09, Queensland exported approximately 152 million tonnes of coal, with a gross sales value of about A$16.4 billion. The majority of this coal was exported from collieries in the Bowen Basin (Office of Economic and Statistical Research 2010c).

Recent growth in the Queensland resource sector means that new jobs are increasingly found in the regional and remote areas of the state. This rapid growth, together with the remote localities of some sites, presents challenges for companies wishing to make the most of Queensland’s resource boom. Such challenges include the Australia-wide skills shortage, and difficulty attracting and recruiting people to remote locations.

FIFO workforces are becoming more common in the resource sector. The Bowen Basin Population Report, 2010 (Office of Economic and Statistical Research 2010b) recently estimated that 15 per cent of the Bowen Basin full-time equivalent population was non-resident (i.e. either DIDO or FIFO). The report also stated that there was significant variation across local government areas (LGAs), with Whitsunday at 3 per cent and Isaac at 30 per cent.

The Queensland Government acknowledges the importance of maximising the opportunities that resource sector growth has presented; however, it also recognises the need to preserve and enhance community liveability in resource communities and to offer workers a choice of where and how they live and work. Businesses and residents of resource communities are eager to harness the economic growth generated by the resource boom to broaden their economies and make their towns stronger and more liveable into the future. The challenge is balancing these two complex and competing demands.

3.1 Moranbah

The town of Moranbah is the main regional centre of the Isaac LGA. Originally established in the early 1970s as a purpose-built mining town, Moranbah will continue to be the major regional centre for the mining and gas industries into the future, due to its established services and infrastructure and proximity to existing mining operations.

Moranbah has experienced significant growth in recent years, largely due to the expansion of mining operations in the Bowen Basin. Continued growth in the mining sector is expected to significantly increase Moranbah’s population over the next 20 years. The current resident population of Moranbah is approximately 8300 people (Growth Management Queensland 2011a).

3.2 Opposition to FIFO workforce arrangements

Mining companies employing high numbers of FIFO workers is an issue that has been the subject of much debate in recent months. Community sentiment on the issue was demonstrated during the public consultation process on BMA’s APC number 1
(accommodation). During the consultation process, the Moranbah community expressed a range of views about the impact of FIFO on the housing market, the local economy, social services and infrastructure and on BMA’s residential and non-residential workforce (and their families).

A total of 177 submissions was received on APC number 1, and of these, 124 submitters (80 per cent) objected to the proposed 100 per cent FIFO arrangement—highlighting the importance of the issue to the community and its desire to be heard on the issues.

The community’s negative perceptions were similar to that reported in a 2011 study, conducted by researchers at the Queensland University of Technology, which examined how mining projects that rely on a non-resident workforce impact upon mining communities. The study collected quantitative and qualitative data from survey participants about their perceptions, and reported that the majority of participants believed that mining projects impacted negatively in the areas of:

- housing affordability and availability
- local infrastructure and services
- recreational amenities
- local employment opportunities
- local business and the local economy
- crime and justice
- community safety
- general lifestyle (Carrington & Pereira 2011, p. 5).

Moreover, the community’s strong concerns about the issue were demonstrated through two petitions against 100 per cent FIFO, tabled in Parliament earlier in 2011 (one with 3317 signatures and another (non-conforming) petition with 954 signatures).

### 3.3 Government policies, plans and initiatives

At the time the Coordinator-General’s report was released in August 2010, the issue of non-resident operational workforces was relatively new for the Queensland Government. In evaluating the project and imposing conditions for the CRM, the Coordinator-General examined studies conducted by the Central Queensland University and the Queensland Resources Council. He also drew on the principles of the **Sustainable Resource Communities Policy: Social impact assessment in the mining and petroleum industry.** (Department of Tourism, Regional Development and Industry 2008).

Since then, the Queensland Government has released several additional documents regarding sustainable development in resource communities. The documents were developed with input from the community and other key stakeholders, and were informed by quantitative and qualitative data on the impacts of a FIFO workforce on both residential and non-residential employees and their families; the local community; and housing and social infrastructure. The main themes of these documents are:

- long-term growth and sustainability of resource towns
• worker choice of where they live
• balancing the economic needs of mining companies with the social needs of the community
• community, government and industry working together to plan for social infrastructure and mitigate impacts.

An overview of the content of these documents is provided in the following subsections.

### 3.3.1 Queensland Infrastructure Plan

The *Queensland Infrastructure Plan for public consultation* was released in July 2011 (Department of Local Government and Planning 2011). It identifies the infrastructure needed to support and further encourage growth across Queensland’s major regional economic zones, of which there are five, and aims to improve the way existing infrastructure is managed. The plan also provides a pipeline of targeted investment to deliver infrastructure where and when it is needed, and addresses the challenge of rebuilding following the recent natural disasters experienced in Queensland.

The plan, which directly supports the Queensland Regionalisation Strategy (see below), acknowledges that the expansion of the resources sector is driving demand for social infrastructure and housing. Accordingly, it details strategies to address the demand for health services, infrastructure and housing, as well as government-funded initiatives that address the skills shortage faced by the resource sector.

### 3.3.2 Queensland Regionalisation Strategy

The *Queensland Regionalisation Strategy for public consultation* was released in July 2011. The purpose of the strategy is to encourage people to settle in the regions outside of South East Queensland, by investing in infrastructure and services to support the existing strengths and quality of life in those regions. To achieve a vision of stronger regions, the strategy proposes 31 statewide actions under four strategic directions:

1. Infrastructure and services—ensuring regional Queensland emerges more resilient from natural disasters and anticipates future growth to improve productive capacity and sustain long-term growth.
2. People—working with local training providers, businesses and industry to deliver locally appropriate skills development, attraction and retention activities.
3. Business—supporting business to attract new investment to generate sustained employment opportunities and strengthen the economic base.
4. Partnerships—fostering partnerships at the local, state and national levels to promote cooperation and drive local leadership.

One of the strategy’s proposed actions (under the category of ‘regional workforce development’) is to ‘coordinate skill development, attraction and retention efforts to encourage participation by existing residents and support workers to relocate with their families for employment opportunities’ (Department of Infrastructure and Planning 2010b).
### 3.3.3 Resource projects housing policy

The **Major Resource Projects Housing Policy** was released on 25 August 2011 and applies to resource and resource-related projects. The policy aims to improve housing and worker accommodation impact assessment in resource communities and provides an opportunity for government, industry and the community to work together on housing issues. Under the policy:

> Major project proponents are responsible for identifying and considering worker accommodation and broader housing impacts as part of their project development and planning and including an analysis of these issues in the Social Impact Assessment (SIA) part of an EIS. Project proponents must specify mitigation strategies in the Social Impact Management Plan, implement these strategies in collaboration with other key stakeholders, and mitigate any adverse accommodation and housing impacts on local communities as a result of their planned resource project (Department of Employment, Economic Development and Innovation 2011, p. 1).

The policy also states that proponents are responsible for considering the projected accommodation and location preferences of their workers, and for providing details of the projected impact of a planned village on community liveability (p. 7).

### 3.3.4 Social impact assessment guideline

The **Social Impact Assessment: Guideline to preparing a social impact management plan** (Department of Infrastructure and Planning 2010c) aims to assist proponents of new or expanded resource projects to develop a social impact management plan (SIMP), after a social impact assessment has been conducted. The SIMP must be prepared in accordance with the Queensland Government’s **Sustainable Resource Communities Policy**, current environmental impact assessment and resource development legislation, policies and procedures.

### 3.3.5 Draft Mackay, Isaac and Whitsunday regional plan

The draft **Mackay, Isaac and Whitsunday regional plan** was released for public consultation on 31 May 2011. Its objective is to maximise the opportunities, and plan for and manage the challenges, associated with providing infrastructure; building the economy; providing employment, housing and community services; and protecting the environment.

The plan acknowledges the challenges faced by Moranbah, as the major service and activity centre of the subregion’s mining and gas industries. These challenges include:

- the expected increase in population
- housing availability and affordability (and the community’s expectations about the type and number of dwellings available)
- maintaining a sense of community
- maintaining and improving social services and facilities
- diversifying both resource and non-resource related industries in and around Moranbah, to ensure its ongoing viability.

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*Background and context*

The Bowen Basin Coal Growth project—Caval Ridge Mine

Coordinator-General’s change report on 100 per cent fly-in fly-out operations workforce
The draft plan acknowledges the housing affordability issues faced by Moranbah, including the impact that high prices have on residents and those wishing to relocate to Moranbah. It also recognises the community’s preference that accommodation be comprised of predominantly permanent dwellings. The draft plan supports providing temporary workforce accommodation in conjunction with a range of other accommodation options, so residents can transition to other types of dwellings (Growth Management Queensland 2011a).

3.3.6 Work for Queensland Summit

On 16 August 2011, the Premier and Minister for Reconstruction, the Hon. Anna Bligh MP, held the Work for Queensland Summit with senior executives from resource companies, Mayors from areas with high unemployment and representatives of the Australian Government. The aim of the summit was to discuss strategies to address the high unemployment levels experienced in some regional areas, and the potential for reducing the unemployment rate by matching people with the numerous job vacancies currently available in the resource sector.

The outcome of the summit was an agreement for the Queensland Government to host mining and gas jobs expos in Cairns, the Wide Bay-Burnett, Sunshine Coast, Whitsunday and the Gold Coast in October 2011, with the support of local Councils. Representatives of the resources sector also committed to identifying the jobs and skills required immediately and in the longer term and bringing those vacancies to the expos.

TAFE Queensland would also be a part of the expo, offering training to people interested in mining industry jobs; and Skilling Solutions Queensland will be on hand to conduct skills assessments and provide career advice.
4 Evaluation of the change application

In evaluating this APC, the Coordinator-General has considered the following:

- the APC dated 14 June 2011
- eight properly made submissions
- six submissions that were not properly made
- supplementary information supplied by BMA on 12 August 2011 (BMA 2011b)
- supplementary information supplied by BMA on 28 August 2011 (BMA 2011c).

In evaluating the proponent’s APC, public and agency submissions and BMA’s supplementary information, the following key issues emerged:

- impacts on wellbeing of workers and their families
- the need for long-distance commuting (LDC) and the shortage of skilled labour available in the resource sector
- housing affordability and availability
- social and economic impacts on resource communities

These issues are described below.

4.1 Impacts of LDC on workers and their families

Several submitters raised concerns about the impact of LDC arrangements on employee wellbeing, and about removing workers’ ability to choose where they live and work. The main issues raised were:

- the potential for workers to become disconnected from their families, potentially leading to marriage breakdowns, domestic violence and/or alcohol and drug abuse
- the impact on a family of not seeing a relative for long periods of time
- workers experiencing fatigue after long shifts and/or consecutive days working, and on workers required to commute a long distance from their destination airport.

The Moranbah Action Group (MAG) cited several studies supporting their assertion that FIFO can have negative impacts on workers. However, the group also acknowledged that they were not against the concept of FIFO, and stated that their objection was to removing workers' choice to enter into LDC arrangements. Similarly, the Construction, Forestry, Mining and Energy Union (CFMEU) raised concerns about employee wellbeing, but at the same time, acknowledged that many of its members have already chosen to work under LDC arrangements, where it suits their lifestyle.

As well as general concerns about the impact of 100 per cent LDC arrangements on employee wellbeing, the CFMEU also raised the following issues:

- BMA already has the capacity to implement a single roster system under the terms of its current workplace agreement
BMA’s assertions are incorrect:

- Workers can already commute under their existing workplace agreement.
- Disagreement with workforce figures quoted by BMA, disputing both the percentage of existing contractors who commute and the number of permanent vacancies quoted by BMA.
- Local residents’ access to employment opportunities offered by BMA.

4.1.1 Proponent response

BMA asserts that its proposed single-shift arrangements should not negatively affect the wellbeing of the workers involved, citing studies that conclude that fly-in fly-out workers are as healthy, or healthier than daily commute workers (Clifford 2009 in BMA 2011b, p. 15). BMA further stated that single-shift arrangements would facilitate a cohesive workforce and improved teamwork and morale (BMA 2011b, p. 12).

BMA has stated that, across its employee workforce, approximately 80 per cent is currently residential; and advised that it has no plans to change the predominantly residential nature of its workforce. BMA’s view is that no-one will be disadvantaged by the proposed change to the up-to-100-per-cent LDC arrangement for CRM. If a worker recruited for the CRM decides that a residential role would suit his or her circumstances, that employee would be offered the opportunity to apply for a job in another BMA operation.

4.1.2 Coordinator-General’s conclusion

Queensland’s resource sector has experienced a significant period of strong growth, and this situation is unlikely to change in the near future. This growth has caused a significant shortage of skilled workers who live in or near towns close to mining operations such as Moranbah. This is demonstrated by the unemployment rate for people in the Isaac LGA, where unemployment is very low at 1.3 per cent, when compared with the unemployment rate for the State of Queensland (5.5 per cent) (Office of Economic and Statistical Research 2010a).

It is acknowledged that non-resident workforces are a key feature of the Australian mining industry, and BMA’s proposal to broaden the geographical recruitment area is one option of attracting and retaining skilled workers in a very tight labour market. The concept of LDC is not new, and it can work effectively in both the resource and non-resource sectors, where workers choose to work under such an arrangement.

Despite CFMEU’s assertion that it has ample members living within the region who could be employed in operational roles for the CRM, it is apparent the majority of these are already employed in the sector. In the case of the proposed increase in the percentage of FIFO workers for the CRM, the need and/or desirability of recruiting from outside the region is accepted.

The Coordinator-General’s report for the CRM discussed FIFO arrangements generally, stating:
temporary worker villages are now a widely accepted means of accommodating construction workforces in Australian resource communities

in an increasingly competitive labour market, FIFO strategies coupled with operational worker accommodation villages will become a more prominent, flexible and cost effective part of recruiting and retaining mine operational workers

some categories of resource workers, especially amongst the single-worker demographic, prefer FIFO arrangements (Department of Infrastructure and Planning 2010a, p. 110).

Further, the Coordinator-General noted that some demographic groups (e.g. married workers with young families) may favour local accommodation rather than LDC arrangements.

The Coordinator-General does not agree with statements made in submissions that workers are somehow ‘forced’ into LDC arrangements. Workers recruited from outside resource communities may, for a number of reasons, prefer to retain their home base. However, where mine sites are located relatively close to existing towns and LDC arrangements are not necessary, it is desirable that workers are offered the choice to relocate with their families. However, where that choice is available, the number of workers preferring LDC arrangements, as a proportion of the total workforce within a particular operation, would be difficult to predict or manage.

As noted in the Coordinator-General's report on the CRM, ‘the exact number of CRM operational workers included within FIFO arrangements at any point in time would be onerous to monitor’ (Department of Infrastructure and Planning 2010a, p. 111). It is not the role of the Coordinator-General to regulate the number of LDC workers for a worksite; rather, it is the Coordinator-General’s role to facilitate accommodation choice for workers. Accordingly, the condition requiring BMA to ensure that 30 per cent of its CRM operational workforce resides in Moranbah has been removed.

Instead, the Coordinator-General is requiring BMA to maintain a residential workforce across its operations in line with current practice—in which approximately 80 per cent of employees reside locally—by requiring BMA to provide substantial investment in employee housing. This will deliver workers accommodation choice, taking into account the future need to source workers for expanded operations. In the order of 80 per cent of BMA’s employee operational workforce already resides in resource communities, and this is expected to continue as the overall size of the workforce increases given BMA’s history of providing houses for its employees.

The Coordinator-General has imposed a condition to ensure BMA considers the location and accommodation preferences of its new workers and includes strategies to address these preferences in its SIMP. This is covered in Condition 11(h). Conditions also require BMA to provide substantial investment in employee housing to reflect this preference for choice.

BMA has submitted that accommodation choice for an individual worker is offered within its overall operations. This is a reasonable approach and generally aligns with the principles of the Major Resource Projects Housing Policy.

The Coordinator-General accepts that there may be some benefits associated with BMA’s proposed single roster FIFO arrangement for the CRM, associated with attracting a more
diverse workforce and maintaining a cohesive workplace. However, it is clear that there are potentially negative aspects to LDC work arrangements. It is a key part of BMA’s corporate responsibilities to manage these impacts for workers and their families. The Coordinator-General has amended Condition 11(h)(iii) to require BMA to develop workforce health and welfare strategies, specifically targeted to long-distance commuters, and include these strategies in the SIMP (refer to Appendix 1, page 21).

4.2 Housing affordability and availability

Historically, the provision of worker accommodation by mining companies has not kept pace with expansion of the workforce. This has led to shortages and corresponding increases in prices and decreases in availability. Moreover, these factors have led to workers in the public sector and non-resource industries being unable to afford housing, to flow-on economic impacts on local businesses and services, and to limited choice of worker accommodation.

Housing was an important issue for many submitters. The key issues raised were:
- the impacts of low housing availability and affordability on residents and potential residents of Moranbah
- a shortage of affordable housing impacting on workers’ ability to choose where they live (often being forced to commute long distances to work in Moranbah because they cannot afford local housing)
- the need to provide people with an opportunity to build a sense of community/pride through home ownership
- the social effects that result from an imbalance in short- and long-term accommodation in the Moranbah area
- the flow-on effect of housing issues on employee retention and attraction, and skills development for businesses outside of the resource sector
- a 100 per cent FIFO model would be inconsistent with the intent of the Queensland Regionalisation Strategy because it would not facilitate workers relocating, and would place further strain on Moranbah’s housing market.

4.2.1 Proponent’s response

BMA has made a significant contribution to housing over the past five years. BMA’s APC states that it has constructed over 62 per cent of the new homes built in Moranbah, specifically:
- constructed or purchased a total of 200 new residences (60 new three- and four-bedroom houses and 37 units/townhouses were constructed in 2010)
- developed or purchased a total of 250 new lots of land (BMA 2011a, p. 26).

The APC states that BMA will construct new residences to support its new employees at existing operations who choose to live in Moranbah; and notes that the expansion of the Peak Downs Mine will have a primarily residential operations workforce. The APC also states that BMA’s intention to house non-residential mine workers at the Buffel Park
Accommodation Village will also ease the pressure on the housing market (BMA 2011a, pp. 26–27).

BMA is working with the IRC and the Urban Land Development Authority on new housing and urban renewal projects, with the objective of providing a wider range of housing styles for growth in Moranbah, and addressing the affordability issue for residents employed in both the resource and non-resource sectors.

As described in the supplementary information document of 12 August 2011, BMA has also committed to construct an additional 160 residences in Moranbah—the equivalent of the dwellings that would have been built for the 30 per cent residential component of the CRM (BMA 2011b, p. 4).

4.2.2 Coordinator-General’s conclusion

The Coordinator-General commends the proponent for its contribution to the Moranbah housing market thus far, and for its ongoing commitment to continuing to address the housing availability and affordability issues. Offering workers choice of where they live and work means offering realistic accommodation options, and contributing to the sustainability and liveability of resource towns such as Moranbah.

The Coordinator-General’s report for the CRM considered impacts on the housing market likely to be caused by the BBCG project. The report notes that the current lack of accommodation does not seem to be stimulating the construction sector to build more housing and further accommodation demands are likely to have an adverse impact on the already stressed housing market in Moranbah.

A key outcome of the Coordinator-General’s report for the CRM was the requirement for BMA to undertake a housing study and a housing plan in which housing mitigation and/or offset measures to address the impacts described in the study are identified as a result of the proposed development of the BBCG project components.

The requirements of the housing plan will be guided by the recently released Major Resource Projects Housing Policy, which requires proponents to consider the projected accommodation and location preferences of their workers, and to provide details of the projected impact of a planned village on community liveability. Proponents must also specify mitigation strategies in their SIMP, implement the strategies in collaboration with other key stakeholders, and mitigate any adverse accommodation and housing impacts on local communities as a result of their planned resource project.

In anticipation of the housing plan, the Coordinator-General has imposed a condition (Condition 18(b)–(c)) requiring BMA to facilitate the provision of permanent residential style accommodation at the minimum rate of eight dwellings for every ten new operational workers in the CRM. Based on the figures provided by BMA, the minimum requirement is 400 dwellings. BMA is also required to provide appropriate accommodation for its non-resident workforce, in accordance with Condition 18(e).
4.3 Social impacts of LDC on resource communities

Submitters raised concerns about a range of general social impacts associated with implementing a 100 per cent FIFO workforce model. These impacts are summarised below:

- the loss of opportunity to grow the population of resource communities and contribute to their long-term sustainability and concerns that increased trends to LDC would result in long-term decline in the viability of townships
- the changing demographics of Moranbah, and perceptions that an increase in the number of young men living in temporary accommodation near Moranbah could lead to community safety, alcohol-related violence or community cohesion issues
- reduced participation rates in local sporting clubs, schools and community groups.
- non-resident workers not being counted in the National Census of Population and Housing, leading to insufficient funding being allocated to Moranbah’s social infrastructure and services
- the need to fully mitigate the potential impacts of the workers accommodation village on local infrastructure and services (such as police, health, fire and emergency services)
- setting a precedent for other mining companies to implement 100 per cent FIFO arrangements.

A local medical practice, Moranbah Medical, made a submission on the impacts of FIFO on non-government medical services. The submission stated that the practice is already under increased pressure from the rapid growth experienced by Moranbah, and that services would be placed under increased pressure under a 100 per cent FIFO model. The submission raised concerns of the potential impacts on the health and safety of residents and medical practitioners in Moranbah due to:

- a doctor/patient ratio that exceeds the recommended level
- an increase in the number of new patients visiting the local medical practice (leading to longer patient waiting times, pressure on medical staff and lower quality care due to a lack of available medical history on non-resident workers)
- the potential for disease to spread quickly among residents living in close proximity to each other in the accommodation village.

4.3.1 Proponent response

BMA’s APC and supplementary information state that it has already invested significantly in Moranbah, and will continue to do so. BMA’s APC states that it invested $54.2 million into Bowen Basin communities in 2009 and 2010—more than half of which was allocated to Moranbah (BMA 2011a, p. 25). BMA has also committed to increase its financial contribution to Moranbah from around $14 million in the 2010 financial year, to approximately $85 million in the 2011–12 financial year (BMA 2011c, pp. 7–8).
Part of the above commitment is an additional $13 million in 2011 for:

- a regional youth and community services centre
- redeveloping the Greg Cruikshank Aquatic Centre
- the IRC’s affordable accommodation initiative for low income, non-resource workers.

In addition, BMA has made a financial contribution of $46 million to upgrade the Moranbah Airport. Appendix 3 details the commitments made by BMA in its APC and supplementary information documents.

BMA’s APC stated it does not expect to draw on Moranbah’s social infrastructure and services, but expects to reduce the pressure on local community infrastructure, due to the largely self-contained nature of the accommodation village. This would be due to fewer mine workers and families living in Moranbah, paramedic services and first aid services being provided at the accommodation village, and the likelihood that CRM workers will not need to visit Moranbah often (BMA 2011a, p. 25).

BMA acknowledged that Moranbah has a shortage of essential medical and emergency services personnel. The APC stated that ‘... it is estimated, based on the existing community profile, that Moranbah has a shortfall of hospital beds ... seven general practitioners and five police officers’ (BMA 2011a, p. 24). BMA’s position is that implementing a 100 per cent FIFO model would ease the pressure on Moranbah’s services and infrastructure, since BMA proposes to include paramedic services at the mine site, and the following facilities at the accommodation village:

- a permanent first aid room (24-hour)
- drug and alcohol testing facilities
- trauma kits
- automatic external defibrillators and other specialised equipment
- a designated medivac helicopter landing facility, located on the sporting field.

These facilities would service both the mine and accommodation village (BMA 2011b, p. 6).

**Queensland Resource Council principles on social infrastructure**

Under the Queensland Resource Council’s (QRC’s) principles on social infrastructure, essential services, such as hospitals and schools, are the responsibility of the Queensland Government, not the proponent. The principles are as follows:

- ensuring an adequate base level of social services in resource communities is a government responsibility, across all levels of government
- encouraging cooperative and partnership approaches between governments and industry which recognise the distinct but complementary roles of stakeholders in the provision of social services in resource communities
- access to social infrastructure and services should reflect the substantial revenues generated in the form of royalties and taxes from these regions
- assessment of the social impacts of development in and around resource communities should take account of cumulative effects
• planning for social infrastructure and services should anticipate medium and long term resource community needs and be informed by the provision and rigorous analysis of accurate and reliable data (Queensland Resource Council 2009).

4.3.2 Coordinator-General’s conclusion

The concerns of resource communities about their long-term sustainability have been recognised in recent government policy announcements (as discussed in subsection 3.3). Those concerns, related to the threat of widespread and increasing adoption of LDC arrangements, should be allayed by the new requirement that BMA construct houses for its additional residential workforce. The expansion of BMA’s economic activity should see an associated expansion of the populations of resource communities.

In the shorter term, it is clear that high rates of population growth in towns and transient ‘spikes’ in construction workforces need to be managed. This includes situations where the market provision of community services (such as child care and doctors) has not kept pace with demand. In addition, the influx of non-resident workers and their effects on the community’s overall wellbeing needs to be considered by mining companies.

Resource communities expect a return from mineral resources that are located in their region, particularly when a large proportion of the benefits or royalties of large-scale mining operations accrue to the State as a whole, rather than a specific region. An appropriate proportion of benefits should therefore flow to communities such as Moranbah.

The Coordinator-General accepts BMA’s argument that the proposed increase to up to 100 per cent FIFO would not necessarily increase impacts on community services for CRM compared with that anticipated for the 70 per cent FIFO arrangement. However, in the overall sense, it is anticipated that BMA’s expanding operations would lead to growth in population of resource communities and therefore increased demand for services.

The key issues raised in submissions relating to potential impacts on social infrastructure have been dealt with previously in the Coordinator-General’s report for the CRM. The Coordinator-General notes BMA’s stated commitment to the growth of the Moranbah community and the range of social and infrastructure-related initiatives. Further commitments relating to collaborative strategies are expected to be detailed in the SIMP.

It is the view of the QRC and BMA that governments have a responsibility to ensure that basic infrastructure and services are available for residents. The Coordinator-General acknowledges that the State Government and other service providers are responsible for providing adequate social infrastructure and services; however, as funding for government services is generally based on five-yearly census data, the supply of services cannot always keep pace with the demand caused by the rapid growth, such as that seen in the resource sector and therefore Moranbah.

It is considered that where mining companies have facilitated rapid growth in a specific area, there is a shared responsibility to manage the shortfall in services, until government funding processes, or the private sector, can respond. Accordingly, it is expected BMA will incorporate specific measures in the SIMP, to mitigate impacts of the increased pressure of the construction and operational workforce on non-government community services,
including health care, counselling, child care, and education/training. This should also consider housing support for service providers. This is to specifically address the situation where the market has been unable to respond adequately and some form of facilitation is needed such as a short-term capital injection.

It is also noted that service delivery in resource communities is hampered by factors affecting the recruitment and retention of State Government and non-government organisation employees in non-resource sector positions, including the comparatively higher wages offered in the resource sector and the significantly lower rates of housing affordability in resource communities where services are required. It is recommended that government departments responsible for police, emergency services, health and education review their housing programs in Moranbah and other growth centres in the Bowen Basin to ensure needs of the expanded population are met.

4.4 Economic impacts

In relation to the economic impacts of the proposed change, submitters raised the following issues:

- that the economic benefits from the mine leave when the non-resident workforce leaves Moranbah
- the difficulty attracting and retaining workers to small businesses when mining companies pay higher wages
- the proposed FIFO model would boost the economies of North and South East Queensland regional centres, not Central Queensland and Moranbah, through company profits, supply chain arrangements and non-resident workers spending their wages in their home locations
- housing affordability and availability issues directly affect the local economy, because staff cannot afford to live in Moranbah.

4.4.1 Proponent’s response

According to BMA’s APC, the CRM, and the associated expansion of the Peak Downs mine, is estimated to generate an additional $500 million per annum into the Queensland economy (through wages, goods, services and flow-on benefits), and $220 million per annum in royalties for the State (BMA 2011a, p. 8).

In supplementary information supplied on 12 August 2011, BMA estimates that the CRM and the expansion of Peak Downs would contribute approximately $35 million per annum to Moranbah. BMA also stated that additional economic benefits would be achieved by implementing its Local Buying Program, which would apply to businesses in Blackwater, Emerald, Moranbah and Dysart with fewer than 15 full-time employees.

4.4.2 Coordinator-General’s conclusion

The CRM would deliver significant economic benefit to the State of Queensland. The project includes a capital investment of approximately $4 billion and will have an annual operating
expenditure of approximately $475 million per annum. It is expected to provide 2000 construction jobs and 500 operational jobs, and produce 5.5 Mtpa of coking coal per annum, over a mine life of approximately 30 years.

In addition to benefiting the State of Queensland, there will also be a significant economic benefit to the town of Moranbah, through opportunities for local businesses to supply goods and services.

While it is reasonable to expect that mining companies wish to maximise their supply chain efficiencies, it would be unreasonable to expect that local businesses would not have an opportunity to participate and share in the mine’s economic benefits. BMA has already begun implementing its Local Buying Program, with eligible businesses already able to register their interest in tendering to supply goods and services, via the Industry Capability Network’s website.

To ensure BMA’s ongoing commitment to the Local Buying Program, the Coordinator-General imposes a new Condition 11(g). This condition also requires BMA to report on the program’s activities annually, and to publish the procurement pipeline of upcoming opportunities.

The Coordinator-General concludes that submitters’ concerns about the flow-on effects of housing availability and affordability on the local economy would be addressed by:

- the expectation that BMA’s employee workforce would continue to be predominantly residential
- the Coordinator-General’s requirement for BMA to construct a minimum of 400 new dwellings to accommodate its growing residential workforce
- BMA’s commitment to work with the IRC and the Urban Land Development Authority to improve housing affordability for low income, non-resource workers (refer to Appendix 3).
5 Conclusion

This evaluation of APC number 4 (dated 14 June 2011) has been made pursuant to section 35I of the SDPWO Act.

Conditions and recommendations made in this report are made pursuant to section 35I(2) of the SDPWO Act.

The Coordinator-General has amended conditions 11 and 18. One new recommendation has also been made. Revised conditions are in Appendix 1 of this change report, and recommendations are in Appendix 2.

Pursuant to section 35J of the SDPWO Act, a copy of this report will be given to the proponent, and a copy will be made available at: projects.industry.qld.gov.au

As per section 35K of the SDPWO Act, the Coordinator-General's report on the EIS for the project, and the Coordinator-General's change reports, both have effect for the project. However, if the reports conflict, the Coordinator-General’s change report prevails to the extent of the inconsistency.
Appendix 1. Imposed conditions

Condition 18

Replace (a)–(e) with:

(a) In January 2012, and then at six monthly intervals until June 2017 and then yearly for the duration of the SIMP, the proponent must publish to its website the accommodation arrangements for its total operational workforce in the Bowen Basin, including:

- the number of BMA employee positions (full-time equivalent)
- the proportion of non-resident employees
- the number of contractors directly employed in BMA mining operations (full time equivalent)
- the estimated proportion of non-resident contractors

(b) The proponent must facilitate the provision of permanent, residential-style accommodation at the minimum rate of eight dwellings for every ten operational full time equivalent positions required for the CRM. Based on the figures provided in the application for project change, the minimum requirement is 400 dwellings.

(c) The initial 160 dwellings required under (b) are to be constructed in Moranbah prior to 30 June 2013. An additional 120 dwellings are to be constructed prior to 30 June 2015 and are to be appropriately located to meet known or predicted housing demand in the Bowen Basin region. The remainder (minimum 120) are to be constructed prior to 30 June 2017 or sooner, also within the most appropriate locations in the Bowen Basin region.

(d) Dwellings must be provided in a variety of types and styles.

(e) Notwithstanding the proponent’s obligations under (b), the proponent must also provide appropriate accommodation for all non-resident workers, generally in accordance with the Major Resource Projects Housing Policy.

Condition 11

Add:

(f) The proponent must include all commitments in the SIMP (as listed in Appendix 3 of this change report and described in the application for project change of 14 June 2011, and in supplementary information provided on 12 August 2011 and 28 August 2011).

(g) The proponent must implement the Local Buying Program and include details of the procurement pipeline of upcoming opportunities and regular reports (at least quarterly) of the program’s outcomes, on its website.
(h) The SIMP must include the following:

(i) A workforce accommodation strategy that includes the accommodation and location preferences of workers.

(ii) Details of recruitment plans and strategies that ensure that all suitable applicants considered for employment in BMA’s operational workforce are treated equally irrespective of their accommodation and location preferences.

(iii) Employee health and welfare programs targeted to non-resident workers

Definitions

'Bowen Basin': the geographic area comprising local government areas of Banana, Central Highlands, Isaac and the part of Whitsunday formerly within the Bowen Shire Council area.

'Local Buying Program': as described in BMA’s application for project change of 14 June 2011.
Appendix 2. Recommendations

Recommendation 1
State Government departments responsible for police, emergency services, health and education should review housing programs in Moranbah and other growth centres in the Bowen Basin to ensure needs of the expanded population are met.
Appendix 3. Proponent commitments

The following commitments were made by BMA in its application for project change and in supplementary information provided on 12 August 2011. These commitments are referred to in Condition 11(f) of this change report.

1) Contribute up to $5.5 million towards developing a regional youth and community services centre, which will be built to provide community support and health services for youth and families in Moranbah.

2) Contribute $2.5 million towards redeveloping the Greg Cruikshank Aquatic Centre.

3) Contribute $5 million over five years towards providing affordable accommodation for low income earners not directly employed in the resource industry. BMA will work with both the Isaac Regional Council and the Urban Land Development Authority on this affordable accommodation initiative.

4) Contribute $46 million towards upgrading the Moranbah Airport.

5) Invest $15 million to upgrade approximately 185 houses and replace two houses in Moranbah; and invest $22 million to upgrade around 108 houses and replace 14 houses in Dysart during the 2012 financial year.

6) Construct an additional 160 dwellings in Moranbah, in the period to 30 June 2013 (subject to development approvals and construction factors), at an estimated capital cost of $60 – $70 million. This housing would be for employees of existing BMA northern Bowen Basin operations.

7) Contribute $6 million in 2011–12 towards rates and special rates, assisting the Isaac Regional Council to maintain and enhance sporting and recreation facilities, infrastructure support and other project initiatives.

8) Contribute $2.8 million in 2011–12 for a range of company community support programs such as day care, additional sporting and recreational facilities and education and cultural initiatives.

9) Contribute $19.6 million in 2011–12 for local infrastructure support for water, road and airport maintenance.
## Acronyms and abbreviations

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<thead>
<tr>
<th>Acronym/abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>APC</td>
<td>application for project change</td>
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<td>BBCG project</td>
<td>Bowen Basin Coal Growth project</td>
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<td>BMA (the proponent)</td>
<td>BM Alliance Coal Operations Pty Ltd</td>
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<td>CFMEU</td>
<td>Construction, Forestry, Mining and Energy Union</td>
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<td>CRM</td>
<td>Caval Ridge Mine</td>
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<td>DEEDI</td>
<td>Department of Employment, Economic Development and Innovation, Queensland</td>
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<tr>
<td>DIDO</td>
<td>drive-in drive-out</td>
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<td>DLGP</td>
<td>Department of Local Government and Planning, Queensland</td>
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<td>environmental impact statement</td>
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<td>IRC</td>
<td>Isaac Regional Council</td>
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<td>SDPWO Act</td>
<td><em>State Development and Public Works Organisation Act 1971</em></td>
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<td>SIMP</td>
<td>social impact management plan</td>
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