

Caval Ridge Mine

Social Impact Management Plan

December 2012



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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BBCGP	Bowen Basin Coal Growth Project
BCN	BMA Community Network
BMA	BHP Billiton-Mitsubishi Alliance
BMAAV	BMA Accommodation Village
BPAV	Buffel Park Accommodation Village
CDP	Community Development Program
CHPP	Coal Handling and Process Plant
CPP	Community Partnership Program
CRM	Caval Ridge Mine
CTEC	Coalfields Training Excellence Centre
DCS	Department of Community Safety
DCCSDS	Department of Communities Child Safety and Disability Services
DM	Daunia Mine
DSDIP	Department of State Development, Infrastructure and Planning
DETE	Department of Education, Training and Employment
DTMR	Department of Transport and Main Roads
FTE	Full Time Equivalent
EIS	Environmental Impact Statement
EMP	Emergency Management Plan
EPCM	Engineering, Procurement, and Construction Management
EPP	Environmental Protection Policy
IAS	Initial Advice Statement
IRC	Isaac Regional Council
KPI	Key Performance Indicator
LGA	Local Government Area
MAPS	Moranbah Alternate Pathways Program
MIW	Mackay-Isaac-Whitsunday
ML	Mining Lease
Moranbah BCN	Moranbah BMA Community Network
mtpa	million tonnes per annum
QAS	Queensland Ambulance Service
QFRS	Queensland Fire and Rescue Service
QPS	Queensland Police Service
(R)	Region
REDC	Regional Economic Development Corporation
RMP	Road-Use Management Plan
SEP	Stakeholder Engagement Plan
SIA	Social Impact Assessment
SIA Unit	Social Impact Assessment Unit, DSDIP
SIMP	Social Impact Management Plan
SRC	Sustainable Resource Communities
SPA Act	Sustainable Planning Act 2009
TMP	Traffic Management Plan
ULDA	Urban Land Development Authority
WMARQ	Women in Mining and Resources Queensland



Executive Summary

Caval Ridge Mine (CRM) is a multi-seam, open cut coal mine owned by BMA, and located in the northern section of the Bowen Basin, southeast of Moranbah.

This Social Impact Management Plan (SIMP) describes how BMA will work with local and regional stakeholders, to mitigate potential social impacts and maximise the social benefits of CRM.

The SIMP addresses the conditions set out by the Coordinator-General in the CRM Environmental Impact Statement (EIS) Evaluation Report, and those amended through reports on Applications for Project Changes.

The SIMP addresses CRM's construction, operation and decommissioning, and details mitigation and engagement strategies with respect to:

- community characteristics, including population change and community cohesion;
- housing and accommodation, including housing supply and accommodation villages;
- regional development, including Council and Government priorities;
- social and health infrastructure;
- community safety and amenity;
- employment opportunity and diversity;
- local business opportunities; and
- cumulative impacts.

The SIMP recognises that CRM will be constructed and operated in the context of several other projects' development (both BMA and non-BMA) in the Moranbah area and the wider Mackay-Isaac-Whitsunday region. It includes a focus on BMA's ongoing commitment to co-operation with local and regional authorities and other industry proponents, and details BMA strategies which are designed to enhance liveability and social sustainability in Bowen Basin towns.

Management and monitoring of implementation and effectiveness are also described in this Plan. The SIMP will be reviewed annually, and revised prior to operations.

The SIMP includes appendices providing further detail on mitigation strategies, and these include:

- Appendix B: BMA Five Year Community Development Strategy;
- Appendix C: Community Workforce Cohesion Strategy;
- Appendix D: Indigenous Engagement Strategy;
- Appendix E: Accommodation Village Management Plan; and
- Appendix F: Draft Housing Impacts Plan.

The Appendices are final documents with the exception of Appendix E which will be refined during the first three months of the accommodation village's operations. Appendix F will be added when it is approved.

The SIMP will be reviewed and delivery will be audited at the end of CRM construction (expected in 2014), then reviewed every three to five years, as agreed with the Office of the Coordinator-General.



1 Introduction

1.1 Purpose and Scope

The Caval Ridge Mine (CRM), located in the northern Bowen Basin, is owned and will be operated by BHP Billiton Mitsubishi Alliance (BMA). BMA was formed in 2001 as a joint venture between BHP Billiton and Mitsubishi Development Pty Ltd. BMA is Australia's largest metallurgical coal producer and exporter, currently operating seven Bowen Basin coal mines and the Hay Point Coal Terminal near Mackay.

CRM will be an open cut dragline and truck and shovel operation with the capacity to produce up to 5.5 million tonnes per annum (mtpa). CRM also enables a 2.5 mtpa expansion of the Peak Downs Mine. The Peak Downs Mine expansion has been delayed in response to the challenging external environment. The extra coal will be transported via conveyor and processed at the CRM Coal Handling and Process Plant (CHPP).

BMA has prepared this Social Impact Management Plan (SIMP) to describe how it will work with local and regional stakeholders to mitigate potential social impacts and maximise CRM's social benefits. The development of the SIMP has been assisted by comprehensive stakeholder engagement throughout 2011 and early 2012, as described in Section 1.5. The SIMP includes:

- a summary of the project, including its workforce and accommodation arrangements;
- an overview of Government requirements for the SIMP;
- a description of local and regional communities influenced by CRM;
- a summary of social impacts and benefits of the Project;
- mitigation strategies, including
 - BMA strategies supporting social sustainability and cohesion;
 - project-specific mitigation strategies; and
 - co-operative strategies to address cumulative social impacts;
- a Stakeholder Engagement Strategy;
- implementation arrangements; and
- monitoring, reporting and auditing procedures.

CRM is part of BMA's growth strategy and the Bowen Basin Coal Growth Project (BBCGP), which incorporates the greenfield CRM and Daunia Mine (DM) projects. The impacts and benefits of Daunia Mine were considered in a separate EIS process.

Preliminary earthworks on the CRM site began in May 2012, and the mine is expected to be operational by mid 2014. Construction of Daunia Mine (DM) began in 2011 and will coincide with CRM construction during 2012 and 2013. The SIMP therefore includes mitigation strategies for potential cumulative impacts on health services and community safety relating to the DM workforce.

While the expansion of Peak Downs Mine associated with CRM has been deferred, a framework for managing its impacts has been included in the SIMP. The SIMP also includes BMA's strategies and partnerships with other stakeholders to address other cumulative social impacts.

1.2 Queensland Government Requirements

The CRM SIMP is required to address the conditions provided by the Coordinator-General's EIS Evaluation Report for CRM¹, as amended through reports on Applications for Project Change. The EIS conditions (Coordinator-General's Evaluation Report Appendix 1) are summarised in Table 1, and included in more detail in Appendix A, along with a list of change reports. Amendments through Change Reports are summarised in Table 2.

Table 1: EIS Social Conditions for CRM

Cond No.	Requirement	SIMP Section
5-8	<ul style="list-style-type: none"> General consultation and communications requirements, including establishment of Moranbah BMA Community Network) and complaints process 	6
10	<ul style="list-style-type: none"> Provide a draft (SIMP) for consultation, review, implementation, monitoring and reporting 	1
11	<ul style="list-style-type: none"> Provision of project-specific mitigation strategies including BMA communities documents and monitoring 	5.1
11	<ul style="list-style-type: none"> Consultation with Queensland Police Service and Emergency Services 	5.2.4
14	<ul style="list-style-type: none"> Report to the Coordinator-General the accommodation arrangements for the construction workforce Provide new dwellings (as amended – See Table 2) Provide sufficient construction village units at each stage of development to accommodate the workforce 	5.2.2
17	<ul style="list-style-type: none"> Participate in the study of cumulative social impacts of mining in the Isaac Region LGA, and consider statutory regional plans 	8.4
18	<ul style="list-style-type: none"> Report to the Coordinator-General on the accommodation arrangements for the CRM operational workforce, and as amended by Change Report No. 4 Provide accommodation and new dwellings in Moranbah Co-operate with OESR in the development of the BBCG Project Housing impacts study and Housing Impacts Plan, (as amended - see Table 2) Housing impact mitigation and management strategies recommended in the final approved plan must be included in future revisions of the CRM SIMP. 	8.2 5.2.2
19	<ul style="list-style-type: none"> Report to the Coordinator-General the accommodation arrangements for the Daunia Mine construction workforce, and provide new dwellings if newly residing workers exceed five in Moranbah or Nebo 	8.2

Ongoing review of CRM's construction and operational requirements by BMA has required the preparation and submission of five Change Requests to the Coordinator-General. The following table provides an overview of each Change Request.

¹ Queensland Government -The Coordinator-General (August 2010) Bowen Basin Coal Growth Project— Caval Ridge Mine _ Coordinator-General's evaluation report for an environmental impact statement - Appendix 1 Part 1.

The Coordinator-General's Reports on Applications for Project Change (APCs) provided amendments and further detailed requirements for social impact management and housing. The effects of the amendments for the SIMP are outlined in Table 2.

Table 2: Applications for Project Change Reports and Condition Amendments

Subject and Date	Cond.	Amendment	SIMP Section
APC 1: Accommodation Village location and capacity 17 February 2011	Change Request Report	<ul style="list-style-type: none"> conditional approval for the proposed location and requirements for the Accommodation Village at Buffel Park 	2.3
	7	<ul style="list-style-type: none"> clarifying requirements for recording of complaints 	6.8
APC 3 ² Housing Study 14 July 2011	18	<ul style="list-style-type: none"> change to administrative arrangements associated with completing the housing study (Condition 18(f)–(j)) 	5.2.2
	10	<ul style="list-style-type: none"> amendment in relation to the timing of the Social Impact Management Plan 	
APC 4: Operational workforce arrangements 14 July 2011	11	<ul style="list-style-type: none"> include all commitments listed in Appendix 3 of the APC Report 	5.1, 5.2
	18	<ul style="list-style-type: none"> include an accommodation strategy that includes the accommodation and location preferences of workers³ provide appropriate accommodation for all non-resident workers, generally in accordance with the Major Resource Projects Housing Policy 	2.3, 5.2
	11	<ul style="list-style-type: none"> include details of recruitment plans and strategies that ensure all suitable applicants are considered for employment irrespective of accommodation and location preferences 	5.2.5
	11	<ul style="list-style-type: none"> include employee health and welfare programs targeted to non-resident workers 	2.3, 5.2.3
	11	<ul style="list-style-type: none"> implement the Local Buying Program and provide regular reports of the program's outcomes on the BHP Billiton website. 	5.2.6
	18 a-e	<ul style="list-style-type: none"> publish workforce figures regularly on the web 	8.2.
	18	<ul style="list-style-type: none"> provide 160 dwellings in Moranbah to June 2013, and an additional 120 dwellings to June 2015 and a further 120 to June 2017 in the Bowen Basin provide dwellings in a variety of types and styles 	5.2.2

² APC No. 2 referred to an Environmental Authority which is not relevant to the SIMP.

³ The APC Report Notes that BMA has submitted that accommodation choice for an individual worker is offered within its overall operations, and that this is a reasonable approach and generally aligns with the principles of the Major Resource Projects Housing Policy.



1.3 SIMP Initiatives and Strategies

The EIS conditions (Condition 11 (a) (i)) require BMA strategies and CRM initiatives referenced in the EIS to be supplied as part of the SIMP.

BMA-wide strategies and initiatives detail BMA's community development approach with the communities of Moranbah, Dysart, Blackwater and Emerald. They include:

- Community Development Program and Landmark Projects (Major Initiatives), described in Section 5.1;
- Five Year Communities Strategy, described in Section 5.1 and attached as Appendix B;
- Skills for Growth, described in Section 5.2.5;
- Indigenous Engagement Strategy, described in Section 5.2.5 and attached as Appendix D;

Specific initiatives developed for CRM include:

- Local Site Initiatives (mitigation strategies) described in Sections 5.2 and 5.3;
- Workforce and Community Cohesion Strategy, addressed in Sections 2.3 and 5.2.1, and attached as Appendix C; and
- Final Terms of Reference (TOR) for the Moranbah BCN (previously supplied).

An Accommodation Village Management Plan has also been requested, and this is attached as Appendix E.

1.4 SIMP Guidelines and Major Resource Project Housing Policy

The SIMP was developed in accordance with the Guidelines for the Preparation of a SIMP (provided by the former Department of Employment Economic Development and Innovation (DEEDI), and the Major Resource Project Housing Policy.

The requirement for a SIMP for major resource development projects which require an EIS was established in the Queensland Government's Sustainable Resource Communities Policy in 2008⁴. Guidelines for the preparation of a Social Impact Management Plan were provided by the Queensland Government in September 2010⁵. SIMP guidelines and corresponding sections in the SIMP are summarised in Appendix A.

The SIMP is required to be a stand-alone document which reflects the findings and recommendations of the project's social impact assessment. CRM's Social Impact Assessment was completed in 2009, and the project has undergone changes with respect to workforce and housing provision, so the SIMP reflects an updated summary of social issues and impacts identified through discussion with the Moranbah BMA Community Network (Moranbah BCN) and other local stakeholders. The SIMP includes detail of community and industry partnerships, partnerships with the Isaac Regional Council, and proposed actions with or by other stakeholders (with their agreement).

The Queensland Government's Major Resource Projects Housing Policy was released on 25 August 2011, and provides further guidance on housing and accommodation management issues. Under the policy, major project proponents are required to:

⁴ Queensland Government - Department of Tourism, Regional Development and Industry (August 2008) Sustainable Resource Communities Policy: Social impact assessment in the mining and petroleum industries

⁵ Queensland Government - Department of Infrastructure and Planning - September 2008 Guideline to the preparation of a Social Impact Management Plan

- identify and consider worker accommodation and broader housing impacts in their Social Impact Assessments (SIAs) and SIMPs;
- specify mitigation for housing and accommodation strategies in their SIMPs;
- implement these strategies in partnership with other key stakeholders; and
- mitigate any adverse accommodation and housing impacts on local communities as a result of their planned resource project.⁶

The Major Resource Projects Housing Policy (MRPHP) provides an opportunity for government, industry and the community to work together on housing issues. BMA's housing initiatives are included in Section 5.2. with further information to be provided in the Draft Housing Impacts Plan (as required by Condition 18(f), and incorporated in later versions of the SIMP.

The MRPHP also requires proponents to consider the projected accommodation and location preferences of their workers, and provide details of the projected impact of a planned village on community liveability. This has been outlined in Section 2.3 of this plan, and in the Accommodation Village Management Plan for Buffel Park Accommodation Village.

1.5 Stakeholder engagement in draft SIMP review

BMA undertook comprehensive stakeholder engagement to review the draft SIMP during February-April 2012. This included meetings with:

- the SIA Unit and the SIA Cross Agency Reference Group;
- the Moranbah BCN;
- Isaac Regional Council, including
 - the Mayor and Councillors;
 - the CEO, Executive Director Governance and Community Services, and Manager Economic Development;
- DEEDI (Now DSDIP)
 - Policy Officer, Sustainable Resource Communities (Moranbah);
 - Regional Development, Partnerships and Planning (Mackay and Central);
 - Indigenous Employment and Engagement (central);
- Department of Communities (now including Child Safety and Disability Services);
 - Housing and Homelessness (Central);
 - Regional Partnerships and Strategic Planning (Mackay)
- Department of Community Safety
 - Captain, Rural Fire and Rescue Service (Moranbah) and Moranbah Ambulance Officers
 - Regional Officers in Charge, Mackay and Rockhampton;
- Queensland Police Service


⁶ Queensland Government - Department of Employment, Economic Development and Innovation, Major Resource Projects Housing Policy August 2011, p. 1.

- Regional Operations, Planning and Criminal Investigation Bureau
- Moranbah Officer in Charge
- Queensland Health
 - Facilities Manager, Moranbah Hospital
 - Regional and Central Planning
- ULDA
 - Chairperson
 - Assistant Director, Housing and Communities; and
- Skills Queensland
 - Manager and Principal Policy Officer.

Key findings from stakeholder engagement and the sections where input is addressed in the SIMP are summarised in Table 3.

Table 3: SIMP review inputs and relevant sections

Input	SIMP Section
There is a general view that remote workers including contractors should be accommodated outside town to reduce impacts on housing stock and neighbourhood amenity.	2.3
There is strong local support for increasing the number of locally-resident workers in order to sustain the town's cohesion and vitality.	5.2.2
Many stakeholders acknowledge that remote workers are a necessary resource, but impacts on community values must be avoided and managed.	2.3
The increasing numbers of non-resident workers from a variety of projects affects feelings of safety and this should be a focus for impact management.	5.2.1, 5.2.4
Further clarity is required on Contractors' implementation of SIMP commitments, including housing mitigations.	2.3.6, 5.4
Update social infrastructure impacts in relation to contractor workforce and deferred Peak Downs expansion	5.2.3.1
Further information is requested on health mitigations including proposed arrangements for GP services	5.2.3.2
Housing cost and availability are critical issues in Moranbah which require a multi-party response.	5.2.2, 5.3
Potential impact on MDSS and the EAP provider needs to be clarified.	5.2.3
Police and Emergency Services staff support co-operation between the project, including local response agreements.	5.2.4
Further detail on employment diversity strategies is requested.	5.2.5.3



Input	SIMP Section
Further information on the Indigenous employment and engagement strategy is requested.	5.2.5.4
The Project is requested to use Skills Queensland's new workforce reporting template.	2.2
Further detail is requested on employment and training strategies and partnerships/linkages with government and/or others.	5.2.5
Concerns remain that remote workforces do not contribute to business turnover.	5.2.6
It is important for projects to keep accurate workforce data.	8.2
Further detail on community cohesion strategy is requested.	Appendix C
Request for clarity years on timing of community partnerships.	5.1
Local Buying Program reporting requirements need to be updated.	5.2.6

2 Project Summary

2.1 Bowen Basin Coal Growth Projects

BHP Billiton Mitsubishi Alliance (BMA) is Australia's largest exporter of seaborne metallurgical coal. BMA was formed in 2001 as a partnership between BHP Billiton and Mitsubishi Development Pty Ltd. The two companies operate seven Bowen Basin (Queensland) coal mines – Blackwater, Broadmeadow, Goonyella Riverside, Peak Downs, Saraji, Norwich Park and Gregory Crinum – and the Hay Point Coal Terminal near Mackay. BMA is the largest employer in the region.

In 2008, BMA announced the BMA Bowen Basin Coal Growth Project (BBCGP), involving the expansion and development of BMA's coal mining operations in the northern section of the Bowen Basin, near Moranbah. The BBCGP currently incorporates the greenfield Caval Ridge Mine (CRM) and Daunia Mine (DM) projects. These projects were notified in the BBCGP Initial Advice Statement submitted in May 2008.

On 18 July 2008, the BBCGP was declared as a project of State Significance requiring an Environmental Impact Study (EIS). Each project is the subject of a separate EIS, as summarised in Table 4.

Table 4: BBCG Projects' EIS Status


Project	Status	Construction Start	Operations Start	SIMP required
Daunia Mine	<ul style="list-style-type: none">EIS Completed 2010Construction started 2011	2011	2013	No
Caval Ridge Mine	<ul style="list-style-type: none">EIS Completed 2009Applications for Project Change approved in 2011	2012	2013-2014	Yes

Daunia Mine has been under construction since mid 2011. Although a SIMP is not required for DM, BMA has chosen to address its potential impacts on health services, traffic and community safety in this SIMP.

The EIS for CRM noted that its construction and operation would enable a 2.5 mtpa expansion of the Peak Downs Mine. The Peak Downs Mine expansion has been delayed in response to the challenging external environment. This expansion is not subject to an EIS; however potential impacts and mitigations relating to the Peak Downs expansion facilitated by CRM have been addressed in this SIMP. These inclusions address the cumulative impacts of the two projects which are co-incident with CRM's construction.

2.1.1 Caval Ridge Mine (CRM)

Caval Ridge Mine is located in the northern Bowen Basin, southeast of Moranbah and north of the existing Peak Downs Mine. The mining lease covers 6,706 hectares on the northern and southern sides of the Peak Downs Highway, with the northern-most boundary of CRM approximately six kilometres from the Moranbah township. Access to CRM will be via a new intersection on the Peak Downs Highway.



CRM will have the capacity to produce 5.5 mtpa, and has an expected working life of approximately 30 years. The project includes construction of a new Coal Handling and Processing Plant (CHPP) to process production from CRM and the potential extra 2.5 mtpa from the associated Peak Downs expansion, which has been delayed in response to the challenging external environment. Coal from the Peak Downs expansion is expected to be transported by conveyor to the new plant. A rail spur and loop will also be constructed and product coal will be railed to the Port of Hay Point for export.

Construction of CRM will employ a contract workforce of approximately 1,760 people. For operations, BMA will employ approximately 500 people, with an average of 100 contractors also required.

BMA is constructing two accommodation villages to accommodate CRM construction and operations workers (see Section 2.3 and Appendix E).

In the short term, prior to full availability at Buffel Park Accommodation Village (BPAV), contractors employed on construction of CRM are being accommodated at the BMA Accommodation Village (BMAAV).

2.2 Caval Ridge Workforce

2.2.1 Construction

Construction of Buffel Park and CRM commenced in early 2012. The major construction components include:

- construction of the Buffel Park Accommodation Village;
- building the mining infrastructure area, including the CHPP, roads, dams, administration buildings, water and sewage treatment plants;
- construction of the rail spur and loop; and
- preparation for the first stage of the mine for operations.

The majority of the construction workforce will commute from various locations throughout Queensland, however local contractors are also likely to provide services to CRM.

Construction is undertaken by a contracted workforce managed by the Engineering Procurement and Construction Management contractor. Revised workforce estimates indicate that the construction workforce will peak at approximately 1,760 in 2013. The indicative workforce profile for construction is as shown in Table 5.

A range of rosters are available to contractors working on CRM construction. Construction rosters are compliant against relevant company and industry fatigue standards, including rest-days where required.

All non-resident workers will be accommodated in the accommodation villages as described in Section 2.3. During rest days, recreational activities will be provided within the accommodation villages, and bus trips to town will be provided so workers can access the local shops and services. A range of other strategies to manage the interface between workers and town are detailed in the Community and Workforce Cohesion Strategy (Appendix C).

Table 5: CRM Construction Workforce Profile

Occupation	FTE	FTE	FTE
Trades and manual contractors	2012	2013	2014
Equipment operator	341	154	1
Labourer	200	294	3
Carpenter/ formworker	25	22	1
Steel fixer	37	43	1
Concrete finisher	19	16	0
Scaffolder	13	12	3
Riggers	38	90	1
Boilermaker/ welder	24	62	1
Pipefitter	10	37	1
Electrician	67	114	4
Instrumentation	0	3	1
Mechanical fitter	10	94	3
Mechanical TA assembly	0	155	117
Contractor craft indirects	207	239	7
Contractor non-manual indirects	149	200	22
Total Trades contractors	1141	1535	168
Non-manual Contractors			
Engineers	6	7	2
Construction - field engineering	67	82	20
Document control	18	22	5
Project controls	14	17	2
Procurement	12	12	2
Contracts	11	14	4
Workforce services	13	18	3
Pre-op services	0	4	15
Env't health and Safety	14	20	10
EME	2	25	14
Other (HR, IT, Finance)	7	7	3
Total Non Manual	164	229	81
Total Full-Time Equivalent (FTE)	1305	1763	250

2.2.2 Operations

The mine is expected to be operational by mid 2014. Operational mining activities will include clearing vegetation, removing overburden and spoil, coal mining, progressive rehabilitation, mine and equipment maintenance, and mine management. Occupational groups which form the majority of the operational workforce include:

- mining (e.g. dragline and heavy machinery operators);
- maintenance (e.g. diesel fitters, electricians, instrument specialists); and
- mine management and administration professionals.

The CRM operations workforce is expected to gradually increase to approximately 400 employees during 2013, with more than 500 operational employees required for steady-state operations from 2014. On average approximately 100 operational contractors are also expected to be required throughout operations. Enterprise Agreement employees will work a seven day roster.

The workforce profile for operations including operational groups and Full Time Equivalent (FTE) headcount is detailed Table 6.

Table 6: Operations workforce profile

Occupation	FTE	FTE	FTE	FTE	FTE	FTE
Employees	2012	2013	2014	2015	2016	2017
Managers	11	11	11	11	11	11
Superintendents	14	14	14	14	14	14
Operational Supervisors	34	53	72	72	72	72
Technical Professionals	24	43	46	46	46	46
Support Professionals	8	16	16	16	16	16
Administrators	2	8	8	8	8	8
Trades	0	181	208	208	208	208
Operators	0	104	172	174	174	174
Total employees	93	430	547	549	549	549
Contractor headcount						
<i>Occupation</i>	FTE³	FTE	FTE	FTE	FTE	FTE
Technical Professionals				5	5	5
Support Professionals				5	5	5
Trades				90	90	90
Total contractors				100	100	100
Total Full-Time Equivalent (FTE)				649	649	649


BMA has a strong commitment to employing locally and from within Queensland, and the workforce at existing BMA operations is largely residential. The Queensland resource industry currently faces extremely tight labour market conditions, as demonstrated by the large number of BMA vacancies.

BMA has planned for a remote workforce to widen its recruitment options in the tight labour market, without impacting existing operations and local opportunities. A remote workforce will also assist with mitigating demands on local housing supply and social infrastructure.

Operational employees and contractors will be accommodated at the BPAV. Major maintenance crews such as dragline maintenance and shut-down maintenance crews will also be required throughout operations. Such crews may include up to 500 people, and be required for periods of some weeks at a time. Accommodation villages will be maintained at a size adequate to accommodate peaks in maintenance crews.

2.2.3 Daunia Mine

Daunia Mine (DM) is a new multi seam open cut mine, producing up to 4.5 mtpa of coal for the export market. The mine is under construction, approximately 30 kms south east of Moranbah and 30 kms west of Nebo. Construction of DM commenced in late 2011 and first coal is expected in 2013. The life of the mine is expected to be approximately 21-25 years.



The project will employ up to 1,000 contractors during construction, which is planned for completion in late 2013, and will employ approximately 450 operational staff. Daunia's construction and operational workforces are being accommodated in the MAC Services Coppabella Accommodation Village, 30 kms east of Moranbah. The Coppabella Accommodation Village provides a similar level of amenity to that planned for BMA's accommodation villages, as described in Section 2.3.

Whilst a SIMP was not required for DM, construction of DM and CRM will coincide during 2012-2013, and as such this SIMP includes consideration of the Daunia workforce's cumulative impacts on health services demand, traffic safety and workforce-community interactions.

2.3 Accommodation Villages

BMA is constructing the Buffel Park Accommodation Village (BPAV) to accommodate the construction and operations workforces for Caval Ridge Mine. BPAV is located approximately 17 kms south of Moranbah on the Peak Downs Highway.

Some CRM construction workers will also be accommodated at the BMA Accommodation Village (BMAAV) as described below. The locations of the two accommodation villages are shown in Figure 1, followed by further detail on each facility.



Figure 1: Accommodation Village Locations



2.3.1 Buffel Park Accommodation Village (BPAV)

Approval for the development of BPAV was provided by the Queensland Government in September 2011.

The BPAV construction village will include 1,380 rooms in the first stage (with the remaining construction workforce accommodated at BMAAV) and up to 2,000 rooms as required. A high standard of accommodation will be provided, including recreation and health services described in Section 2.3.3. An extensive pedestrian network will be provided, as this is the key mode of travel within the village.

BPAV is expected to commission its first rooms in late 2012, and will accommodate members of the construction workforce, village management and support people. A specialist village management contractor will manage the village under the direction of the EPCM contractor for the period of construction (see Appendix E). BMA may assume management of the village contractor for operations or appoint another management contractor.

The village will include dedicated sections for both the construction and operational workforces. Accommodation units will be maintained within BPAV to accommodate periodic maintenance crews. Accommodation for maintenance people will also be maintained for the longer term.

The operation workforce section of the BPAV, which includes 445 rooms, will be constructed concurrently on the same site. This is to ensure adequate capacity as the operations workforce builds up, and achieve integration and efficiency in village infrastructure. This facility will be maintained for the longer term, to further reduce pressure on accommodation demands in Moranbah.

2.3.2 BMA Accommodation Village (BMAAV)

In order to mitigate pressure on housing in Moranbah, BMA is establishing a 1,200 room Accommodation Village (BMAAV). The BMAAV is located approximately five kilometres south of Moranbah, on the Peak Downs Mining Lease (ML 1775). Construction of BMAAV began in May 2011, with 400 rooms available in March 2012 and approximately 800 rooms expected to be available in June 2012. Delays associated with the Development Applications for the Buffel Park Accommodation Village have resulted in a need to accommodate some of the construction workforce at BMAAV.


The EPCM contractor will manage the village during CRM's construction, through a specialist village management contractor. BMA will assume management of the village after handover for operations. BMAAV will include similar facilities and services as BPAV (described below).

BMA has constructed a new intersection on the Moranbah Access Road, at the entrance to BMAAV, installing slip-lanes in both directions to provide safe access to and from the site and minimise impacts of through traffic.

2.3.3 Employee and Family Wellbeing

BMA is committed to maintaining the health and well-being of its workers and contractors' workers. Health facilities and service provision for all persons accommodated by BMA in relation to the CRM will include:

- access to a health clinic, paramedic, on-site emergency response staff, trauma kits, defibrillators and drug and alcohol testing facilities;

- 
- gyms, outdoor recreation space, sporting field and sports equipment, social meeting places and barbecue facilities;
 - Employee Assistance Program for counselling and emotional health issues;
 - regular health promotion programs such as physical activity programs, weight management, reduced smoking and alcohol consumption;
 - health monitoring programs such as skin checks and blood pressure testing, programs;
 - nutrition and education programs delivered through the Villages' dining facilities; and
 - a helipad and medical evacuation facilities incorporated in the mine's facilities.

If the CRM or DM construction or operations workforces include migrants to Australia, specific induction, training and support programs will be developed.

The EAP provider is a company which will secure appropriate staffing levels to meet needs.

All BMA operational sites also employ health advisors, exercise physiologists, and qualified rehabilitation and return-to-work coordinators, and provide free on-site physiotherapy and occupational therapy services for work and non-work related injuries. BMA is also considering provision of GP services, as described in Section 5.2.3.

The contractor managing the BPAV accommodation facilities will provide employees whose responsibility is to ensure workers have access to recreation options, transport to access essentials in town, and health and well-being programs. This includes the village management contractor's design and delivery of healthy eating programs which are designed by nutritionists. Further details are provided in the Accommodation Village Management Plan.

Responsible service of alcohol will be practiced in the licensed camp facility under management of the specialist accommodation village management contractor. The licensee will participate in local Liquor Accord meetings with other proprietors in the Moranbah area.

Physical infrastructure provided within the village to manage health and avoid impacts on local infrastructure includes waste management and recycling facilities, bus parking and transit facility, water and energy infrastructure, a sewerage treatment plant, as well as roads and paths.


Access to the internet and mobile phone services to maintain daily connection with family members and friends is provided within BPAV. BMA's EAP Program also provides counselling if required by families of its workers. Other options being considered include support programs and information for families at home, and practices that support family harmony and inclusion, such as special occasion celebrations.

2.3.4 Travel Arrangements

During construction, the remote workforce will fly to Moranbah or Mackay airports from their points of origin, and be bussed to accommodation villages and the mine site.

For operations, the non-resident workforce will fly to Moranbah Airport from other Queensland regions, and be bussed to the CRM site and accommodation villages.

BMA owns and operates the Moranbah Airport and has committed \$46 million towards the upgrade of the Moranbah airport. The upgrade includes an improved runway, terminal, and parking facilities, and a new intersection to improve safety and access to the airport. The airport upgrade will benefit the community through improved provision of services and bring the airport in line with other regional centres.



A small number of workers are expected to use light vehicles between the villages and mine site. However, organised commuting arrangements and discouragement of the use of private vehicles will minimise traffic impacts on the Peak Downs Highway and other busy local connectors. Traffic safety is further addressed in Section 5.2.4.

2.3.5 Fatigue and Journey Management

Fatigue management is a core policy for BMA projects and operations. BMA's EPCM contractor and its' sub-contractors for CRM will employ fatigue and journey management policies which are consistent with BMA's requirements, and this is addressed in their contracts to ensure a consistent approach to the safety of workers and other road users. This will include rest days for construction workers to maintain sleep levels, and attend to health and fitness.

Fatigue and journey management procedures for CRM and DM's operations will include:

- a three-tiered training approach which educates managers, supervisors and workers in fatigue management, including:
 - how to recognise the effects of fatigue;
 - the influences of a healthy lifestyle and non-work activities;
 - the effects of medical conditions, sleep disorders and drugs and alcohol;
 - personal measures to manage fatigue; and
 - how to access the Employee Assistance Program.
- standard rosters which can only be varied through risk assessment and authorised sign-off;
- monitoring employees and contractors shifts to ensure fatigue management guidelines are met;
- accommodation in ensuite rooms with state-of the-art light, noise and temperature control; and
- separation of crews on night and day shift.

Additional journey management strategies include:

- bus transport to and from the village and work sites, as well as to and from the airport;
- providing guidelines to workers which outline acceptable safe journey management practices; and
- discouraging the use of private transport by workers.

Operations workers are also required to provide individual journey management plans which detail how they will safely travel between their homes and the airport (and back), in line with BMA guidelines.

Compliance will be monitored, including through regular consultation with the Queensland Police, and policies and practices modified if required. Fatigue and journey management policies also apply to BMA staff employed for the Daunia Mine.



2.3.6 Relationship to Moranbah

BMA is working closely with the EPCM contractor to ensure an integrated approach to construction management, which reflects respect for community values, and promotes mutual respect between non-resident workers and the local community. Actions undertaken in this regard include:

- participation by BMA and Bechtel managers in the monthly Moranbah BCN to ensure issues are anticipated and addressed;
- relationships established between BMA, Bechtel and local Police officers;
- development of induction materials by both BMA and Bechtel, addressing SIMP requirements with regard to conduct, health and local values;
- development of agreed workforce conduct and accommodation village rules for construction;
- articulation of requirements for all non-resident workers to stay in the accommodation village to major contractors, and provision of sufficient rooms for this to occur; and
- development of Local Buy strategies for both construction and operations phases.

BMAAV is located approximately five kilometres southeast of Moranbah, whilst BPAV is located approximately 17 kms south of the town. The Coppabella MAC Group Village which accommodates DM construction and operations workers is located some 30 kms to the east of Moranbah. As such, each village is separated from the town, which avoids direct 'neighbour' impacts.

Moranbah residents may notice increased bus movements at shift times and increased workers around the area. CRM's construction workforce is expected to peak at approximately 1,760 during 2013, by which time there will also be up to 430 operational workers employed. As such, the peak combined workforce may total up to 2,190, if peak construction coincides with the operational peak.

A range of on-site services will be provided to the workforce as described in Section 2.3.3.

BMA does not expect to draw on Moranbah housing during either construction or operation of CRM and DM. Provision of workforce health, recreation and well-being programs at the accommodation villages will also limit demands on Moranbah's social infrastructure.

There is potential for increased demand on police, emergency and health services, which will be mitigated as described in Section 5.2.3. Mitigations in relation to the expected demands on housing and social infrastructure are addressed in Section 5.2 as part of BMA's Community Development Strategy.

BMA or its contractor will also provide a regular bus service from the accommodation village to Moranbah to enable workers to access local shops, banks and other services. This will enable contact with the town and its businesses, provide workers with access to a social environment outside the village, and ensure workers can access needs such as medication, banking or shops.

Additional information on workforce management, including workforce training during construction and operation, is in Section 5.2.5. Caval Ridge's Workforce and Community Cohesion strategies are outlined in Section 5.2.1 and in Appendix C. CRM will also work with BMA's Community Network to monitor perceptions of behaviour and safety in the community, and support initiatives to address any issues identified.



2.3.7 Accommodation Village Management

An Accommodation Village Management Plan (AVMP) for Buffel Park has been developed. The AVMP will be finalised during the first three months of village operation, and will include:

- workforce well-being and facility provision;
- engagement with local services including Queensland Police Service, Fire and Rescue and Ambulance Services;
- management of behaviour in the accommodation villages;
- gender and cultural issues; and
- the complaints management procedure, outlined in Section 6.



3 Communities of Influence

CRM's social and cultural area of influence includes the township of Moranbah, the Isaac Regional Council (IRC) Local Government Area (LGA) and the greater Whitsunday and Mackay regions.

The strongest influence will be on the Moranbah community, located six kilometres from the mine lease's northern boundary. Impacts and benefits will also be experienced at the regional level in the Isaac, Mackay and Whitsunday LGAs, as discussed in Section 4.2.

During the construction period, CRM will also influence other regions from which workers are drawn. However the origins and types of workers are still to be determined.

The following sections summarise social and cultural values in the local and regional area, with a focus on those potentially impacted or benefited by CRM.

3.1 Indigenous Community

The Native Title claimants for the Moranbah area are the Barada-Barna people. At the 2006 census, 419 people (2.1 per cent) in the Isaac LGA identified as Indigenous, including 134 people in Moranbah, representing 1.9 per cent of the town's population.

Engagement with Barada-Barna people in the region indicates some of their key values as:

- protection of cultural heritage, and ensuring ground disturbance respects and protects the physical evidence of cultural heritage;
- employment, particularly for young people;
- culturally-specific services available in the region;
- affordable housing; and
- opportunities for business development.

BMA's Indigenous Engagement Strategy's principles include respecting the cultural heritage of Indigenous people, improving their economic status through education, employment, health and well-being, and engaging openly and transparently to maintain effective partnerships.

BMA has developed its Indigenous Engagement Strategy "In Partnership", as the framework for working with Traditional Owners and other Indigenous people in Queensland to support their employment, business development and community development goals.

3.2 Moranbah

The township of Moranbah is located in central Queensland, approximately 180 kms south west of coastal Mackay. It was established in the late sixties by Utah Development Company as a purpose-built mining community to service first Goonyella, and then Peak Downs Mine.

The township currently occupies about eight square kilometres, with land use strongly residential in nature. Given the nature and location of mining leases and buffer zones, which ensure town amenity is protected from impacts such as dust and noise, the availability of land for additional housing is somewhat constrained.

An Urban Development Area in and around Moranbah was declared in 2010, in order to identify affordable housing and land development opportunities. BMA is working with the ULDA to realise these opportunities.



3.2.1 Population

The estimated resident population of Moranbah in June 2010 was 8,511 people⁷. The population was estimated to have increased at 2.8 per cent per year between 2006 and 2010, growing from 7,607 to 8,511 people (or around 220 people per year) in this period.

More than 72 per cent of households are identified as family households. This includes couples, couples with children and single parent families. Key population characteristics of the Moranbah community in 2006, as compared to 2001, included:

- a median age of 29 years, down from 31 years in 2001, and compared to 35 years in Mackay;
- a higher proportion of males, at 55.2 per cent, which had decreased from 55.8 per cent in 2001;
- average household size of three, down from 3.6 in 2001, and compared to 2.7 in Mackay and Queensland; and
- median individual weekly income of \$948 per week, compared to \$550 in 2001, and \$530 in Mackay.

About 83 per cent of Moranbah residents were born in Australia, with approximately one in eight born overseas, most of these from English speaking countries but with a representation of European and South East Asian origins.

The population in Moranbah has become more mobile over the past ten years. This is best demonstrated by the fact that in 2001, approximately 65 per cent of residents lived in Moranbah for the preceding five years, whilst in 2006 this figure was 35 per cent.

The Moranbah population is projected to increase to approximately 11,000 residents by 2016⁸, and if this growth level were sustained, could reach more than 13,000 by 2021.

3.2.2 Non-resident population

Whilst the above characteristics describe the Moranbah population as captured by the ABS census, the residential population is a mixture of those who live and work in the Moranbah community and those who live in the area (in town or in accommodation villages) during their work days.


Less is known about the non-resident workforce than the resident workforce. However it can be estimated that 85 – 90 per cent are male, a large proportion live in the surrounding regions of Mackay, Whitsunday, Rockhampton and the Central Highlands, the age profile is largely between 20 and 50 years, and there are high proportions of skilled (trades-trained) and semi-skilled workers.

OESR's Bowen Basin Population Report (2010) estimated that the number of people staying in and around Moranbah as non-resident workers was 2,931 people in June 2010, from a total estimated Full Time Equivalent (FTE) population of 11,442 people.

OESR's report also found that whilst 26 per cent of the FTE population in the Moranbah area was non-resident, higher percentages were recorded in Dysart (30 per cent), Middlemount (39 per cent), Coppabella (70 per cent), Glenden (52 per cent) and Nebo (70 per cent).

⁷ OESR (2010) OESR (2011) Bowen Basin Population Report, 2010 estimate based on ABS preliminary data for 2009., p. 20

⁸ OESR (21001) Unpublished data for Housing Impact Study.



The report also found that accommodation villages and single persons quarters (SPQs) housed 85 per cent of non-resident workers in the Bowen Basin in June 2010, so many of the non-resident workers interact primarily within the accommodation sites and work sites. Some make visits to Moranbah or other towns close by to access recreational, health or retail services, but most of their interaction with the area is in terms of road use. Others access housing in town, and have varying degrees of interaction with community members and services.

3.2.3 Employment and business

In September 2011, the Belyando Statistical Local Area (which includes Moranbah) had an estimated labour force of 7,663 (up from 7,547 people in March 2011) of whom just 107 people, or 1.4 per cent were unemployed⁹. This compared favourably with Mackay which had an unemployment rate of about 4.1 per cent, and Queensland with a rate of 5.8 per cent. However, this low rate equates to full employment in the Moranbah and surrounding area, making it difficult and expensive for businesses and services to access labour.

Weekly individual incomes in the study area indicate that Moranbah is a relatively prosperous community. The median individual income for the study area was \$948 per week, which was considerably higher than the Queensland median of \$466.

With nearly half of the working population employed in mining, there is little economic diversification in Moranbah. Non-mining workers and families in Moranbah find that costs of living (and particularly housing) impact significantly on household incomes.

Despite the relative 'prosperity' of the Moranbah community, most people undertake the majority of their spending outside the community in other regional centres. Other issues affecting local business in the area, as identified by the Moranbah BCN, include:


- loss of staff from local businesses and services to higher paying mining roles;
- impact of high rents on business owners, their businesses and employees; and
- loss of potential local benefit from mining with contracts typically awarded to larger suppliers.

3.2.4 Social infrastructure

Moranbah has a good range of basic social infrastructure, including:

- two childcare centres, two primary schools, a High School and a Trades Training Centre;
- a 14 bed hospital which provides services including acute nursing care, x-ray, outpatient services and physiotherapy;
- two doctors' surgeries with a total of four to five doctors employed;
- Moranbah and District Support Service, providing a range of family and community support services;
- Queensland Ambulance Service (QAS), the Queensland Fire and Rescue Service (QFRS) and the Queensland Police;
- sporting facilities, including football, court sports, aquatic facility, pony club, tennis, and motor cross; and

⁹ <http://www.workplace.gov.au/workplace/Publications/LabourMarketAnalysis/SmallAreaLabourMarkets-Australia.htm> viewed 1 August 2011

- 
- volunteer and service groups, including Lions, Masons, Rotary and Apex.

However, this infrastructure has become stretched, due to rapid growth in recent years, which has increased demand on services including emergency and supported housing, childcare, family support, disability support, and services for aged care.

Health infrastructure is also stretched. The lack of other after-hours health services means evening presentations in particular are taxing on hospital staff. Patients who require treatment beyond basic services are sent to regional hospitals, the nearest being Mackay, which is approximately 200 kms from Moranbah. For example, birthing services aren't offered in the hospital, leading to long stays in regional centres and high costs for new parents.

The ability to attract and retain qualified service workers is constrained due to the high cost of housing, and services workers face challenges in meeting living costs due to the high cost of housing.

3.2.5 Community values

Over its forty year life, Moranbah has developed a strong sense of community. It has strong value as a place to raise families, as evidenced by more than 2,000 people of less than 15 years old living in Moranbah in 2006. Recent consultation evidence (BCN July 2011) indicates that school enrolments at one state school had grown by 200 students between 2008 and 2011. The town is now seeing some third generation families, with more than 250 people over 60 years who were resident there in 2006.

School principals report that strong family, sporting and community values have led to exemplary school communities. Moranbah parents provide strong support for their schools and students, and children's behaviour is described as excellent.

In the Isaac Community Plan consultation process, almost all (98 per cent) of participants said they had chosen to live in the Isaac Region for community, health, lifestyle and liveability reasons. Key aspects valued by residents include:

- a higher than average level of social advantage as measured by the SEIFA¹⁰ indexes;
- strong community spirit;
- a casual, relaxed lifestyle with family and sporting associations at its centre;
- a wide range of sporting facilities, and a more limited range of community centres;
- the highly valued 16 bed hospital, police, ambulance and fire stations; and
- a range of local retail services.

Recent Community Perception Surveys conducted by BMA in Moranbah indicate that respondents living in the town perceive Moranbah as a family-orientated community, and very suitable to raising children. The surveys indicate that the key disadvantages felt by those living in the area include limited shopping facilities, the high cost of living and shortages of housing and accommodation.

Overall, the community was found to be generally optimistic and believe there is a strong growth outlook in the region through mining. Current community priorities include improving entertainment and recreational facilities, providing for and attracting more services and businesses, and improving transport and infrastructure.

¹⁰ ABS (2008) Socio-Economic Indexes for Areas (based on 2006 Census Data).

The Moranbah BCN identified the following key issues affecting the town's lifestyle and values including:

- the high cost of housing and effects on low income households, including young people and non-resource workers;
- increased traffic and fears for declining traffic safety both in town and on the highway;
- difficulty sustaining businesses in the face of high labour costs and labour shortages;
- a decline in the level of government-funded social support services, relative to population growth;
- high demands for services and facility maintenance on Isaac Regional Council due to the large area it services;
- low availability and consequent high cost of land in town;
- high costs of living ; and
- large numbers of non-resident workers who may not understand local values.

3.3 Mackay-Isaac-Whitsunday Region

Regional areas and the State of Queensland will benefit from the CRM project in terms of employment, economic development and regional development, as described in EIS. The regions of Isaac, Mackay and Whitsunday will experience the most direct influence.

A regional Plan for the Mackay-Isaac-Whitsunday (MIW) Region has been gazetted. The Plan notes that the Mackay urban area is the primary centre for the region, and holds most of the region's higher order services. The regional area's characteristics are detailed in the CRM EIS, and summarised briefly in this section.

3.3.1 Population

The Mackay Isaac Whitsunday (MIW) region includes the city of Mackay, the coastal towns of Bowen and Airlie Beach, and the more rural towns of Proserpine, Merinda, Nebo, and Clermont, as well as the mining-oriented towns of Glenden, Moranbah, Dysart and Middlemount.


The combined population of the MIW regions was estimated to have grown by approximately 20,000 people in the 2006-2011 period, to more than 180,000 people. Between 2011 and 2021, the MIW region's population is estimated to increase by an extra 50,000 people, as shown in Table 7. ¹¹

Table 7: Population Projections for MIW Region and LGAs

LGA	2006	2011	2016	2021	2026	2031
Isaac (R)	21,113	23,277	28,266	31,418	34,270	37,000
Mackay (R)	107,332	121,397	138,348	156,117	172,604	187,367
Whitsunday (R)	31,355	35,743	40,618	46,008	50,928	55,451
MIW Region	159,800	180,417	207,232	233,544	257,802	279,819

Source: Queensland Treasury - OESR (2011) Bowen Basin Population Report, 2010 Appendix B: Medium Series Projections

¹¹ These data were derived from the Queensland Government (2011) Queensland Government Population Projections to 2031: local government areas, 2011 edition Appendix B: Queensland Government population projections to 2031: (medium series) local government areas 2011 edition



As shown in Table 7, Isaac LGA's population is expected to increase by an average of almost 1,000 people per annum in the years 2011-2016, with growth slowing in 2016-2021 to around 630 people per year. This equates to an average annual growth rate of three per cent in the ten years to June 2021, higher than the expected growth in Mackay (2.5 per cent per year) and Whitsunday (2.6 per cent per year).

3.3.2 Regional Values

The Mackay-Isaac-Whitsunday (MIW) region has a land area of 90,340 km², and is highly diverse in landscape, settlement pattern and environmental and social values. Key elements of the region's vision, as expressed in the MIW Regional Plan, include:

- a vibrant, progressive region where the values of the community and industry are respected and in balance with the natural environment;
- a region where the natural assets and abundant resources have been responsibly managed for the benefit of residents and visitors and future generations;
- achieving its potential with a range of industries, and employment and learning opportunities for everyone; and
- has a resilient and inclusive community that respects and offers diversity and choice, and where residents and visitors enjoy a healthy, active and safe lifestyle.

According to the medium series projections, Isaac LGA's growth rate is expected to be the fourth highest in the state after Gladstone, Ipswich and the Scenic Rim. As such, the region faces major challenges to sustainable growth, including those identified in the MIW Regional Plan:

- access to required services and facilities;
- managing transport network congestion and capacity issues;
- managing the constraints facing urban development across the region;
- opportunities for affordable and diverse housing choices, particularly in mining communities; and
- managing cumulative social impacts on the local community¹².

Regional Councils and other stakeholders are acutely aware of the area's vulnerability to resource cycles and project development schedules. However, they also see mining as an integral part of the regions' future. Councils are working to ensure mining and associated development can proceed in line with community values, and with adequate social and economic resources for their region to cope with growth. Key growth opportunities and challenges identified in the MIW Regional Plan include:

- additional industrial land, and timely provision of infrastructure and services;
- protecting rural areas from inappropriate development;
- encouraging infill and redevelopment in the Mackay urban centre; and
- further employment and housing options.

CRM's alignment with regional planning objectives is described in Section 4.2.3.

¹²Queensland Government Department of Local Government and Planning (Feb 2012) Mackay Isaac Whitsunday Regional Plan viewed at <http://dlgp.qld.gov.au/regional-planning/mackay-isaac-and-whitsunday-region.html> (February ay 2012) 20 March 2012



4 Social Impacts and Benefits

CRM's social impacts and benefits were detailed in the CRM Social Impact Assessment (CRM EIS 2009), and were re-appraised during development of the SIMP to consider:

- alignment with recent local and regional planning directions, and new policy requirements;
- more recent information on demographic characteristics and projections;
- an updated understanding of current issues, through engagement with the Moranbah BCN and other stakeholders;
- changes in the project since the EIS was conducted in 2008, including approval for the Buffel Park Accommodation Village, BMA's housing development plan, and planning for a remote workforce;
- cumulative impacts of mining and other developments in the Isaac region; and
- stakeholder input on existing issues and potential impacts, followed by a summary of impacts as updated with the Moranbah BCN.

4.1 Stakeholder Input

4.1.1 EIS Stakeholder Input

During the CRM EIS and SIMP development processes, BMA undertook community consultation and stakeholder engagement relating to CRM and the wider Bowen Basin Coal Growth Projects. The purpose was to identify community issues and concerns, develop proactive mitigation strategies, and continue to develop relationships between BMA, regional agencies and organisations, and central Queensland communities.

Stakeholders and consultation processes are detailed in the Social Impact Assessment, and included:

- community members, through perception surveys and specific consultation EIS consultation;
- community organisations, through interviews and meetings with service providers and committee members;
- regional Councils, through briefings, meetings and EIS review during statutory consultation periods; and
- Queensland Government agencies, through interview and statutory consultation reviews.

Existing social issues identified by stakeholders reflect Moranbah's long history of mining, the challenges of small regional towns, recent rapid growth in mining interests, and a background of high growth in the MIW region. The key themes in consultation included the need to ensure CRM doesn't exacerbate current negative conditions, and supports the town's social sustainability.

Existing issues and potential CRM impacts identified by stakeholders are summarised in Table 8.


Table 8: Summary of Stakeholder Input on Issues and Impacts

EXISTING ISSUES	POTENTIAL CRM IMPACTS IDENTIFIED BY STAKEHOLDERS
<p>Housing</p> <ul style="list-style-type: none"> • Low availability of housing for families and singles. • Low availability and consequent high cost of land in town. • High housing costs compound family living expenses. 	<ul style="list-style-type: none"> • Pressure on housing and accommodation supply from non-resident workers. • Potential for increased demand for housing to accelerate housing cost increases. • Potential for economic stimulation to increase demand for housing.
<p>Liveability and cohesion</p> <ul style="list-style-type: none"> • Increased traffic and concern for declining traffic safety, in town and on the highway. • Amenity issues such as dust. • Reliance on the mining industry, with concern for sustainability if town growth is not continued. • Difficulty sustaining businesses in the face of high labour costs and labour shortages. 	<ul style="list-style-type: none"> • Concern that non-resident workforces may affect community safety and cohesion. • Potential for increased traffic to decrease driver safety on the Highway and in Moranbah. • Recognition of BMA's contribution to Moranbah's social resources, and potential for CRM to contribute. • Potential positive effect of buying locally to diversify and strengthen the local economy.
<p>Social infrastructure</p> <ul style="list-style-type: none"> • Lack of government recognition of population growth and fluctuations. • Increasing demand for services from population growth, and as a result of housing costs. • Need for a co-ordinated response to social infrastructure needs. • Limited access to General Practitioners, Police and health and community workers. 	<ul style="list-style-type: none"> • Concern that there will be increased demands on GPs, hospital and emergency services. • Increased demand of new families on social and health services due to population growth (reduced by a remote workforce).

4.1.2 SIMP Stakeholder Input

Stakeholder engagement in the development of the SIMP was conducted from February 2011 to March 2012, and included:

- eight meetings with the Moranbah BMA Community Network (Moranbah BCN);
- meetings with Moranbah service providers including Fire and Rescue, Ambulance, Police, Principals from each school, the Director of Nursing and Senior Nurse, General Practitioners and Medical Practice Managers;

- 
- meetings with Isaac Regional Council and Mackay Regional Council;
 - meetings with Queensland Government agencies including:
 - Department of Employment, Economic Development and Innovation (DEEDI) SIA Unit;
 - DEEDI's Sustainable Resource Communities Officer;
 - Office of Statistical and Economic Research;
 - Queensland Police Service (Local and District Officers); and
 - Queensland Health (local and district officers).

Discussions with the Moranbah BCN and other stakeholders during SIMP development provided input to CRM impact assessment and mitigation development, including:

- the need to manage the impacts of non-resident workforces, including respect for local values and communities, and appropriate social behaviour;
- the need to manage the impact of CRM workforces on health services, so service levels and local access aren't diminished;
- need for information about timeframes for construction and operation to enable Council and local services to plan;
- more active co-operation with local emergency services is required;
- journey management and fatigue policies need to be an active and ongoing focus, to minimise impacts on safety and emergency services;
- the accommodation demands of short stay workforces living in town are impacting on housing cost and neighbourhood amenity;
- the need for government and appropriate industry investment to support amenity and the sustainability of the town;
- reinforce local employment opportunities, including apprenticeships and traineeships; and
- the need to strengthen opportunities for local business to provide services and products to CRM.


Stakeholders were concerned that CRM would start a trend to a remote workforce in all future projects (and potentially existing mines), reducing the local workforce, and changing the town's character. Stakeholders stressed the need to 'future proof' Moranbah – against both short and long-term mining trends, and the eventual cessation of mining.

These issues are addressed in Section 5. BMA will continue to engage with stakeholders during the construction and operation of CRM, as detailed in Section 6.

4.2 Project Alignment with Regional and Local Planning

4.2.1 Sustainable Resource Communities Policy

Against a background of increased resource sector investment, the Queensland Government introduced the Sustainable Resource Communities (SRC) Policy in 2008, to provide a framework for better management of the impacts of growth on communities and encourage improved assessment and management of impacts by all stakeholders.



The SRC Policy recognises both the economic contribution of mining to Queensland and the potential for significant environmental, social and economic impacts on communities. It notes that a greater focus on social impact assessment during the approvals phase is particularly relevant where *'multiple concurrent and overlapping proposals for new and expanded mining development'* could result in cumulative impacts on communities being inadequately understood or addressed.

The SRC Bowen Basin Leadership Group, which consists of Council, mining company representatives, union representatives, State Government departments and community members, was established under the Sustainable Resource Communities Partnership Agreement. BMA is a regular participant in the Bowen Basin Leadership Group and is working with a number of its members to address local and regional development priorities.

The delivery of health services has been identified as a key priority for the Leadership Group, which is progressing the Bowen Basin Health Service Plan, to develop a model of medical and health service delivery to match the needs and ability of communities within the Bowen Basin. BMA is also participating in a number of joint initiatives to develop social resources in Bowen Basin towns, relating to existing operations, which are provided for context and information purposes in Section 5.1.

4.2.2 Mackay Isaac Whitsunday (MIW) Regional Plan

The Queensland Government exhibited the Mackay Isaac Whitsunday (MIW) Regional Plan for public review in May-July 2011. The MIW Regional Plan will provide the framework for managing 'growth, change, land use and development and decision making in the region to 2031'¹³. The *Sustainable Planning Act 2009* (SPA Act) established regional plans as statutory instruments, to coordinate and integrate planning at the regional level, and assist communities to meet the challenges associated with population growth and change.

The Plan's vision is for: *"a vibrant region where the values of the community and industry are respected and in balance with the natural environment... natural assets and abundant resources are responsibly managed.... and ... has a resilient and inclusive community ... where residents and visitors enjoy an active, healthy and safe lifestyle"* (p. 10).

Strategic directions include 'Strong Communities', which notes that planning for social infrastructure for the growing population is a key challenge. The trend towards remote workforces is also noted, as is a preference by existing community members that social and economic opportunities, and a mix of housing, are provided in local towns to enable people to settle permanently in the region.

Specific challenges to the adequacy of social resources in the face of strong growth are noted in the MIW Regional Plan as including geographically dispersed communities, a growing population including mobile and temporary residents, reliance on industries subject to market volatility, and existing issues of disadvantage. The need for a broader range of health and community services is also prominent, including demands placed on infrastructure by non-resident workers.

The Regional Plan notes housing affordability as a key concern, creating pressure on low income families, young families and non-mining businesses seeking workers. The establishment of the Urban Development Area to address housing supply issues is a key initiative to address this, as is support for higher densities near activity centres in Moranbah.

Of particular relevance to the Isaac sub-region, the plan notes:

¹³ Department of Local Government and Planning (May 2011) Draft Mackay Isaac Whitsunday Regional Plan

- the unprecedented level of mining activity in the region which brings many economic development opportunities and also challenges to be addressed if communities are to remain sustainable;
- population growth in Moranbah will result in significant change in the scale and composition of the town centre; and
- that the IRC and the ULDA are undertaking detailed planning to ensure the town and its infrastructure can accommodate the anticipated growth.

4.2.3 Alignment with Local and Regional Priorities

The CRM, when considered with both BMA and CRM-specific community development strategies as described in Section 5, will support the MIW regional priorities, through:

- provision of accommodation for both construction and operations workforces;
- ongoing partnerships and new initiatives with community groups, businesses, schools and health facilities, as described in Section 5.1;
- provision of commuting as an option for regional workers, reducing labour draw from local services and businesses; and
- contribution to housing provision in Moranbah (as described in Section 5.2), including medium density housing options, to enhance local housing options.

The Isaac Region Community Plan was finalised during 2011, and identifies a number of Projects which would enhance the amenity and lifestyle of Moranbah residents. Within these priorities, which also include town beautification and business development, BMA has invested in:

- Moranbah Aquatic Centre upgrade;
- the Moranbah Regional Youth and Community Services Centre Upgrade;
- affordable housing;
- green initiatives such as environmental programs with Moranbah schools; and
- addressing the cumulative impacts of mining. through support for facilities which enhance amenity and activity levels in the community.

Other specific contributions to local and regional development, primarily through partnership with local and regional stakeholders, are outlined in Section 5.1. The Community Plan may be updated during its 20 year term, and future revisions of the SIMP will need to take account of substantive changes to the plan and to social conditions in the Moranbah area.

4.3 Social Impacts and Benefits

This section summarises potential social impacts and benefits, identified in the CRM EIS or through Moranbah BCN and local agency input. Impacts categorised as follows:

- community characteristics;
- housing and accommodation;
- community health, safety and social infrastructure;
- community lifestyle, amenity and cohesion; and

- economic development, employment and training.

Tables 9 and 10 summarise ‘potential impacts’, that is, impacts which could occur without mitigation. Impacts which were assessed as of moderate to high probability are discussed further in mitigation. Potential benefits which should be addressed in mitigation strategies are also summarised. Impacts which were considered of low likelihood and low significance are not detailed further, however BMA will monitor the baseline factors to ensure unexpected impacts are identified and addressed.

A qualitative assessment of the significance and consequence of impacts has been undertaken with respect to:

- the baseline for the relevant value, for example, housing and health services are already stressed;
- potential for CRM to contribute to cumulative impacts;
- the duration and number of people affected, where this can be quantified; and
- potential for disproportionate impacts on vulnerable members of the community.

The tables therefore include:

- the type of impact in each category;
- the nature of the impact (“-“ negative, “~” neutral or “+” positive); and
- the significance of the impact, and consequence if not mitigated.

Impacts and their corresponding mitigation strategies and performance indicators are summarised in Section 5.4.

4.3.1 Summary of Impacts: Construction

Potential impacts and benefits during the construction phase are summarised in Table 9.

Table 9: Potential Impacts - CRM Construction

Potential impact	Type	Significance & Consequence
Community characteristics		
Increase in non-resident workers during 2012 (up to 1,305 workers), 2013 (up to 1,763 workers) and 2014 (up to 250 workers) (see Section. 2.3).	-	Medium - potential for non-resident workers to affect perceptions of safety and cohesion through not behaving in accord with local community values.
Increased number of male workers around the community.	-	Medium (cumulative) - potential increased need for programs and services which enhance community resilience and participation in community life.
At peak, an extra 1,760 non-resident workers in the region, co-incident with around 500 DM construction workers.	-	Medium (cumulative) – potential for increased demand on already stretched health services, Airport, Police and Emergency Services.
	+	High - increased demand for consumables and services, enhanced by Local Buying programs.

Housing and accommodation		
Non-resident workers accommodated in Accommodation Villages.	~	Low - Avoids demand for housing or temporary accommodation in Moranbah.
Contribution to cumulative impact on housing demand in Moranbah due to new residents employed by local companies as a result of supply to CRM.	–	To be determined in the Housing Impact Study and Plan - could cause acceleration in demand for housing and therefore increased housing costs.
Existing pressure on hotel/motel accommodation could be exacerbated, preventing locals' visitors and tourists' access to accommodation.	–	Low - (cumulative) visitors to the project are housed in village accommodation.
Community lifestyle, amenity and cohesion		
Impacts on the lifestyles and business opportunities of nearby and adjacent property owners.	–	Low – environmental management and engagement with potentially affected property owners is ongoing to ensure potential impacts are managed.
Workers on rest days may use local facilities (town centre, hotel or other) in large numbers.	–	Medium - (cumulative) potential for large number of non-resident workers visiting town to result in locals feeling less comfortable and 'at home'.
Impact on recreational services and facilities	~	Low, offset by BMA investments in strengthening local facilities and clubs. Interactions of workers with town facilities would need to be managed in consultation with local facility managers.
Community health, safety and social infrastructure		
Potential impact	Type	Significance & Consequence
Demand from construction workers on limited community health resources.	–	Medium (cumulative) - potential for local access to GPs and hospital resources to be affected if mitigation is insufficient.
Perceptions of community security and safety reduced due to increased number of non-resident workers.	–	High (cumulative) – a large number of non-resident workers may change the community dynamics (e.g. feelings of closeness and knowing everyone, neighbourhood amenity and feelings of safety), if not managed appropriately.
Ambulance and fire services demand will increase with increased population.	–	Medium - potential for extra demand to detract from local service levels. Ensuring adequate resourcing needs to be addressed by relevant stakeholders including Government agencies.
Traffic safety currently challenged by multiple projects.	–	Medium – (cumulative) - with current high loads and projected increases, traffic safety is a key issue to be addressed in co-operation with the QPS. This will be mitigated by use of buses to transport

		workers between airport, accommodation and mine.
Police services stretched by extra commuting workforce and population growth.	-	Medium - potential for extra demand to detract from local service levels and resources if services are inadequately funded.
Economic development, employment, and training		
Non-residential workforces spending less money in the community than local workers would.	-	Moderate - offset by worker visits to town and local buy strategies.
Rates and special rates income contribution to IRC.	+	High - increased funding for sufficiency of LGA infrastructure.

4.3.2 Summary of Impacts: Operations

Potential impacts and benefits during the construction phase are summarised in Table 10. The remote workforce and provision of Accommodation Villages will avoid or reduce a number of potential impacts including:


- undue pressures and associated demands on social infrastructure and land availability;
- housing demand;
- labour drain from local businesses; and
- road safety impacts of fatigued drivers.

The demand for education and childcare services attributable to CRM will be negligible. However demand from the future Peak Downs expansion may be noticeable and this is addressed in Section 5.

Table 10: Potential Impacts - Operations

Potential impact	Type	Significance & Consequence
Community characteristics		
Potential impact	Type	Significance & Consequence
Remote workforce for operations sourced from throughout Queensland.	+	Medium - availability of employment choice to wider range of regions. High – spreading the economic benefits of more than 500 new high-income jobs and additional contracting opportunities to the remote workforce point(s) of origin.
Remote workforce brings little increase to community participation or local expenditure.	~	Low – CRM facilitates the expansion of Peak Downs, which will see approximately 275 primarily residential positions.
BMA Diversity Strategy will increase workforce diversity, with a goal of 30 per cent women and five per cent Indigenous people in BMA operations.	+	Medium - increased benefit for employment choice for women, Indigenous people and workers not yet skilled in coal mining.

Housing and accommodation		
Potential impact	Type	Significance & Consequence
Increase in Moranbah housing demand due to families whose move to Moranbah is facilitated by Peak Downs Expansion jobs.	~	Low – Timing of expansion is uncertain, but will be offset by BMA's Housing delivery strategy contributing to growth and local household formation.
Small indirect housing demand due to increased employment levels in Moranbah from CRM supply opportunities.	~	Cumulative - significance of demand for non-resource workers be determined in Housing Impact Study.
Implementation of BMA's Housing and Accommodation Program.	+	High - increase in housing stock of 160 dwellings in Moranbah by June 2013 (subject to normal development delays such as wet weather and contractor availability) to house new families. This stock will also address the impacts associated with the future Peak Downs Expansion
	+	Medium - Increase in housing diversity with a proportion of new BMA-built dwellings of medium density.
	+	High - increase of additional 240 dwellings in Bowen Basin housing stock by June 2017.
Community lifestyle, amenity and cohesion		
Increase of 500 full time equivalent non-resident workers.	–	Low - limited demand on local and regional health infrastructure due to facilities and services provided to the remote workforce at accommodation villages.
Potential for future increased demand on social support services due to changes in community, remote workers or new local employees at the Peak Downs Expansion facilitated by CRM.	–	Low to medium – (cumulative) - social services need to be monitored to identify any impacts, and agency and industry priorities for resources adjusted if required.
Community health, safety and social infrastructure		
Potential for increased demand for social support services due to changes in community, remote workers or future local employees at Peak Downs.	–	Medium (cumulative) - reflective of demand increasing across the board in response to multiple projects operating around Moranbah, and requires a collaborative response.
Increased school enrolments and increased childcare demand from future Peak Downs families.	~	Low - timing to be determined, and is in context with planning for three per cent average population growth in the Isaac region.
Traffic safety	–	Low - (cumulative) - small increase in traffic due to CRM operations, which will be managed in accordance with traffic safety protocols which were



		established during the construction phase.
Ambulance and fire services demand	–	Low - (cumulative) - potential for small incremental increase in demand which may need to be addressed in government funding priorities.
Police services	–	Low - (cumulative) - potential for small incremental increase in demand as above.
Employment, workforce participation and training		
Potential impact	Type	Significance & Consequence
CRM facilitates the future Peak Downs Expansion	+	Medium - creates choice in local and non-resident based employment.
Non-residential workforces spending little money in the community.	–	Low – offset by new families associated with the future Peak Downs expansion. and BMA Local Buy Program.
Potential for long-term supply contracts.	+	Medium - potential for significant benefit to local and regional businesses.

4.3.3 Summary of Impacts: Decommissioning

The CRM is likely to be in operation for a minimum of 30 years; therefore the earliest decommissioning may be around 2044.

Decommissioning activities will include the removal and recycling (where practicable) of above ground infrastructure, site rehabilitation and remediating the site to applicable regulations and standards in place at that time.

It is possible that decommissioning will cause some community discomfort regarding loss of benefits accruing from the mine to the local and regional area.

Given BMA and other proposed growth plans in the Bowen Basin, CRM is likely to be one of several projects operating in the area in 2044, so it is also possible that its cessation will have little effect on local communities.

Prior to decommissioning, BMA will consult with local communities regarding potential impacts, and identify strategies which will reduce or avoid such impacts. A SIMP will need to be developed three to five years prior to expected decommissioning, addressing collaboration with key stakeholders as part of closure planning.



5 Mitigation Strategies

In the ten years to June 2021, the Isaac Region's population is expected to increase by more than 8,000 to more than 31,400 people.¹⁴ Regional Councils and State Government agencies are committed to addressing growth challenges in the Isaac region.

Integral to this, as articulated throughout consultation for EISs, SIMPs, and local regional plans, is the need to support the social sustainability of mining towns and regions. On projected growth rates, Moranbah could see a population of up to 13,000 by 2021¹⁵, from a current population of around 9,000. As such, Moranbah's social and physical fabric will need to further develop, to support continued growth.

BMA is committed to the social sustainability of towns in the Bowen Basin region, and has a long history of social investment, community engagement and housing development. **Section 5.1** outlines **BMA's Community Development Program** for Moranbah and its region. As noted in Section 1.3, this Program describes BMA's existing community development approach and addresses Blackwater, Emerald, Capella, Dysart, and Moranbah. The Community Development Program supports and offsets BMA's current operations and future growth projects, including CRM.

Section 5.2 outlines **CRM-specific mitigations** which address EIS and Project Change Report conditions. This section includes BMA-wide strategies which will apply as relevant to new projects, and detailed strategies for CRM's construction and operation.

Section 5.3 addresses **cumulative impacts**, including the role of BMA and other stakeholders in addressing cumulative impacts.

Section 5.4 provides the **action plans**, which summarise CRM-specific mitigation strategies; accountability and timing for delivery of actions, and performance measures.

5.1 Building Social Sustainability and Cohesion

BMA's Community Development Strategy includes current BMA community support activities and proposed further activities for 2011-2016. An outline of current activities is provided in Appendix C, including the scope and detail of BMA's work with communities and other partners for the next five years.

The Strategy's focus is on strengthening the social resources which support quality of life over time, including:

- quality education and training, employment choice, and adequate incomes;
- community, recreational and health facilities which support personal and family health;
- community cohesion, including shared values and positive community relations;
- a healthy environment and good public amenity.

During the financial years 2009 to 2011, BMA invested more than \$100 million in community programs, partnerships and other social and recreational facilities in Moranbah, Dysart, Emerald and Blackwater.

¹⁴ Queensland Government – Office of Economic and Statistical Research (2011) - Queensland Government Population Projections to 2031 for Local Government Areas

¹⁵ OESR (2001) Unpublished data for Housing Impact Study

The sections below describe BMA's Community Development Program for 2011-2012, including some investments already committed for later years. It includes:

- Major Local Initiatives (described in the EIS Condition 11 (a) as Landmark Projects); and
- Local and regional community partnerships and funding agreements for 2011-2012.

5.1.1 Major Local Initiatives

BMA is committed to ensuring its ongoing support for community values, local amenity and the lifestyle available to Moranbah residents. BMA is also motivated to ensure the attractiveness of the town to other families who will move to Moranbah as a result of expansions in existing operations.

BMA's major local initiatives include partnerships and funding commitments for projects which will enhance amenity, lifestyle and community cohesion in Moranbah, and address the cumulative impacts of projects including CRM. These are summarised in Table 11.

BMA is also working with the IRC on new housing and urban renewal projects, with the objective of providing a wider range of housing styles for growth in Moranbah. Further to this addressing affordability for residents employed in both the resource and non-resource sectors.

Table 11: Major Local Initiatives

Project	Funding and other support	Partners	Schedule
Greg Cruickshank Aquatic Centre Development	\$2.5 million	Isaac Regional Council and other industry partners	Commenced, complete in 2012
Moranbah Regional Youth and Community Services Centre	Up to \$5.5 million towards a Regional Youth and Community Services Centre to provide community support and health services for youth and families in Moranbah.	Dept Communities Isaac Regional Council	Planning commenced, completion expected in 2013-2014
Moranbah Airport	Contribute \$46 million towards upgrading		Complete
Community support programs	\$2.8 million in programs such as day care, additional sporting and recreational facilities and education and cultural initiatives.	Various partners including Moranbah District Support Services	2011-12 disbursements
Support for Moranbah's infrastructure	\$19.6 million for local infrastructure support for water, road and airport maintenance.	Isaac Regional Council	2011-12
Affordable and community housing	\$5 million over five years (including \$3.5m by 2012) towards affordable accommodation for low income earners not directly employed in the resource industry.	Isaac Regional Council	Commitment to IRC housing trust complete, investment finalised by 2016
Housing investment and housing upgrades	Develop 160 dwellings in Moranbah Upgrade approximately 185 houses	See section 5.3.6	By 2013
Special Rates and	BMA has a legacy arrangement		Annual

Charges	with the Isaac Regional Council to pay a Special Rates and Charges fee on an annual basis (\$8.1m in FY2012/2013). This fee is calculated annually covering the key communities of Moranbah and Dysart in the Isaac local government region. The Daunia and Caval Ridge Mines fall within the Isaac local government region.		
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5.1.2 Community Development Program

BMA has a strong and active commitment to community partnerships. BMA’s current activities and commitments in the project region are managed through the Community Development Program (CDP). The Community Development Program addresses regional and local priorities for community development, and responds to cumulative impacts, through funding and partnerships designed to:

- enhance social infrastructure, including facilities and programs which address growth pressures, education and skills training, and enhanced recreational opportunities;
- support the availability of affordable housing and services for families experiencing disadvantage;
- enhance community and cultural development activities, including youth leadership and development, and Indigenous employment, skills, and business development; and
- address community safety and environmental health.

The CDP includes a Community Partnership Program (CPP) which supports regional community programs across areas including:

- youth development;
- economic development / business skills training;
- community development and welfare;
- community safety, sport, wellbeing and recreation; and
- arts, entertainment and cultural development; and sustainable development.

Current and planned initiatives being delivered with local and regional stakeholders are outlined in Table 12. Current initiatives include partnerships to address the cumulative impacts of BMA’s growth projects, and these include:

- investment in social infrastructure and affordable housing for non-resource service workers;
- cross-industry participation in planning for better health services GPs in Moranbah and Dysart; and
- funding for the CQ Rescue Helicopter service.

Table 12: Current Local and Regional Community Development Partnerships

Project	Partners	Timing	Catchment Community
Social infrastructure			
Three year partnership with Moranbah and District Support Services beginning FY11	Moranbah and District Support Services	2011-2014	Moranbah
Development and implementation of a childcare strategy including cross-industry co-operation, feasibility assessment and support for family day care.	Isaac Regional Council, Crèche and Kindergarten Association, Industry partners	2011 - 2015	Bowen Basin
Strategy to define optimal operating model to attract and retain more GPs in Moranbah and Dysart	IRC, Moranbah Medical and Industry partners	2012	Moranbah Dysart
Program focused on supporting youth at risk or disengaged in the Moranbah and Blackwater communities	Department of Community	2012 - 2015	Moranbah Blackwater
Funding for a financial counselling service across the Bowen Basin	The Salvation Army	2012 - 2015	Bowen Basin
Community safety and health			
CQ Rescue – Mackay - Funding for the operations of the rescue service helicopter	CQ Rescue - Mackay	2010 - 2012	Northern Bowen Basin
Good Sports - Alcohol management and education program	Australian Drug Foundation	2010-2012	Bowen Basin
Recycling for Kids roll out program across Bowen Basin operations.	Children’s Health Foundation	2012-2015	Bowen Basin
Workforce awareness and fundraising to assist the Mater Foundation and support for employees and their families.	Mater Foundation	2011-2012	Bowen Basin

Project	Partners	Timing	Catchment Community
Education and training			
Defensive Driver training to educate year 12 students to drive safely.	Moranbah State High School	2011-2013	Moranbah
STARFISH program – at risk reengagement program	Moranbah State High School	2011 – 2013	Moranbah
EXLR8 Youth Leadership Program across Bowen basin secondary schools	School Worx Impact Mentoring	2011-2013	Bowen Basin
Re-engineering Australia F1 in Schools Competition	Dept. of Education and Training	2011-2013	Bowen Basin
Natural Resource Management Expo	Central Highlands Regional Resource Use Planning Co-op	2011-2013	Southern Bowen Basin
School based program that delivers recycling and waste management	Central Qld. Local Government Association	2011-2013	Central Queensland
Cultural, Recreational and Environmental Programs			
Music education program for teachers and students, and community performances	Musica Viva	2010-2012	Central Queensland
GAPS – arts program for youth at risk or disadvantaged	Crossroad Arts	2010-2012	Bowen Basin
Moving Opera! to deliver secondary school training and performances	Opera Qld	2010-2012	Bowen Basin
Kidspace and Artspace To-Go! Arts based workshop program for 0-5 years.	Artspace Mackay	2011-2013	Moranbah and Mackay
Actors@Work – high school based contemporary performances and Q&A sessions	The Bell Shakespeare Company	2011-2013	Moranbah, Dysart, Emerald, Blackwater
Partnership with Moranbah Arts Council to provide a range of high quality and interactive theatre, art exhibitions, training and workshops to Moranbah, Dysart and the region.	Moranbah Arts Council	2012 – 2014	Moranbah Dysart



5.2 Mitigating CRM Impacts

This section details strategies which address the potential social impacts of CRM's construction and operation. Mitigations include:

- BMA-wide strategies, including increased diversity in the CRM workforce, local buy programs and workforce-community cohesion strategies. Specific strategies will be applied as appropriate to new projects; and
- CRM-specific strategies to avoid, reduce and mitigate project impacts, in co-operation with other stakeholders.

Where relevant, potential social impacts of DM and the future Peak Downs Expansion are also considered in the mitigations strategies, including:

- for the Peak Downs expansion, local employment, housing delivery, and demands on social infrastructure; and
- for DM, workforce-community interactions, police and emergency services and health services.

Action Plans are included in Section 5.4, summarising:


- impacts and benefits;
- key strategies;
- the proposed role of BMA and other stakeholders;
- timeframes for delivery; and
- performance measures.

5.2.1 Community and Workforce Cohesion Strategy

Community cohesion and identity refers to connectedness and respect between community members, a shared sense of place and belonging, and shared values and goals.

BMA's workforce at existing operations is largely residential, with a preference to employ locally, to help ensure a long-term, stable population in Moranbah and continue to contribute to community cohesion. Impacts to community cohesion may occur through cumulative impacts such as increased housing costs, changes in social character, or impacts to local amenity. BMA strategies to support community cohesion in Moranbah include:

- investment in major community facilities;
- a comprehensive Community Development Program, as outlined in Section 5.1;
- additional housing investment, including provision of housing to suit various needs;
- support for Isaac Regional Council's Affordable Housing Trust;
- additional locally-based employment positions due to the future Peak Downs expansion; and
- active recruitment for vacancies in BMA operations.



CRM-specific strategies to enhance community and workforce cohesion in Moranbah are outlined in the following sections. These strategies will be implemented for CRM's construction and operation, and where possible for DM's operation.

Further detail is included in the Workforce and Community Cohesion Strategy (Appendix C).

5.2.1.1 Worker Conduct

BMA's Workplace Conduct Policy requires all workers to treat others in the workplace with courtesy, dignity and respect, both at work and outside of work. The Workplace Conduct Policy provides clear guidelines to follow concerning conduct. CRM also aims to recruit workers across a range of age, gender and other groups (as described in Section 5.2.5), to promote balance and positive behaviour amongst the workforce.

Expectations of behaviour in town, and respect for local values, will be made explicit in on-boarding and induction programs for CRM. Compliance with the EPCM's 'Work Rules' (for construction, outlining expectations of behaviour) and BMA's Workplace Conduct Policy (for operations) will be required for both CRM and DM workforces.

Work Rules are signed by all workers, and individuals are held to account for any breaches. Workers demonstrating behaviour that does not comply with the company requirements will face disciplinary action in line with the terms of their employment. The EPCM contractor has contractual procedures to ensure that codes of conduct are extended to workers employed by its major contractors.


5.2.1.2 Respect for Local Values

BMA will ensure both workers and local residents are aware of the Project's commitment to respect local values. Strategies for both construction and operations include:

- providing induction training and a welcome pack to CRM workers including:
 - local culture and values;
 - the importance of respecting Moranbah as a family-friendly town;
 - information on regional attractions and activities;
 - expected standards of behaviour;
- providing information to the local community about:
 - BMA's expected standards of behaviour;
 - access to its complaints mechanism;
 - responses to reported incidences of anti-social worker behaviour; and
- providing services and information to support non-resident workers to manage the pressures of the non-resident worker lifestyle.

5.2.1.3 Integration

During construction, the EPCM contractor or specialist village management contractor will employ staff to ensure workers' access to recreational and health services, and facilitate positive interactions with local residents. In addition to the commitments to respect local values outlined above, the EPCM contractor is responsible for providing adequate facilities and services for the recreational needs of construction workers.



During operations, BMA will provide opportunities for operations staff to visit Moranbah and interact with businesses and communities, including:

- providing regular information to workers about local activities (e.g. through a regular 'What's On' news sheet, and local speakers);
- provide transport from the Accommodation Village to Moranbah to enable workers to visit the town and local businesses;
- invest in programs and facilities which enable residents to become familiar with operations at CRM, including;
 - providing CRM staff as speakers at school and community events;
 - consideration of a viewing platform at CRM with information to interpret activities for visitors; and
 - consideration of mine tours to allow residents including school students to become familiar with the activities and procedures on mining sites.

CRM construction workers will be informed of opportunities for contributing to the local community, and encouraged to support local and regional community projects. As detailed in Section 5.2.6, the EPCM contractor has a commitment to implementing a 'local buy' program in the project area, which will make a contribution to local businesses during the construction period.

Strategies to support operations workers' contributions to the community are detailed in the Workforce and Community Cohesion Strategy (Appendix C).

5.2.1.4 Monitoring and Reporting


BMA will monitor the effectiveness of workforce-community cohesion strategies during the construction period and for operations through:

- consideration by the Moranbah BCN, to advise on perceptions of behaviour and safety in the community;
- consultation with key stakeholders including Moranbah Police, Queensland Health, School Principals and the Department of Communities Child Safety and Disability Services to identify concerns and the effectiveness of mitigation strategies;
- BMA's community perception surveys;
- consideration of the reported outcomes from community development and partnership programs;
- workforce and management surveys; and
- complaints and grievance records.

If monitoring indicates a concern about community impacts due to CRM or DM, BMA will consult with the Moranbah BCN and other key stakeholders to identify corrective actions. The results of monitoring will be included in the SIMP annual report.

5.2.2 Housing and Accommodation

Bowen Basin housing supplies are influenced by household formation, population growth, mine life-cycles, and commodity trends. A number of companies and industries require housing and accommodation for workers at projects around Moranbah. Against a background of constrained



residential land, co-ordination of housing demand with supply over time has been difficult. As a result, Moranbah has experienced housing price increases amongst the highest in Australia over the past five to 10 years.

Housing cost and availability is a critical concern for the community in the Moranbah area. Lack of housing stock affects all parts of the community, including low income households, business and services that have difficulty attracting employees. This is also a challenge for BMA, which currently has a large number of vacancies.

BMA has a comprehensive program in place to provide housing for its employees. In the five years to 2010, BMA's contribution to housing included:

- construction or purchase of 250 new dwellings;
- purchase or development of 250 new lots in Moranbah;
- approximately \$2 million per week on new houses and upgrades; and
- provision of over \$12 million in rental subsidies to employees.

BMA currently operates seven mines in the Bowen Basin where employees largely live locally. The approval of a remote workforce for CRM means BMA can offer employees and their families the choice between remote workforce arrangements with CRM or living in local communities for existing operations.

BMA's Five Year Accommodation Plan (to 2015) includes provision of a range of accommodation options, including accommodation villages, units, townhouses and detached dwellings in Moranbah. Provision of dwellings is addressed in the following section.

5.2.2.1 New Housing Provision


BMA is making a considerable investment in new housing in Moranbah for its employees. During FY12, BMA delivered 69 new townhouses and houses across all of its communities, including 51 in Dysart and 18 in Moranbah. BMA plans to deliver further dwellings in Moranbah and other Bowen Basin communities in FY13 demonstrating a commitment to residential living options for employees.

In addition to the accommodation villages, a number of other initiatives are being pursued. These include:

- Upgrading 185 houses in Moranbah;
- Working with the IRC to align housing and urban renewal initiatives;
- Monitoring and publishing the number and proportions of resident and non-resident employees and contractors; and,
- Meeting with ULDA and IRC to continue to share information about housing initiatives and potential opportunities.

5.2.2.2 Housing Impact Study

The Coordinator-General required BMA, as per the amended Condition 18(f) of his Report, to:



“...undertake a BBCG Project Housing Impacts Study (including the CRM and Daunia Mine) which will provide an analysis of the impacts of each component of the BBCG project on the housing market in Moranbah or surrounding areas.”

As part of the Coordinator-General's requirements for the Caval Ridge Mine, BMA commissioned the preparation of the Bowen Basin Coal Growth BBCG Project Housing Impacts Study and Plan. This report constitutes the BBCG Project Housing Impacts Study, and was submitted to the Coordinator General in August 2012

The Study sought to provide an understanding of the current housing and related contexts in Moranbah and determine the level of 'at risk' low to moderate income non-resource households in Moranbah. In addition, the Study was required to determine BMA's impact on the demand for low to moderate income non-resource housing in Moranbah from the Caval Ridge Mine and Daunia projects such that a fair and equitable contribution to affordable housing could be determined. Options to fulfill the contribution were required.

Key Findings

Information and analyses presented in the report have shown that the growth being experienced in Moranbah due to the extensive coal mining operations in the Bowen Basin is impacting on its housing market. An inflated housing market can have wider impacts on the economic and social environments, and data and information produced as part of this commission suggests that there are negative impacts on housing occurring in Moranbah as the result of cumulative growth in the resources industry. Key findings of the report included that:

- The housing market in Moranbah is highly inflated and this is impacting on a number of areas, including:
 - The ability for non-resource industries to secure employees, particularly in the service sector;
 - People choosing to live further away from their work place;
 - The ability for local industries to get trades workers given the combination of the high wages in the resource sector and high rental / housing prices in Moranbah;
 - The inability for community and emergency services to keep pace with demand in some instances; and,
 - The unfortunate impacts on individuals' and families' well-being from housing stress, which can lead to relationship issues, breakdown and general unsocial behaviour.
- In 2006, OESR estimated that there were at least 17 per cent of non-resource low to moderate income households paying high rents, 8 per cent of non-resource households paying moderate rents and 25 per cent of non-resource households paying low rents, who are at risk of experiencing housing stress. Together, these accounted for 88 households. In addition, there were 85 households that indicated they paid 'subsidised rents' that were considered at risk of housing stress. In total, 173 non-resource households in Moranbah were 'at risk', which accounts for around 8 per cent of the total number of households in Moranbah.

- However, it is acknowledged that there is likely to be latent demand for further affordable housing in Moranbah.
- BMA is a major driver of growth in the Region, but they are not the only driver. Full time equivalent population forecasts produced by OESR indicate that BMA employees and their dependents accounted for around 30 per cent of total population in 2011, and BMA estimates that an additional 25 to 30 percent of the full time equivalent population contract to BMA. Depending on the population scenario that results, these proportions are likely to remain stable or increase marginally by 2018.

A Framework for Determining Reasonable Contributions to Affordable Housing

A framework for determining the likely impacts on the demand for non-resource housing associated with BMA's mining operations for Caval Ridge Mine and Daunia was presented. This framework determined the indirect impact associated with the direct employment of the construction and operational workforces of the Caval Ridge Mine and Daunia mining operations. A probable proportion of the overall indirect employment was then attributed to Moranbah based on local spend information where possible. A weighted average of employees per households was noted and the indirect employment was converted to a ratio of affordable housing units required for every direct employee in the BMA operations.

The overall result of the analysis indicated that if:

- 1 affordable dwelling was provided for every 90 construction workers in BMA's Daunia and Caval Ridge Mine; and,
- 1 affordable dwelling was provided for every 50 operational workers in BMA's Daunia and Caval Ridge Mine,


BMA's indirect impacts on the non-resource low to moderate housing demand would be mitigated.

The assessment indicated that at peak demand in 2013, when Caval Ridge Mine's peak construction will coincide with Daunia's early operations, 37 dwellings for non-resource low to moderate households would be required, .

BMA's Contributions to Affordable Housing

BMA's contributions to housing for non-resource low to moderate households are being delivered through a range of mechanisms, including:

- a commitment of \$5 million to the Isaac Affordable Housing Trust , which is likely to yield around 13 units of housing;
- provision of substantial subsidies (approximately \$986,000, in FY12 and F13) to support housing for six community service providers in Moranbah, including:
 - Moranbah District Support Services;
 - C&K Childcare;
 - Simply Sunshine Childcare;
 - Gryphon Psychology;

- 
- Moranbah Ambulance; and
 - Moranbah Early Learning Centre;
 - relinquishment of three houses leased from the Department of Public Works and Housing so that reallocation to Queensland Police staff could occur.

Thus, in total, BMA has committed over \$6 million to affordable housing, and will have assisted at least 22 households: 13 non-resource families through the Isaac Affordable Housing Trust contribution, plus another three households through relinquishment of Department of Public Works and Housing, plus assisting at least six other households in Moranbah in 2012 and 2013 through rental subsidies. The Housing Impact Plan will outline further contributions to address the peak demand of 37 dwellings.

In addition, there are a variety of housing and accommodation initiatives being progressed by BMA to ensure that their direct operations do not result in further stress on the housing market in Moranbah. These include:

- the construction of two accommodation villages to house construction and operational workers for their Caval Ridge Mine and Daunia operations;
- the planned delivery of further dwellings across Bowen Basin communities to accommodate direct employees;
- upgrading of houses in Moranbah;
- working with the IRC to align housing and urban renewal initiatives; and,
- meeting with ULDA and IRC to continue to share information about housing initiatives and potential opportunities.

5.2.2.3 Housing Impact Plan

Given the provision of accommodation in villages for all non-resident workers for CRM and DM operations, and BMA's requirement for associated contractors to also use accommodation villages, there will be negligible direct housing impacts from the projects on housing demand.

The Coordinator General's Evaluation Report conditioned BMA to prepare a Housing Impact Plan. The Terms of Reference for the Plan have been completed in consultation with the Moranbah BCN and approved by the Coordinator General.

The Draft Housing Impact Plan builds from the Housing Impact Study, and describes contributions to housing for non-resource workers, and proposed accommodation worker accommodation arrangements. It includes provision for monitoring the effect of providing affordable non-resource worker housing, and a performance review of the workforce housing supply elements of the Plan.

When approved, the Housing Impact Plan will be appended to the SIMP.



5.2.2.4 Accommodation villages and workforce monitoring

BMA is developing accommodation villages, which will minimise local housing impacts during both the construction and operation of CRM. Temporary facilities were constructed on the BMAAV site for workers constructing the village, who are now residing in the village.

Rooms are made available for all BMA, EPCM contractor and remote contracted workers. All contractors are advised that BMA requires remote workers to live in accommodation villages. Accommodation rooms and facilities will provide a high quality, safe and healthy social environment which is attractive to workers, as described in Section 2.3. Additional strategies for Accommodation Village Management are detailed in Appendix E.

As required by the conditions of the Coordinator-General's Report on the CRM Application for Change Request No. 4, BMA is publishing the accommodation arrangements for its operational workforce in the Bowen Basin on the BHP Billiton website, at six monthly intervals from January 2012 until June 2017 and then yearly for the duration of the SIMP. This includes the number of BMA employee positions, the proportion of non-resident employees, the number of contractors directly employed in BMA mining operations (full-time equivalent) and the estimated proportion of non-resident contractors.

BMA is also monitoring accommodation arrangements as follows:

- for CRM, to identify the number of newly residing full-time CRM construction workers, and if the number exceeds 12, the need for additional housing production, as per EIS condition 14 (b); and
- for DM, to identify any potential need for additional dwellings in Moranbah or Nebo, in the event that more than five construction workers settle in the area.

5.2.3 Social and Health Infrastructure


5.2.3.1 Social infrastructure

BMA is providing workers with health services and programs, recreational services, and the Employee Assistance Program for mental health and family issues. As such, demands on local services provided through the Moranbah and District Support Service (such as support for young families, parenting classes, and networking forums) are not anticipated as a result of the remote workforce. Some workers may seek information from MDSS in relation to family issues, and in this instance are referred to the appropriate state-wide information and support services.

BMA is currently funding MDSS through a triennial funding agreement. . As all non-resident workers will be housed in accommodation villages, requests for crisis housing support through the Emergency and Long-term Accommodation Moranbah service are not anticipated.

There is also the potential for non-resident workers to access medical services in the community if they choose not to use on-site health services. It should be acknowledged that, whilst BMA is providing health services and mitigation strategies to reduce impacts on health services, remote workers have the right to access other practitioners whilst staying locally if an urgent need arises.

Should the Peak Downs expansion coincide with CRM construction, there would be small increases in demand for school enrolments, health services and family support services, however this population



growth is consistent with planning for growth in the town. It may also increase the pool of people (spouses and dependents) to work in local businesses and in a volunteer capacity, and these options will be promoted through welcome packs and welcome days.

As outlined in Section 5.1, BMA maintains a sustained program of investment in social infrastructure. This includes:

- a three year funding support agreement with Moranbah and District Support Services (MDSS);
- funding for the Moranbah Regional Youth and Community Services Centre (planned for completion in 2014);
- \$1.1 million in 2011 on health related activities, including accommodation and medical centre rental subsidies, donations, sponsorships and other partnerships in Moranbah, Emerald, Dysart and Blackwater to enhance local access to health services and qualified professionals; and
- funding for local programs such as day care, additional sporting and recreational facilities, as well as education and cultural initiatives, reviewed on an annual basis.

This is part of the company's commitment to enhanced sustainability of social resources to address population growth and cumulative impacts.

BMA undertakes regular monitoring of local service demands in consultation with services providers and industry partners, through BCN meetings, interagency meetings, and review of funding and partnership outcomes. This will enable monitoring of any demand relating to CRM and, if required, any adjustment of social investment priorities.

Notwithstanding BMA's commitment to liveability in its communities, funding for traditional areas of government service support such as health, education and community services is the responsibility of government, primarily at State level.

Moranbah and other Bowen Basin communities are amongst the largest revenue generators for the State and Commonwealth through mining royalties and other taxation. Accordingly, these communities should expect the same level of government service provision as applied for other regions, or arguably greater service provision to address the cumulative impacts of mining and population growth.

BMA remains committed to working co-operatively with Government agencies and other industry proponents to address cumulative impacts on local social infrastructure, and has proposed potential responses for consideration by other stakeholders in Section 5.3.

5.2.3.2 Health mitigation strategies

In common with many regional towns in Queensland, Moranbah has experienced a shortage of doctors compared to the number of residents, particularly in light of forecast population growth. Pressures on health services are a result of cumulative impacts from sources including population growth, non-resident workers from a range of projects, and temporary workers.

BMA is committed to mitigating the impacts of the CRM and DM workforces on local health services. As outlined in section 2.3, BMA's accommodation villages will include on-site services and facilities to enhance workers' health and reduce impacts on local services. Mitigation strategies developed in consultation with the Moranbah Hospital and local GPs include:

- provision of health promotion programs and health services during the construction period as described in Section 2.3.3 and below;
- ensuring on-boarding and induction programs for construction and operations include requirements that workers understand:
 - they should attend to existing medical issues before they come on shift;
 - the need to provide contact details for their current medical practitioner, and the GP who performed their mine medical, for their personnel records;
 - they need to bring prescription drugs, prescriptions and where relevant, records of chronic health issues to site;
 - the hospital is not equipped for treating minor health issues and has no full time doctor in attendance;
- providing paramedical, physiotherapy, occupational therapy and hygiene specialists for operational workers; and
- a review of potential options for GP services to service specific requirements of the CRM and DM projects.

BMA is also conducting a six month pilot program providing on-site medical and nursing services at the Goonyella Riverside Eureka Accommodation Village. The purpose of the service is to assist in alleviating demand on local medical resources, and enable employees and contractors to receive the best possible medical care in a timely manner.

Construction workers from Daunia and Caval Ridge are currently accessing this service. The pilot program is providing on-site medical and nursing services including:


- clinical services, primary health care, medical emergency and dispensary services;
- medical evacuation services and coordination;
- patient record management and case management; and
- Coal Board medicals, alcohol and drug screening, vaccinations and medical clearance certificates.

Medical Practitioners are available 24/7, including operation of twice daily clinics every day.

Collation of health statistics to inform health service planning and the provision of health promotion programs will be undertaken as part of the pilot. The pilot program will be evaluated and the results shared with the Caval Ridge and Daunia construction managers, to inform further consideration of provision of medical services on those sites or in accommodation villages, and further reduce pressure on local health services.

BMA's pandemic planning procedure will also be applied for the CRM project. This procedure is updated regularly, and outlines the management of communicable diseases at the work site and accommodation village, including respiratory and gastrointestinal infections. The project will also implement appropriate communicable disease management as part of workforce induction training and health promotion programs.

BMA is committed to working in partnership with government, industry and community to address the cumulative impacts of resource development on health services. The Bowen Basin Leadership Group has commissioned Health Workforce Queensland to develop a regional health services plan. The



project is being funded by key members of the Leadership Group, including the Banana, Isaac and Central Highlands Councils, BMA and other resource companies. BMA is also funding a complementary study focused on Moranbah and Dysart medical services.

5.2.4 Community Safety

Community safety is a core value for BMA, and is addressed in the SIMP through:

- workforce management;
- accommodation village rules and management;
- co-operation with local Police services;
- the complaints process;
- support for community development initiatives; and
- monitoring, with the BCN and QPS.

Community concerns have been expressed about the impact on community safety from additional traffic, the presence of more non-residents in the area, and the potential for an increase in anti-social behaviour. Police and emergency services have also identified the likelihood of increased demand on their services as a result of increasing numbers of workers (particularly non-resident workers) in the area. These demands relate primarily to increased need for traffic patrol services, requirements to attend incidents, and over-sized vehicle escorts.


BMA has engaged with stakeholders including the Queensland Police Service, Queensland Fire and Rescue Services and Queensland Ambulance Service and Isaac Regional Council to develop the following strategies.

5.2.4.1 Co-operation with Police and Emergency Services

BMA has consulted with local and regional officers, and developed the following strategies to mitigate CRM impacts on emergency services such as the QFRS, QPS and QAS. The aim is to maximise alignment and co-operation on community safety issues.

BMA's EPCM contractor has met with QPS, QFRS, and QAS to:

- Ensure they are oriented to the CRM, BMAV and BPAV sites and have access to site maps identifying village managers' quarters, emergency management facilities, chemical storage and use areas, access roads, fences and security points;;
- have an agreed protocol whereby on-site security staff meet and escort police and emergency services staff on arrival at site; throughout the facility
-
- provide the QPS, QFRS and QAS with a briefing on
 - construction schedule and activities;
 - rosters, and scheduled fatigue management days;
 - village 'rules of conduct' and 'work rules';
 - initiatives to integrate workers with residents and local values; and
 - the complaints procedure;

- 
- exchange contact details for Officers in Charge, CRM site managers, project managers, security contractors and Mine Rescue workers;
 - discuss and agree a locally negotiated protocol with QPS for incident response, and
 - agree lines of communication and protocols for co-operation during the construction period, including bi-annual communications, to review issues and mitigations.

The EPCM contractor will also identify the helipad site to local Emergency Services and evacuation service providers, including geo-co-ordinates.

BMA has ensured emergency services parking is adequate. There are two designated Emergency Parking spaces at BMAAV, marked as Emergency Services Vehicles only, and located centrally near the training rooms. One of the onsite emergency services provider ambulances is parked there full time. In an emergency the site manager would co-ordinate arrangements to allow for Police and Emergency Services vehicles to park as required. At BPAV, dedicated space has been made available and will be designated as Emergency Vehicles Only.

Throughout operations, strategies will include:

- provide regular advance information on workforce ramp ups or wind downs, fatigue management arrangements, and events which may disrupt traffic;
- sponsor annual communication forums between site managers, mine rescue, QFRS, QPS for information sharing and review of mitigation strategies;
- investigate the provision of a generic gate key for emergency services personnel to allow access through or around sites on approved routes to attend emergencies; and
- identify potential for shared recreational events (e.g. after training exercises, or through sport) which would develop relationships between mine employees and contractors, and local service personnel.

BMA will also monitor the two projects' construction activity demands on Police and Emergency Services through regular communication with them.


BMA has proposed the Queensland Government's consideration of increased resources for Police and the Ambulance Service in Moranbah and the Mackay district, includes consideration of increased resources for training for the Queensland Fire and Rescue Service in Moranbah, as outlined in Section 5.3.

Engagement during operations will be reviewed prior to commencement and addressed in the next version of this SIMP.

5.2.4.2 Traffic Management and Road Safety Education

BMA has consulted with the Queensland Department of Transport and Main Roads (DTMR) and Isaac Regional Council (IRC) in the development of the Traffic Management Plan (TMP) for the construction of CRM. The TMP was revised in consultation with the Queensland Police, DTMR and Isaac Regional Council to ensure all issues were addressed, and has been submitted to the Coordinator-General.

BMA and the EPCM contractor will liaise with DTMR and IRC throughout the construction phase for the mine, to ensure compliance with this document. More detailed TMPs will be developed as planning progresses, including a TMP for the operational period, in consultation with the Isaac Regional Council and DTMR.



Remote workforces have far smaller traffic impacts than a resident or drive-in-drive out workforce, however traffic safety is a high priority for BMA. Road safety programs for the workforce will be delivered across the CRM and DM sites, with specific programs delivered annually, and regular road safety management programs maintained. Specific initiatives include education as part of induction and on-boarding programs, on:

- local road conditions and seasonal issues;
- drug and alcohol limits;
- expectations of safe and courteous driving, in town and on the highway;
- specific requirements of heavy vehicles; and
- police and traffic management requirements.

Moranbah and Mackay District police officers identified the cumulative impacts of heavy vehicles from multiple projects as a critical challenge for the region, with increased traffic on the Peak Downs Highway, including significant increases in wide loads, a significant concern. The EPCM and BMA contractor will, wherever possible, provide three months notice of vehicles requiring pilotage to the QPS Mackay District. The EPCM Contractor is also establishing quarterly meetings with QPS, QFRS and QAS to ensure a co-ordinated approach to traffic and other safety issues.

BMA is currently developing a Bowen Basin-wide road safety and transport program. This will support BMA's regular sponsorship of local schools and community groups for road safety initiatives. BMA is also working to strengthen its investment in the Mining Industry Road Safety Alliance, and other road safety initiatives.

As a regional issue with many stakeholders involved, addressing this issue will require co-ordination by a relevant Government agency to convene a multi-project/company response, e.g. information sharing and collaborative strategies to address peak demands in the road network.


5.2.4.3 Emergency Management Procedure

An Emergency Management Procedure (EMP), including a Disaster Management Plan, has been developed for CRM's construction period. The EPCM contractor has consulted with the Department of Emergency Services, Queensland Police and Isaac Regional Council in finalising the Plan.

Site facilities at CRM are set up to deal with emergency responses. In the event of an incident requiring off-site treatment, the on site team will stabilise any patients and then transfer them via QAS to Moranbah Hospital for onward transfer as appropriate. The EPCM contractor carries out regular liaison with Moranbah hospital, as well as QAS and the Queensland Fire Service.

The Emergency Response Procedure notes that all personnel will work co-operatively with Police, Fire and Ambulance services, and do as instructed by them if safe to do so. The EMP includes reference to the responsibilities of local services, noting:

- Queensland Police Service is responsible for the overall coordination of the management of an incident (and later for investigation in relation to potential criminal issues);
- Queensland Fire and Rescue Service is responsible for fire suppression, rescue of casualties, hazardous material management, site safety for all responders, and environmental protection, in close cooperation with mine site personnel;
- QAS Officers are responsible for directing the medical aspects of casualty extrication. Mine Rescue teams and site responders will follow the direction of the Emergency



Services Site Commander, with the senior most rescue officer in charge of the rescue at all times;

- State Emergency Service is responsible to the Police Commander for providing assistance to responding Services as required;
- Counter Disaster and Rescue Service is responsible for the coordination of State aerial operations, media liaison, public education and advice at chemical emergencies; and
- an EMP for CRM operations will be developed and submitted with the next version of the CRM SIMP.

5.2.5 Workforce Management and Skills for Growth

The Queensland Government, through Skills Queensland, requires that future SIMPs will include Workforce Management Plans (WMPs). Whilst CRM's Terms of Reference and Conditions didn't require a WMP, the following sections detail BMA's 'Skills for Growth' strategies addressing relevant WMP requirements, including:

- school and industry based training partnerships in Moranbah and across the Bowen Basin;
- structured training, through traineeships and apprentices;
- demonstrating industry best practice through partnerships and local investments in training;
- strategies to increase Indigenous people's employment opportunities in BMA operations; and
- strategies to diversify the workforce through training and recruitment to mining-related jobs.

5.2.5.1 Education and Training Partnerships

BMA is facilitating training and trade qualifications for local young people through its support for the Coalfields Technical Centre of Excellence (CTEC) in Moranbah, established as a partnership between BMA, Education Queensland and other industry partners. CTEC is an industry-standard facility based at the Moranbah State High School, where students participate in practical, as well as theoretical activities, to complement their site-based training. The facility includes two networked computer laboratories, a board room, a training room and a state of the art welding/oxy workshop and machining workshop, with a wide range of specialist equipment.

Other Initiatives aimed at building skills for growth in the Isaac and Mackay regions include those summarised in Table 13. BMA regularly reviews its partnerships to ensure funding is well targeted to local skills growth. Partnerships to be implemented during operations will be identified prior to the SIMP review in 2014.


Table 13: Education and Training Partnerships

Initiative	Partners	Timing	Catchment area
Employment of an experienced industry-accredited trainer for the delivery of high quality training to students.	Coalfields Training Excellence Centre	2011-2013	Moranbah
Sponsorship of part salary for IT specialist to support IT support at each of the schools in Moranbah.	Moranbah State, Moranbah East and Moranbah State High School	2011-2013	Moranbah
Support for the Moranbah Alternate Pathways Program (MAPS) - vocational education and training pathways program.	Moranbah State High School	2010-2012	Moranbah
A professional development program aimed at enhancing the capabilities of teachers and schools in resource communities to improve literacy and numeracy.	University of Qld, Dept. of Education & Training and Bowen Basin Schools	2011-2014	Bowen Basin
BMA Skilled Communities – the development of a strategy to improve and develop education and training across the Bowen Basin.	Consultant	2012	Bowen Basin
Rollout of the BMA university undergraduate scholarships program in non mining sectors across the Bowen Basin.	CQ University	2012-2018	Bowen Basin
Supporting the employment of a Business Development Manager for the Mackay Engineering College to assist with the establishment of the College over the first three years.	Mackay Engineering College & Rio Tinto	2011-2013	Mackay
Smith Family Learning for Life worker assisting disadvantaged youth with education and training in the Sarina area.	The Smith Family	2011-2013	Mackay
Ongoing recruitment of local apprentices.	Local High Schools, Coalfields Training Excellence Centre	Ongoing	Bowen Basin

5.2.5.2 Apprenticeships and Training

Construction

For the construction phase, the EPCM contractor will coordinate across CRM construction contractors to manage the demand for trades workers over the course of CRM construction. To facilitate opportunities for training and employment of local people, the EPCM contractor is working together with Construction Skills Queensland to address skills gaps in critical construction trades.



A forum bringing Bowen Basin training providers together to assess opportunities for partnership in a centralised Bowen Basin skills development centre is planned for early 2012.

A program is also in place to attract “mature-age” people with skills and/or qualifications in a trade and place them into accelerated apprenticeships to meet specific construction-phase trade skills requirements. Bechtel’s commitment to this is demonstrated by its program announced in November 2011 whereby 400 adult apprenticeships will be created as part of the biggest single intakes of adult apprentices in Australia’s history.

Operation

Each of BMA’s mines in the Bowen Basin developed its own Apprenticeship and Trainee program, in partnership with group training companies. In 2010, BMA moved to direct employment of apprentices and trainees, to ensure consistent recruitment, management and training standards were applied, and to provide a better foundation for transitioning apprentices and trainees to direct employment in BMA projects.

In 2011 and 2012, BMA’s Skills for Growth Program provided opportunities for 120 apprenticeships, including trainees, 109 graduates, 42 scholarships, and 152 vacation employment students. In 2012, BMA expects to increase the number of apprentices and trainees to 129.

Recruitment for apprentices commences in July/ August every year. Apprenticeship positions include diesel fitters, electricians, mechanical fitters, auto electricians, refrigeration mechanics, fitters and turners, and boilermakers. Trainee positions include mining operations, drill and blast, processing plant operators, laboratory technicians, and tyre fitters.

BMA’s strong preference is to source apprentices locally. BMA operations around Moranbah are currently able to access only about 30 per cent of their apprentices from the local community. Therefore the Company needs to source apprentices from the wider region.

BMA has a presence in all local schools in the Bowen Basin, and works with them to:


- develop training and education programs;
- foster a culture of responsible learning; and
- provide career advice and information about pathways to employment in BMA operations.

BMA is developing detailed assessment and planning processes for recruitment and skilling of operational staff from both within the MIW Region and from other parts of Queensland, and this will be addressed in the SIMP when it is reviewed prior for Operations.

5.2.5.3 Employment Diversity Strategy

BMA is committed to ensuring all aspects of workplace diversity are addressed throughout operations, including:

- ensuring the workforce is representative of the gender, ethnicity, abilities and age of communities;
- ensuring the workforce has a wide range of experience, capability, beliefs and perspectives that influence the organisation; and
- providing equal opportunity, where everyone is encouraged to be the best they can be, and recognised for it.



BMA's Employment Diversity strategy will apply to BMA's new growth projects. Targets being considered for CRM include up to 30 per cent female participation and five per cent Indigenous participation in the operational workforce. BMA is also undertaking training and recruitment strategies to significantly increase the number of workers who are new entrants to coal mining.

Initiatives established as part of the Employment Diversity strategy include:

- establishment of a Diversity Working Group, visible leadership and support with line management;
- diversity training aimed at promoting tolerance and acceptance for diversity within the workplace;
- reviewing recruitment assessments and selection techniques;
- industry readiness training for new entrants;
- developing systems, processes and policy that support diversity;
- increasing the number of female candidates being considered;
- providing information to women through project publications and internal communications, and fostering support networks for women in accommodation villages; and
- tracking and analysing employee demographics, and including diversity statistics in monthly HR management reports.

5.2.5.4 Indigenous Employment and Business

BMA's Indigenous Engagement Plan targets six focus areas identified through consultation with key stakeholders, including Traditional Owner representatives across the Bowen Basin, including:


1. Education;
2. Workforce diversity;
3. Business development;
4. Knowledge sharing and cultural exchange;
5. Wellbeing; and
6. Engagement.

The plan has been developed in consultation with stakeholders, and key strategies will be introduced over the next five years. Progress with the 'In Partnership' Indigenous Engagement Strategy (including employment and business strategies) will be described in the Annual Report.

Priorities in 2012-2013 include:

- Piloting the Pathways to Employment Program;
- Trialling a Vendor Awareness Program for Indigenous business;
- Implementing a Cultural Awareness Program across BMA operations; and
- Establishing the Indigenous Advisory Committee.

DATSIMA have worked in partnership with BMA to access Aboriginal and Torres Strait Islander networks across SEQ., and BMA in conjunction with DATSMA is running a series of facilitating



information sessions in Brisbane, Logan, Caboolture and Ipswich to targeting Indigenous employment for the Caval Ridge and Daunia mines.

BMA is working towards a target of five per cent Indigenous employment in its operational workforce, which could result in 25 positions at CRM. Additional opportunities are likely in major contracting companies supplying labour and services. Strategies currently being implemented or in planning include:

- working with Indigenous people in the region to identify their needs and aspirations in relation to employment;
- developing the Pathways to Employment program for skilled and unskilled work entry for Indigenous people, focussing on improving recruitment policies and practices to better attract and retain Indigenous employees within BMA;
- identifying appropriate training programs in consultation with Indigenous people;
- rolling out the Indigenous pre-employment training and trainee employment initiative across the business (Blackwater Mine and Gregory Crinum Mine currently employ ten Indigenous trainees who are supported by on-site mentors);
- up to five scholarships to be provided annually for Indigenous students to study at CQ University who reside in BMA's communities of interest and/or are members of the Traditional Owner groups within BMA's footprint;
- supporting a three year Indigenous community development program with Central Highlands Regional Council, to enhance capacity, community strengths and relationships within the Indigenous and wider communities;
- supporting the linking schools to families program at Blackwater State School which supports Indigenous and non-Indigenous workers to facilitate a pre-prep program focussed on Indigenous community values;
- partnering with Central Queensland schools to develop literacy, numeracy and educational support and scholarship programs; and
- a new jointly funded position established by BMA and CQ University to support strategic planning, outreach and capacity building in engagement with outreach activities in Indigenous communities in central Queensland.


CRM induction processes for construction and operations will also include cross-cultural awareness material, raising awareness of the companies' programs to increase Indigenous employment and engagement.

5.2.6 Local business opportunities

BMA and its EPCM contractor recognise the need to ensure local businesses grow alongside BMA Growth projects. Both BMA and its EPCM contractor have comprehensive Local Buy strategies.

5.2.6.1 Construction

The EPCM contractor has initiated a program to facilitate local procurement and local contracting opportunities for Bowen Basin businesses. It includes employment of a field procurement manager based locally to work with local and regional business to increase their supply to the Project. The



program is based on outreach and information sharing with local businesses, to raise awareness around construction-phase procurement and contracting opportunities.

Local suppliers and contractors are also advised to register expressions and interest via the Industry Capability Network's ICN Gateway online registration service. Efforts will also be made to identify local capabilities and to tailor certain packages of work to suit local companies' ability to compete for bids.

The EPCM contractor will provide ongoing information to the Moranbah Traders Association, and attend business forums to ensure local companies are aware of opportunities. The EPCM contractor has also been an active participant in Mining and Energy Services Council of Australia (MESCA) forums for businesses in Townsville, Mackay, Brisbane and Gladstone.

5.2.6.2 Operations

BMA's Local Buying Program (BLBP) is a targeted program providing opportunities for small businesses to competitively supply goods and services to BMA and its operations throughout the Bowen Basin.

BLBP targets businesses with less than 25 full-time employees, registered or operating as their primary place of business in the townships of Blackwater, Dysart, Emerald and Moranbah. It will be extended to CRM and Daunia mines when they are operational. Further detailed information is available at <http://c-res.com.au>.

Reports on the BMA Local Buy Program will be delivered via the BHP Billiton website at quarterly intervals from 30 November 2012.

5.2.6.3 C-Res

In partnership with the Mackay Whitsunday Regional Economic Development Corporation (REDC), BMA has also developed C-Res (Community Resourcing), to deliver BMA's Local Buying Program. C-Res includes a Community Foundation as part of the Local Buying Program. The Foundation's priorities include:

- Building Sustainable Futures – focusing on wider business economic and community development. This includes business grants (new, growth, innovation), employment programs, scholarships and regional promotion and awareness; and
- Building Sustainable Business Communities – focusing on local business training and development. This includes industry training, regional economic analysis and education and skills development for businesses.

For all transactions processed through the BLBP, BMA will incur a small processing fee, which will cover C-Res' administration costs and an allocation to the Community Foundation, ensuring the sustainable future of the Foundation and the continuous injection of funds back into the region.

To ensure funding opportunities target genuine community needs, the BMA Local Buying Program Advisory Committee (BAC) will provide advice and recommendations to C-Res on the allocation of funding under the Community Foundation. The BAC is a representative body made up of key stakeholders from across the region including BMA, REDC, Central Highlands Regional Council, Isaac Regional Council, Central Highlands Development Corporation, Regional Trading Associations (i.e. Moranbah Traders Association), and Indigenous Business.



5.2.6.4 Indigenous Businesses

As part of its Indigenous Engagement Plan, BMA will also develop initiatives aimed at increasing Indigenous businesses' participation in BMA's operations. These include:

- developing an awareness program with Indigenous stakeholders to outline the process for tender based contracts;
- working with Indigenous people of Central Queensland to identify opportunities to supply BMA operations directly, or in collaboration with other business and industry;
- supporting the Central Highlands Development Corporation's Business Support and Development Project which includes Indigenous businesses; and
- supporting a three year Indigenous community development program with Central Highlands Regional Council, which is intended to enhance capacity, community strengths and positive relationships within the Indigenous and wider communities.

5.2.7 Landholder Liaison

As part of the EIS process, parcels of land were identified that would provide a dust and noise buffer, and encompass the land requirements for key infrastructure including an accommodation village, rail, stock route and utility corridors for the CRM.

Following the introduction of a new air quality objective in the Environmental Protection Policy (EPP) in 2009, the dust contours were re-evaluated. As a result properties where landholders had concerns were identified, and compensation and access agreements were negotiated. Landholders' main concerns were dust and noise, and the majority of properties were sold to BMA through negotiated agreements. These properties provide a buffer around the mine to mitigate against noise and dust issues.


CRM's Stakeholder Engagement Plan provides for regular consultation and notification of works with adjacent landholders. CRM construction and operational managers will establish contact with adjacent landholders to the mine site and accommodation villages, and provide contact details to ensure a direct response to any concerns that may be raised during construction and then operation. Landholders' concerns will be monitored, addressed and reported through regular communication, and as part of the Complaints Register for the project.

5.3 Cumulative Impacts

Cumulative impacts result from the addition and interaction of impacts from more than one project. For example, population increases from one project may not trigger the need for more teachers, but demands from a number of projects may trigger the need for teachers and increased school facilities. Cumulative impacts can be responsible for other social change processes, such as increased housing prices and resulting pressures on low income households in local communities.

CRM and DM form part of a portfolio of BMA Growth projects. Additional BMA projects may also be developed during CRM's early operations period (2014-2018).

Several other mining companies are active in the northern Bowen Basin region, with new and expanded projects proposed including the Anglo American Grosvenor project, Hail Creek Expansion, Vale's Isaac Plains and Eagle Downs projects, the Lake Vermont Expansion (Lake Vermont Resources).



The range and number of proposed projects and uncertainties in project development and project schedules make it difficult to predict the timing and magnitude of cumulative impacts. Monitoring and responding to cumulative impacts therefore needs to be flexible, and involve all parties with a role in managing impacts.

5.3.1 Identifying and Monitoring Impacts

BMA participates in a number of regional forums which aim to identify and address the cumulative impacts of industry and regional growth pressures. These include the Bowen Basin SRC Local Leadership Group, the Moranbah Cumulative Impact Group, Bowen Basin Community Network, interagency groups across the Bowen Basin, Queensland Resource Council's Social Policy Group, the Mackay Whitsundays Regional Economic Development Corporation (REDC), and Central Highlands Development Corporation.

The BMA Communities team also works regularly with their counterparts to identify and address local issues. One forum for this is the Communities Local Industry Working Group, through which community advisors from BMA, Dyno Noble, Arrow and other industry partners share information and work collaboratively on projects and activities impacting on the local community.

BMA's commitment to identifying and monitoring cumulative impacts relating to CRM and Daunia includes:

- identifying and publishing information about CRM's workforce, and housing provision;
- monitoring key social indicators to identify the effect of CRM impacts and mitigations, as described in Section 7; and
- continuing participation in cumulative social impacts forums, studies and industry initiatives.

5.3.2 Mitigation of cumulative impacts

As described in Section 5.1, BMA has a number of strategies in place to enhance local and regional amenity and cohesion, and to address the cumulative impacts of BMA's new projects. These strategies support and complement CRM-specific initiatives, and include:

- social infrastructure partnerships as outlined in Section 5.1.1;
- community support programs as described in Section 5.1.2;
- investment in the Isaac Regional Council's Housing Trust as described in Section 5.2.2; and
- a collaborative strategy with local and industry partners to plan for health services in Moranbah (Section 5.2.3).

Cumulative impacts need to be addressed through collaboration between industry, Councils, Government agencies and communities. Collaborative responses were discussed with relevant stakeholders during review of the draft SIMP. Table 14 outlines:

- potential cumulative impacts of multiple projects during CRM's construction and operation period;
- BMA strategies to address the cumulative impacts of CRM, Daunia and the future Peak Downs expansion; and



- responses for consideration by other stakeholders, with a focus on collaborative strategies, and service provision commensurate with the Full Time Equivalent population.

Table 14: Mitigation of Cumulative Impacts

BMA RESPONSES	RESPONSES FOR CONSIDERATION BY OTHER STAKEHOLDERS
Cumulative Impact: Increased demands on police, ambulance, health, education and community services	
<ul style="list-style-type: none"> • Initiation and funding for Moranbah-Dysart health services plan. • Funding for Bowen Basin Leadership Group's regional health services plan. • Participation in the Moranbah Cumulative Impact Group. • Establish relationships and regular communication between construction and operations managers for CRM and Daunia, and local QPS, QAS and QFRS teams. • Provide well-being and health services for construction and operations workers at CRM and Daunia sites. • Publish information about expected future CRM and Daunia workforce numbers. • Continue funding community services, programs and facilities in Moranbah and the Bowen Basin, including those that enhance community safety and participation for women. • Participate in the cumulative social impact study co-ordinated by the Queensland Government. • Monitor any impact of remote workforces on community services in consultation with service providers. 	<ul style="list-style-type: none"> • DSDIP may consider co-ordination of an annual planning forum between local and regional community services, industry and Councils, to identify collaborative responses to cumulative impacts on social infrastructure.
Cumulative Impact: concerns about community safety	
<ul style="list-style-type: none"> • Commitments to induction training, Workplace Conduct policy, Village Management Plan, co-operation with local services, and complaints management. • Ensure CRM and Daunia workforces are aware of local values and the need to manage their behaviour to prevent poor role modelling or concerns for safety for young people. • Through the community development strategy, target funding for programs and services which increase the safety and participation of women. • Develop strategies for interaction of CRM workforce with Moranbah community. 	<ul style="list-style-type: none"> • QPS is considering opportunities identified by local police for increased resources for <ul style="list-style-type: none"> ○ community policing in Moranbah ○ traffic patrols on Peak Downs Highway and Moranbah Access Road ○ formation of 'flying squad' police who can supplement local capacity in Bowen Basin towns.

BMA RESPONSES**RESPONSES FOR CONSIDERATION BY OTHER STAKEHOLDERS****Cumulative Impact: Pressure on housing stocks in Moranbah**

- Use of remote workforces and construction of accommodation villages for the CRM and Daunia mines.
- BMA's housing investment program as discussed in Section 5.2.2.
- Investment in affordable accommodation for non-resource workers in conjunction with the IRC.

- The IRC has established an Affordable Housing trust, with BMA's financial support (\$5 million to 2016).
- IRC is considering Planning Scheme amendments to enable increased medium density options.
- DSDIP may consider the coordination of an annual workshop between companies, IRC and Government agencies, to share housing study figures, workforce projections and mitigation strategies, and support co-ordinated planning for local growth.
- Government agencies need to consider the need for guest accommodation for government and community service visitors in new housing developments.

Cumulative Impact: Concerns for safety on Moranbah-Mackay road network

- Liaise with DTMR and IRC throughout CRM construction phase to ensure compliance with the approved Traffic Management Plan.
- Develop detailed TMPs for specific transport exercises.
- Continue workforce and community traffic safety education programs during the construction period.
- Participation in cross industry and government initiatives to improve communication, industry safety standards and co-ordination of road safety initiatives.
- BMA is participating in Road Action group forums considering regional priorities for traffic safety and road infrastructure improvements.

- DTMR and QPS may consider the need for consider co-ordination of a multi-stakeholder industry response including information sharing and collaborative strategies to address peak demands on the road network, and enhanced road safety.

Cumulative Impact: demand for health services

- | | |
|--|---|
| <ul style="list-style-type: none"> • Provision of health services for CRM and Daunia construction workers. • Cross-industry co-operation to undertake planning for health services in Moranbah and Dysart. | <ul style="list-style-type: none"> • Queensland Government consideration of the SRC Leadership Group’s Bowen Basin Health Services Plan, including delivery of increased health and medical services in Moranbah. • Queensland Health consideration of additional resources for the Moranbah Community Health Centre commensurate with growth due to new households and young families. |
|--|---|

Cumulative Impact Stimulation of demand for increased local business and retail services

- | | |
|--|--|
| <ul style="list-style-type: none"> • Roll out of the Local Buying Program and embedding supply opportunities in the business. • Articulation of Local Buy requirements throughout principal and major contracts. • Continued interaction with REDC, Moranbah Traders and other business and economic development bodies to build relationships, and monitor and enhance local buy strategies. • Co-operation with local and regional business capacity development initiatives and data collection projects. | <ul style="list-style-type: none"> • ULDA will spend \$15 million in 2012-2013 to deliver 185 housing allotments in Moranbah and Blackwater and work closely with Isaac Regional Council to assist it in early delivery of its Belyando Estate. • ULDA consider provision for small business uses and corner shops in Moranbah UDA developments. • DSDIP or OESR consider collation and publication of combined industry data on workforce, construction phases, local spend, and business capacity development. • Continued Government support for local businesses working towards pre-qualification and capacity building for resource company supply chains. |
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5.4 Summary and Action Plans

The action plans detailed in Tables 15-18 summarise:

- CRM’s social impacts,
- CRM-specific mitigation strategies;
- accountability and timing for delivery of actions; and
- performance measures.

Key stakeholders for each strategy are also identified.

Actions have been listed separately for construction and operation under the headings of:

1. Supporting Community Development and Cohesion
2. Increasing Housing and Accommodation Options
3. Community Health, Safety and Social Infrastructure
4. Economic Development, Employment and Training.

Table 15 Community Development and Cohesion Action Plans

1a. SUPPORTING COMMUNITY DEVELOPMENT AND COHESION - <u>CONSTRUCTION</u>			
Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> An average of 750 and a peak of approximately 1,760 non-resident workers in the region, co-incident with around 500 non-resident workers at Daunia Increased number of male workers around the community, and reduced perception of cohesion and safety 	<ul style="list-style-type: none"> Ensure all EPCM contractor employees and major contractors sign 'Work Rules' and hold individuals to account for any breaches (Section 2.3.6). Provide information to the local community about BMA's complaints mechanism (Section 5.2.1). EPCM contractor to implement local buy strategy to contribute to local businesses and community during construction (Section 5.2.6). Provide induction training, welcome pack and ongoing information to non-resident workers (Section 5.2.1). Community infrastructure and safety actions - Action Plan 3. Health mitigation actions - Action Plan 3. 	<p>EPCM</p> <p>BMA</p> <p>EPCM</p> <p>EPCM</p>	2012 to 2014
<ul style="list-style-type: none"> Workers on rest days may overwhelm local facilities (town centre, hotel or other) 	<ul style="list-style-type: none"> Specialist village management contractor to provide employees at BPAV and BMAAV onsite and town recreation options, transport and health and well-being programs (Section 2.3.3). 	EPCM	2012 to 2014
<ul style="list-style-type: none"> Potential for worker's behaviour to affect resident's enjoyment of public places and facilities 	<ul style="list-style-type: none"> Provide and promote a range of avenues for stakeholder feedback, input and complaints, as detailed in Section 6 and in accordance with CG Cond. 8. Educate workers on behavioural expectations and complaints management process through induction and on-boarding process (see Section 5.2.1). Monitor and manage workforce behaviour as per Action Plan 3. Provide information to the local community on how reported incidences of anti-social worker behaviour have been addressed (Section 5.2.1). Through the community development strategy, target funding for programs and services which increase the safety and community participation of women. 	<p>BMA</p> <p>EPCM</p> <p>BMA</p> <p>BMA</p> <p>BMA</p>	2012 to 2014

1b. SUPPORTING COMMUNITY DEVELOPMENT AND COHESION - OPERATIONS

Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> Local population growth and support for community sustainability 	<ul style="list-style-type: none"> Provision of housing (Section 5.2.2) and social infrastructure (Section 5.2.3) to support the integration of new families within the community. 	BMA	Housing targets see Action Plan 2
	<ul style="list-style-type: none"> Provide information about expected future CRM and Daunia workforce numbers to local services annually. 	BMA	2012-2015
	<ul style="list-style-type: none"> Participate in the cumulative social impact study co-ordinated by the Queensland Government. 	BMA	As determined with DSDIP and IRC
<ul style="list-style-type: none"> Deferred Peak Downs expansion – estimated 100-150 new families Potential need for increase in provision of community, youth and health services 	<ul style="list-style-type: none"> Enhance community support and health services for young people and families in Moranbah through provision of up to \$5.5 million towards developing Moranbah Youth Centre to address cumulative impacts of Growth projects. 	BMA	Planning commenced Completion expected in 2013-14
	<ul style="list-style-type: none"> Enhance social amenity and recreation options through provision of \$2.5 million funding for the Greg Cruickshank Aquatic Centre Development. Maintain provision of funding towards health related programs and activities. 	BMA	Due for completion in 2012
<ul style="list-style-type: none"> Decreased community cohesion if non-resident workers don't identify with local values or contribute to communities 	<ul style="list-style-type: none"> Workforce induction, training and integration strategies as identified for construction (Section 5.2.1). Require workers to comply with the relevant Workplace Conduct (Section 5.2.1). Community infrastructure and safety actions as described in Action Plan 3. 	BMA	Actions to be reviewed in SIMP review at the completion of construction in 2014
Role of other stakeholders	<ul style="list-style-type: none"> Major initiatives being implemented in partnership with Isaac Regional Council, Department of Communities Child Safety and Disability Services and ULDA. Local community providing feedback. Community organisations participating in initiatives to build cohesion. DSDIP to co-ordinate with IRC assessment of cumulative impacts. 		
Performance measures	<ul style="list-style-type: none"> Positive contribution to social amenity in Moranbah, through completion of major local initiatives. Community cohesion monitored through BCN feedback and Community Perception Survey data. Number of complaints and resolution rate. 		

Table 16: Housing and Accommodation Action Plans

2a. INCREASING HOUSING AND ACCOMMODATION OPTIONS – CONSTRUCTION			
Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> Construction workers including contractors require accommodation in the area during roster Indirect housing demand due to increased employment levels in Moranbah contractor companies 	<ul style="list-style-type: none"> Provide accommodation in Accommodation Villages for all BMA employees and EPCM contractors (Section 5.2.2). Require contractors to use approved Accommodation Villages for all non-local employees (Section 5.2.2). 	EPCM & BMA EPCM	From commencement of construction to completion of operations, or as reviewed in the interim
	<ul style="list-style-type: none"> Develop BPAV including dedicated sections for the construction and operational workforces. 	BMA	
	<ul style="list-style-type: none"> Complete Housing Impact Study and Housing Impact Plan to identify and mitigate impacts from Bowen Basin Coal Growth Projects on local housing access (Section 5.2.2; CG Cond.18 f-o). 	BMA	2011-2012
	<ul style="list-style-type: none"> BMA Communities Staff participate in regional forums (Section 5.3.1) to identify and address the cumulative impacts of industry and regional growth pressures (CG Cond. 17). 	BMA	2011-2014
	<ul style="list-style-type: none"> Monitor and publish the number and proportions of resident and non-resident construction workers and contractors (Section 5.2.2.; Section 8.2.1; CG Condition 18 a-e). 	BMA	Six month intervals from January 2012 until June 2017, and yearly thereafter for the duration of the SIMP

2b. INCREASING HOUSING AND ACCOMMODATION OPTIONS - OPERATIONS

Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> Contribution to cumulative impact on housing demand in Moranbah 	<ul style="list-style-type: none"> Develop dwellings in Moranbah (Section 5.2.2; CG Cond. 18). 	BMA	Complete by June 2013
	<ul style="list-style-type: none"> Provide \$3.5 million to the Isaac Regional Council's' Housing Trust for provision of affordable dwellings. 	BMA	Complete by June 2012
	<ul style="list-style-type: none"> A further \$1.5 million will be provided to the Isaac Affordable Housing Trust by 2017. 	BMA	Complete by 2017
	<ul style="list-style-type: none"> Develop additional dwellings across the Bowen Basin, as determined by conditions (Section 5.2.2; CG Cond. 18). 	BMA	Agreed targets complete by June 2017
	<ul style="list-style-type: none"> Work with the IRC and Urban Land Development Authority to align housing and urban renewal initiatives (Section 5.1.1). 	BMA	2011-2012 Existing BMA strategy
	<ul style="list-style-type: none"> Monitor and publish the number and proportions of resident and non-resident employees and contractors (Section 5.2.2; Section 8.2.1; CG Condition 18 a-e). 	BMA	Six monthly from Jan 2012 - June 2017, and yearly thereafter
Role of other stakeholders	<ul style="list-style-type: none"> IRC to manage Housing Trust. ULDA and BMA deliver housing development projects. ELAM provide feedback on supported housing demand. 		
Performance measures	<ul style="list-style-type: none"> Provision of accommodation for all non-resident workers including contractors. Provision of dwellings in Moranbah as conditioned Less than 12 houses rented in Moranbah for non-resident construction workers on CRM and less than five houses rented in Moranbah or Nebo for Daunia. 		

Table 17: Health, Safety and Social Infrastructure Action Plans

3a. COMMUNITY HEALTH, SAFETY AND SOCIAL INFRASTRUCTURE – CONSTRUCTION			
Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> Demand of non-resident workers on local health services and emergency services 	<ul style="list-style-type: none"> Review options for provision of General Practitioner services for the CRM and Daunia construction workforces (Section 5.2.3). Provide on-site paramedics, health clinic and evacuation facilities in Accommodation Villages (Section 2.3). Mitigation of demands on local Health services as detailed in Section 5.2.3. 	BMA EPCM EPCM	2012-2014
	<ul style="list-style-type: none"> Participation in cumulative social impact assessment as per conditions. 	BMA	2012-2013
	<ul style="list-style-type: none"> Regular engagement with QFRS, QPS and QAS members as detailed in Section 5.2.3. Consult Queensland Health regarding any potential involvement of Moranbah Hospital in Emergency Response (Section 5.2.4). Identify helipad site(s) to local Emergency Services and evacuation service providers, including geo-co-ordinates (Section 5.2.4). 	EPCM & BMA EPCM EPCM	2012-2014
	<ul style="list-style-type: none"> Undertake regular monitoring of local service demands in consultation with services providers and industry partners, (Section 5.2.3.1). 	BMA	2012-2014
<ul style="list-style-type: none"> Traffic safety challenged by multiple projects 	<ul style="list-style-type: none"> Liaise with DTMR and IRC to ensure compliance with the Traffic Management Plan (Section 5.2.4). Participate in cross industry and government initiatives to improve communication, industry safety standards and co-ordination of road safety initiatives (Section 5.2.4). 	BMA BMA	2012-2014
	<ul style="list-style-type: none"> Provide three months notice of vehicles requiring pilotage to QPS Mackay District, wherever possible. 	EPCM & BMA	2012-2014
	<ul style="list-style-type: none"> Develop road safety program for delivery across both CRM and Daunia sites, as detailed in Section 5.2.4. Induction and on-boarding programs on local road conditions and specific traffic management requirements (Section 5.2.4). 	BMA EPCM	2012-2013

3a. COMMUNITY HEALTH, SAFETY AND SOCIAL INFRASTRUCTURE – CONSTRUCTION

Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> Amenity, dust or noise impacts on advancement landholders 	<ul style="list-style-type: none"> Maintain contact with landholders adjacent to the mine site and Accommodation Villages to directly respond to, monitor and report on landholder concerns. Adhere to various EA conditions. 	BMA BMA	2012-2016
<ul style="list-style-type: none"> Emergency management 	<ul style="list-style-type: none"> Provide Emergency Management Qld Procedure including disaster management plan to EMQ. 	BMA	2012

3b. COMMUNITY HEALTH, SAFETY AND SOCIAL INFRASTRUCTURE - OPERATION

<ul style="list-style-type: none"> Demand of non-resident workers on local health services and emergency services 	<ul style="list-style-type: none"> Provide a range of well-being and health services for workers at CRM and Daunia sites as detailed in Section 2.3. Ongoing needs assessment (see Section 5.3), to assess need for dedicated workforce GP for mine operations. 	BMA	2012-2015
	<ul style="list-style-type: none"> Provide information about expected future workforce numbers to local services including schools (Section 5.3.2). 	BMA	2012-15
<ul style="list-style-type: none"> Demand on emergency police may increase as a result of commuting workforce and population growth 	<ul style="list-style-type: none"> Develop a mutual support arrangement between CRM and local emergency services as described in Section 5.2.1.4. Regular communication between BMA mine rescue, QFRS, QPS and QAS to monitor and manage demand (Section 5.2.3). 	BMA BMA	2012 ongoing
Role of other stakeholders	<ul style="list-style-type: none"> IRC and other industry partners participating in health service planning. BMA's Community Network to support the monitoring of perceptions of behaviour and safety in the community. Multiple community partners in BMA Community Development Strategy and Program, as outlined in Section 5.1. DTMR reviewing and monitoring Traffic Management Plans. QFRS, QPS and QAS participation in joint initiatives. 		
Performance measures	<ul style="list-style-type: none"> Management of workers' behaviour monitored through complaints and police feedback on impacts/incidents. Increased co-operation between BMA and emergency services as monitored through briefings and site attendances. Measure compliance with actions from traffic management plan. Feedback from QPS, QFRS and QAS in Moranbah on managing service demands. 		

Table 18: Economic, Employment and Training Action Plan

4a. ECONOMIC DEVELOPMENT, EMPLOYMENT AND TRAINING - <u>CONSTRUCTION</u>			
Impacts	SIMP Actions	Account.	Timing
<ul style="list-style-type: none"> Potential for increased skills and employment opportunities 	<ul style="list-style-type: none"> Implement mature age apprenticeship program. 	EPCM	2012-2013
<ul style="list-style-type: none"> Non-resident construction workers spending less money in the community 	<ul style="list-style-type: none"> Implement the EPCM Contractor's 'Local Buy' Program during construction to build strong relationships with local businesses (Section 5.2.6; CG Cond.11). Co-operate with local and regional business capacity development initiatives and data collection projects (Section 5.2). 	EPCM	2012-2014
<ul style="list-style-type: none"> Positive economic contribution to local businesses through BMA supply contracts 	<ul style="list-style-type: none"> Articulate Local Buy requirements throughout major contracts (Section 5.3.1) wherever possible. 	EPCM	2012-2014
4. ECONOMIC DEVELOPMENT, EMPLOYMENT AND TRAINING - <u>OPERATION</u>			
Impacts	SIMP Actions		Timing
<ul style="list-style-type: none"> Opportunity for increased Indigenous employment 	<ul style="list-style-type: none"> Implement BMA's Indigenous engagement strategy 'In Partnership', as described in Section 5.2.5.4 , Employment Diversity strategy and Pathways to Employment Initiative as described in Section 5.2.5.3. 	BMA	2012-2015
<ul style="list-style-type: none"> Ongoing growth in local employment 	<ul style="list-style-type: none"> Enable choice between local residential and remote workforce employment, as discussed in Section 5.2.1. 	BMA	2012 ongoing
<ul style="list-style-type: none"> Non-resident employees and contractors spending little money in the community 	<ul style="list-style-type: none"> Implement BMA Local Buying Program with small businesses headquartered in Moranbah, Dysart, Emerald, and Blackwater throughout operations. Maintain strong, long-term relationships with local business (Section 5.2.6; CG Cond.11). 	BMA	2012- 2014 Review 2015
<ul style="list-style-type: none"> Potential for increased skills and employment opportunities for local residents, including young people 	<ul style="list-style-type: none"> As per Section 5.2.5.1, BMA's Education and Training Partnerships are regularly reviewed to ensure programs are well targeted for local skills growth. Operations initiatives to be identified before SIMP Review in 2014. 	BMA	2012 Operations initiatives to be identified in SIMP Review
<ul style="list-style-type: none"> Potential for limited long-term employment choices for 	<ul style="list-style-type: none"> Through BMA Diversity Strategy, promote, increase and support workforce diversity for CRM operations as described in Section 	BMA	Progress by 2015



women, Indigenous people and workers not yet skilled in mining.	5.2.5.3.		
Role of other stakeholders	<ul style="list-style-type: none"> • Participation in collaborative Education and Training initiatives, by a range of stakeholders including Moranbah Traders Association, Dysart local small business representatives, Central Highlands Development Corporation and DSDIP. • Indigenous community members and businesses to participate in employment and business development strategies. 		
Performance measures	<ul style="list-style-type: none"> • Provision of local employment opportunities at BMA's existing operations, • Access to CRM operational employment for workers across the MIW and other Queensland regions. • Number of new businesses supplying CRM and Daunia as result of Local Buy strategies. 		



6 Stakeholder Engagement Strategy


BMA aims to build strong relationships within our communities by developing positive relationships and practising values based stakeholder engagement. For Caval Ridge, the key objectives for engagement are to:

- ensure local residents, businesses and authorities have sufficient information about the project, its activities, workforce and schedule to participate in impact management, monitoring and local development initiatives;
- build relationships which support communication, information sharing and feedback to assist decision making with regard to the impacts of construction and operations of CRM;
- ensure stakeholder issues and grievances are identified, evaluated, addressed and recorded; and
- comply with the Co-ordinator-General's conditions on stakeholder engagement.

6.1 Stakeholders

A Stakeholder Register has been established, to ensure stakeholders, their interests and contact details are known to the CRM team, and that feedback and complaints are recorded and actioned. Key stakeholders for CRM include:

- adjacent landholders;
- the Moranbah BCN;
- community members who may be affected or benefitted by CRM impacts;
- local businesses who will supply construction and operations of CRM;
- Isaac Regional Council and Mackay Regional Council;
- organisations and service providers represented on the Moranbah BCN, including:
 - Barada-Barna traditional owners;
 - Moranbah Traders;
 - Moranbah schools;
 - Moranbah youth services;
 - Moranbah and District Support Services;
 - Moranbah Hospital;
- Government agencies, including:
 - Department of Communities, Child Protection and Disability Services;
 - Queensland Police;
 - Queensland Health;
 - Department of Community Safety;
 - DSDIP's SIA Unit;

- 
- Skills Queensland; and
 - DSDIP's Mackay Service Centre.

BMA is also in regular consultation with local and regional partners, as listed in Table 14.

Strategies for information, communication, consultation and partnership are outlined below.

6.2 Moranbah BMA Community Network

BMA has established the Moranbah BMA Community Network (Moranbah BCN) as a key consultation mechanism for Caval Ridge. The BCN has an Independent Chair, and members include representatives of:

- Moranbah businesses;
- Moranbah schools;
- Moranbah youth services;
- Moranbah and District Support Services;
- Moranbah Hospital;
- Isaac Regional Council;
- Traditional Owners;
- Daunia and CRM construction, operations and environmental managers; and
- the Queensland Government.

The purpose of the BCN is to:

- assist in providing advice and input on issues relating to the social impact and mitigation strategies outlined in the CRM EIS and SIMP;
- receive and consider progress reports on the implementation of the SIMP; and
- participate in the design and collection of qualitative and quantitative data pertinent to monitoring SIMP mitigation and management strategies.


BCN meetings occurred monthly during the development of the SIMP, and will occur at least every second month during the first year implementation period for the first approved SIMP. BCN minutes are made publicly available through the BHP Billiton website, and quarterly reports are provided on BCN meetings.

6.3 Engagement in SIMP Implementation

BMA has regular meetings with partners involved in implementation of its local initiatives and local and regional partnerships, as described in Section 5.1. In addition, BMA works with local and regional stakeholders at individual and group level, to address social infrastructure needs affecting its workers and families (e.g. working with the IRC and childcare centre proponent to find a solution to the centre's threatened closure).

The CRM team will establish regular consultation with Council and Government stakeholders involved in SIMP initiatives, including:

- meetings with key stakeholders who accept accountability for recommended actions to address cumulative impacts;

- 
- Moranbah BMA Community Network meetings;
 - meetings with Isaac Regional Council, including project-specific IRC Steering Committee and Advisory Group meetings;
 - meetings of the Moranbah Cumulative Impact Group;
 - meetings with Indigenous stakeholders; and
 - participation in industry community meetings and interagency meetings.

6.4 Consultation with Isaac Regional Council and State Agencies

BMA will maintain its regular briefings and consultation meetings with the Isaac Regional Council, to:

- provide updates on CRM and DM construction;
- provide updates on SIMP delivery, and get feedback from Council on the effectiveness of mitigation strategies; and
- identify ongoing opportunities for Council and BMA to work together to address cumulative impacts.

The schedule for consultation with IRC will be reviewed at the completion of construction, and set as part of the revised SIMP for the operational period. BMA will also continue to meet with Mackay Regional Council on an as-needs basis.

BMA will meet annually with the Department of Communities, Child Safety and Disability Services, Queensland Police, Department of Community Safety, DSDIP Regional Development Unit, and DSDIP SIA Unit during construction. This will be to review SIMP progress, regional development priorities and Government agencies' initiatives to address cumulative impacts. More regular meetings will also be required with local officers of the Police, Community Safety and DSDIP, and these will be agreed with the officers concerned.


6.5 Communication during Construction

BMA has also established general communication mechanisms for CRM including:

- a free call number, answered 24 hours / seven days per week;
- an email address for BMA growth projects to ensure community members have access to the CRM team;
- a reply paid address for written correspondence from the community; and
- promotion of phone, email and reply paid address details on all project correspondence and communication materials.

A CRM section has been established on the BHP Billiton website and will be maintained until at least 24 months after commencement of operation of the CRM. The internet page will provide quarterly progress and consultation activities updates, including:

- environmental management reports that are publicly available and the executive summaries of those reports;
- minutes from BMA's Moranbah Community Network meetings;
- quarterly construction bulletin/newsletter; and

- 
- BMA's Feedback and Complaints Procedure, including a 24 hour toll-free complaints contact telephone number.

BMA's local Communications and Community Relations Advisers will provide information, participate in local projects, manage complaints at the local level, and ensure effective lines of communication between the CRM management team and the local community.

The CRM workforce and BMA Community Relations Advisers will be trained in regard to information, consultation and complaints procedures and protocols.

Communication activities during the CRM construction period will include:


- prior to commencement of works, and at six-monthly intervals, BMA will provide public notices to advise residents and businesses of construction works likely to impact the community. Public notices and advertisements will provide the location and hours in which works will occur and how to contact CRM;
- early and on-going engagement with owners and occupants of sensitive places adjacent to or predicted to be impacted by the proposed construction, operational and mitigation works. Engagement activities will include provision of information about the timing, duration, location, and potential effects of construction works, and where required, mitigation measures available;
- bi-monthly updates and briefings to the Isaac Regional Council to advise on project activities, schedule, the BMA Local Buy Program, and progress with SIMP implementation;
- regular stakeholder notifications and face to face meetings for identified stakeholders (such as Police and Emergency Services) and local and regional authorities. These meetings and notifications will be provided to advise of construction works likely to impact the community;
- ensuring that the local community and businesses are kept informed of any traffic disruptions and controls, and construction of temporary detours. Notification will be made no less than 48 hours prior to such works being undertaken through newspaper advertisements and/or community radio announcements, community notice boards and the BHP Billiton website (www.bhpbilliton.com/regulatoryinformation); and
- regular information provision through distribution of fact sheets, the website and participation in local forums and community events.

Where issues arise which would benefit from broader community consultation, or input to review of mitigations is sought, BMA will provide issue-specific consultation activities such as community workshops, surveys and information sessions.

As discussed in Section 5.2. and 6.7, BMA will conduct regular engagement with local and regional authorities and stakeholders including Isaac Regional Council, Government agencies and Queensland Police, during both the construction and operations phase. Regularity of consultation is to be agreed in co-operation with stakeholders.

6.6 Communication and consultation during operation

The CRM General Manager will review the communication and engagement strategy three months before operations are expected to commence. A revised Stakeholder Engagement Strategy (SEP) for operations will be provided when the CRM SIMP is reviewed in 2014. Consultation during CRM operations is likely to include:

- 
- ongoing partnership and co-operation with parties responsible for BMA's Community Development and mitigation initiatives;
 - BCN meetings, as agreed with the Chair and members;
 - maintenance of communication channels between CRM, IRC, QPS and Emergency Services;
 - provision of CRM information on the BHP Billiton website;
 - maintenance of the free call number;
 - bi-monthly meetings of the BMA Moranbah / Isaac Regional Council;
 - maintenance of the complaints and feedback mechanisms; and
 - monitoring and reporting of consultation and complaints resolution.

6.7 Complaints resolution

As noted in the International Council on Mining and Metals good practice guideline for complaints management,¹⁶ any large-scale project, even if managed to the highest standards, may cause local concerns. BMA believes that effective complaints management is integral to building communication, respect and trust between its operations and local communities. It also assists in detecting and addressing local concerns at an early stage.

Responsibility for receiving complaints rests with the BMA Community Relations team. However, responsibility for addressing and resolving complaints rests with the CRM Approvals and Communications Manager during construction, and with the CRM General Manager during operations.

6.7.1 Process for Receiving and Responding to Complaints


All personnel including contractors will be made aware of the existence and importance of the complaints mechanism in their on-boarding program, and how to direct a complaint.

The following avenues will be promoted to community members and registered stakeholders for their feedback, input and complaints:

- email, phone and reply paid addresses described in Section 6.2 and included on BHP Billiton's website;
- in person to a community relations advisor, or during a meeting with BMA employees;
- to a third party such as a government department (e.g. Department of Environment and Resource Management), with links between BMA and departments to ensure that feedback is provided in a timely manner.

Upon receipt of a complaint, the responsible Manager will commence investigation into the cause of the complaint and where mitigation is required, take any reasonable actions required to address the complaint.

¹⁶ International Council on Mining and Metals (October 2009) Handling and Resolving Local Level Concerns & Grievances – Pilot Version, viewed at <http://www.icmm.com/page/15822/icmm-presents-new-guidance-note-on-handling-and-resolving-local-level-concerns-and-grievances>



Wherever possible, BMA will seek resolution to concerns through dialogue and joint problem solving with affected stakeholders. The way in which complaints are resolved will vary according to the issue, and may range from a reasonable rejection of the complaint (with a full explanation provided to the complainant) to mitigation or change in practices. Depending on the complaint, one-on-one consultation with CRM representatives and/or independent mediation at BMA's expense will be offered.

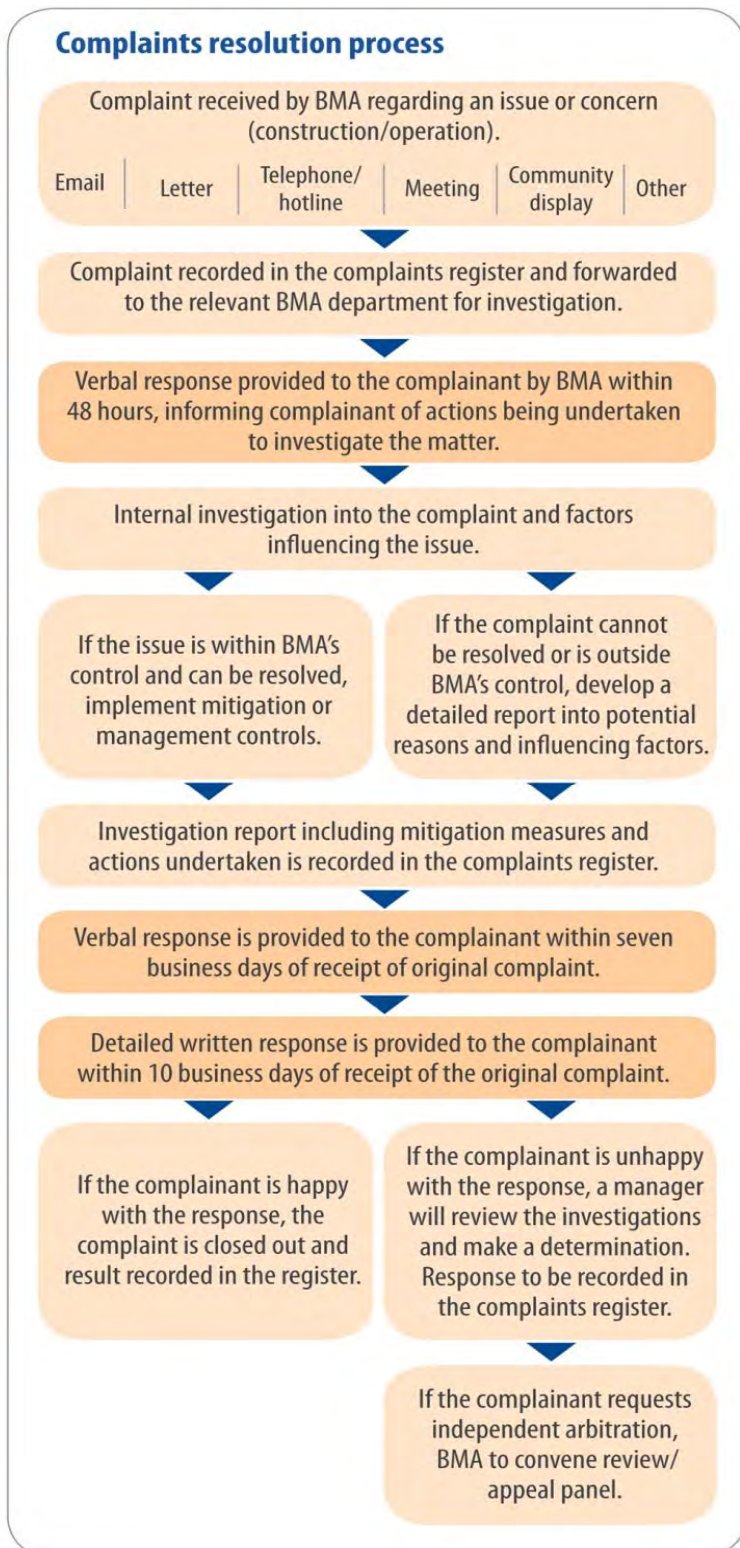
A verbal response on the facts identified and progress with the investigation will be provided to the complainant within 48 business hours (unless the complainant agrees otherwise), and a detailed written response will be provided within ten business days of the receipt of the complaint.

Upon closing out a complaint, the stakeholder will be contacted by the relevant BMA representative to determine if they are satisfied with the resolution. If dissatisfied, the stakeholder can appeal to BMA for further consultation and investigation. In the event that a complainant rejects a proposed resolution, they will be invited to resubmit the complaint with an explanation or reconsideration and a response.

For unresolved complaints, BMA will also provide access to an alternative dispute resolution mechanism available at no cost to the individual or community. Alternatively, suggest assistance be sought from an independent third party, such as an NGO, community leader, or a locally experienced academic. Figure 2 summarises the complaints management and response process.

BHP Billiton's Global Ethics Panel also provides oversight of concerns related to business conduct. The panel is comprised of eight corporate representatives from relevant functional areas and two external advisors. It provides a high-level point of contact for employees. The panel meets quarterly to review all business conduct cases that have been raised through the complaints processes. It also assesses emerging policy issues and recommends to the chief executive appropriate changes to BHP Billiton's 'Code of Business Conduct'.

Figure 2: Caval Ridge Mine Complaints Resolution Process





6.7.2 Non-conformance

The process for dealing with circumstances where Schedule 1 requirements are not met during CRM construction or operation activities will include:

- a mechanism for reporting;
- taking corrective action where required; and
- indicating responsibilities and timing for such actions.

A review process will be established to provide for further or alternative mitigation measures to be implemented as soon as practicable, in response to monitoring results which indicate non-compliance with respect to noise, dust and other environmental controls.

6.7.3 Complaints Register and Reporting

BMA will utilise its established internal complaints register to record and report on all complaints that may be received during the construction and operation of the CRM project. The complaints register will detail:

- name of complainant, date of complaint and how it was made;
- nature of the complaint, issues arising and date of initial response;
- name and department of BMA employee in charge of investigations;
- summary of investigations and actions taken;
- date of written response sent to complainant; and
- complainants' responses to investigations.

The complaints register will be updated and maintained by BMA's Community Relations team. Information on all complaints received and response times will be made available to the environmental management representative weekly. Six monthly reports summarising complaints and their resolution will be made available on the BHP Billiton website. External reporting of grievances to government departments will be via the Complaints Register and reporting arrangement described in Section 6.5. External compliance auditing will be undertaken by a third party auditor.

6.8 Monitoring and Review of Stakeholder Engagement

As described in Section 8.3, BMA will provide regular reports on a range of key strategies including stakeholder engagement and grievance management, and housing actions. The CRM team will analyse feedback including complaints to assist in the identification of emerging issues. The complaints mechanism will be regularly reviewed to identify:

- the type of and trends in complaints;
- whether the correct procedures are being applied;
- whether communities are sufficiently aware of the mechanism;
- whether complaints are generally being successfully resolved; and
- whether the trends reveal any underlying issues that need to be tackled.

The stakeholder program will be reviewed annually to ensure it meets the needs of stakeholders, and is relevant to CRM activities.



7 Implementation

This section outlines:

- co-ordination of SIMP delivery and monitoring;
- BMA teams' areas of responsibility for implementation of the SIMP;
- other stakeholder roles; and
- initiation of SIMP delivery.

7.1 SIMP Co-ordination

A cross-functional SIMP Delivery Team has been formed for CRM to represent and co-ordinate accountable parties and delivery processes. The SIMP Delivery Team includes:

- Project Director, CRM;
- General Manager Operations, CRM;
- General Manager Operations, Daunia;
- Project Manager, CRM Construction;
- Area Manager Approvals and Communications, CRM and Daunia;
- Human Resources Manager, CRM and Daunia;
- Environment Manager – Approvals;
- EPCM Project Director;
- BMA Communities Manager; and
- Senior Communications Advisor – CRM and Daunia.

The SIMP Delivery team will meet monthly during the first six months of construction and SIMP delivery, then quarterly during construction, to:

- track progress against SIMP commitments, and monitor compliance with conditions;
- consider data from stakeholder engagement and complaints processes, and initiate corrective actions if required;
- forecast construction, operational and traffic activities which require community notification or stakeholder engagement;
- monitor workforce profile and accommodation provision;
- identify any issues (such as co-ordination or communication) to be addressed; and
- oversee SIMP review, reporting and auditing requirements.

BHP Billiton's Project Hub will provide the Secretariat for the Delivery Team. The Project Hub will also develop a SIMP implementation schedule to assist the Delivery Team and accountable employees and contractors in monitoring progress with SIMP commitments. Membership of the delivery team may change as the project moves into steady-state operations. This will be addressed in the post-construction review of the SIMP.

7.2 Delivery Functions

Given the breadth of the SIMP, several functional areas share responsibility for aspects of SIMP implementation. These key functions are shown in Table 19.

Table 19 SIMP Delivery Functions

CRM SIMP DELIVERY TEAM			
<ul style="list-style-type: none"> • Co-ordination and leadership of SIMP delivery • Compliance monitoring and reporting • Cross-functional liaison 			
BHPB CRM Project Team	BHPB Communication and Engagement Team	BMA Communities – Brisbane and Moranbah	BMA Corporate Divisions
<ul style="list-style-type: none"> • Construction Management • Workforce Management • Operations Planning and Management • SIMP Monitoring and Reporting (construction) 	<ul style="list-style-type: none"> • Moranbah BCN • Communication • Stakeholder Engagement • Feedback and Complaints Process 	<ul style="list-style-type: none"> • Community Development Strategy • Major Local Initiatives • Local and Regional Partnerships • Indigenous Engagement Strategy • SIMP Monitoring and Reporting (operations) 	<ul style="list-style-type: none"> • Housing and Accommodation • Health, Safety and Security • Employment Diversity • Training and Skills for Growth
Major Contractors			
<ul style="list-style-type: none"> • Co-operation with compliance requirements • Contractor management • Workforce monitoring • Accommodation Village operations and local co-operation • Workforce health, safety and support 			

7.3 Other Stakeholders' Roles

The SIMP includes a number of suggested actions for consideration by other stakeholders, including actions to address cumulative impacts. BMA meets regularly with the Isaac Regional Council, Moranbah BCN, project partners and other industry bodies, to progress partnership work and collaboration. BMA will review proposed SIMP actions with all relevant parties during public consultation on the SIMP, and will incorporate monitoring of SIMP delivery in regular ongoing meetings. Proposed actions for Queensland Government agencies and authorities are outlined in Table 14.

8 Monitoring, Reporting and Review

This section describes the processes of monitoring, reporting and review to be undertaken for CRM. It includes:

- monitoring requirements;
- monitoring of compliance and SIMP progress;
- monitoring of impacts and indicators;
- participation of stakeholders in monitoring;
- reporting and audit processes; and
- SIMP review and amendment processes.

Detailed monitoring strategies are provided for the construction phase (2012-2014). Strategies for monitoring SIMP delivery and compliance during operations will need to be refined during the post-construction review of the SIMP.

8.1 Requirements

Requirements for social monitoring were articulated in the Coordinator-General's EIS conditions¹⁷, and in Change Request 4. Conditions with a bearing on monitoring, reporting and review are outlined in Table 20.

Table 20: CRM Monitoring Requirements

EIS Condition	Requirement
1	Provide a copy of the final commitments register for the CRM to the Coordinator-General including SIMP commitments
6a	The Moranbah BMA Community Network will have functions including: <ul style="list-style-type: none"> • consideration of the CRM air quality monitoring program • assist BMA to monitor the effectiveness of its communications strategy • receive and consider progress reports on the implementation of the SIMP • play a key role in the design for collection of qualitative and quantitative data pertinent to monitoring SIMP mitigation and management strategies.
6e (v)	Provide to the Moranbah BCN regular information on the progress of work on the Daunia and CRM Mines and monitoring results

¹⁷ The Bowen Basin Coal Growth Project: Caval Ridge Mine—Coordinator-General's evaluation report for an environmental impact statement (EIS)

EIS Condition	Requirement
10 (f)	Develop a SIMP monitoring plan which includes: <ul style="list-style-type: none"> • impacts and issues to be monitored; • targets and outcomes sought; • a monitoring strategy; • how management of impacts will be monitored; • responsibilities for monitoring; • timing and frequency of monitoring; and • key performance indicators.
9 (b)	A review process must provide for further or alternative mitigation measures to be implemented as soon as practicable in response to monitoring results where non-compliance is identified and in accordance with the agreed outcomes of community consultation.
9 (c) (vi)	Develop a database for tracking complaints, issues, the subject of complaints, responses and corrective actions taken
10 (a) (i)	The SIMP must include a monitoring program for mitigation and management strategies designed to address social impacts
11 (b)	Engagement with the Queensland Police Service in monitoring: <ul style="list-style-type: none"> • fatigue and journey management policies; • potential increased demand on police service delivery; and • collaborative strategies to monitor and address those matters in the CRM SIMP over which BMA has control.
11 (c)	Strategies to monitor and review the CRM Emergency Management Plan
18 ¹⁸	In January 2012, and at six monthly intervals until June 2017, then yearly for the duration of the SIMP, publish to the website accommodation arrangements for operational workforce in the Bowen Basin, as specified.
18 (k) (v)	Monitoring of the effect of any provision of affordable non-resource worker housing (in the Housing impact Plan).
19 (a)	Report to the Coordinator-General the accommodation arrangements for the Daunia Mine construction workforce.
19 b	Provide new dwellings for Daunia construction workers who move to Moranbah and evidence of those dwellings, if more than five Daunia construction workers move to Moranbah or Nebo during construction.

¹⁸ Change Request condition replacing 18 (a-e) of EIS conditions



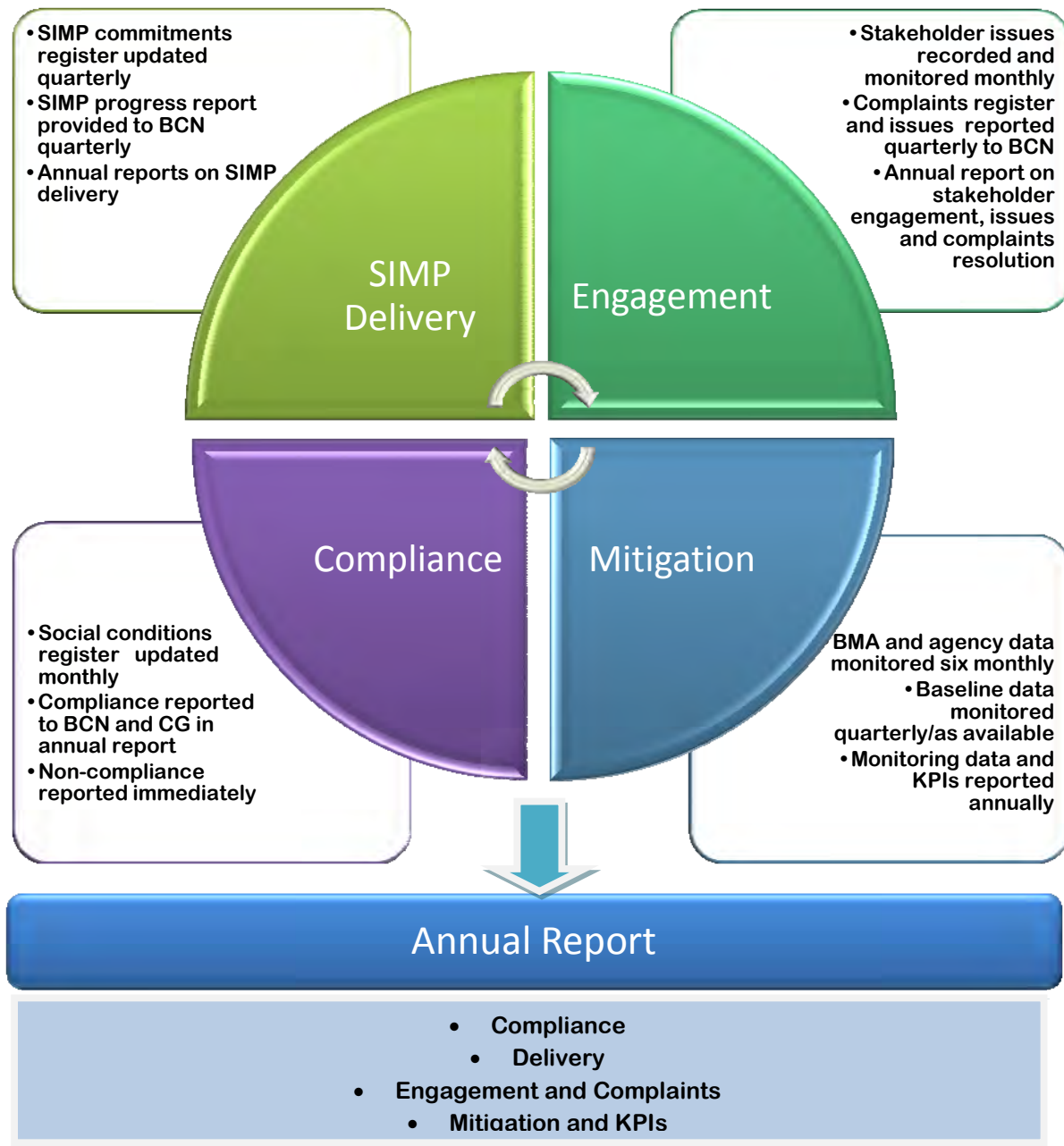
8.2 Monitoring Strategy for Construction

Monitoring will commence following the approval of the Final SIMP. The purpose of monitoring is to measure, track and report CRM's social compliance, and to monitor the effectiveness of CRM mitigation strategies. The monitoring strategy to be used during CRM's construction includes four, linked parts:

- tracking delivery of SIMP actions through the commitments register;
- identification of stakeholder issues and complaints, and tracking and reporting responses;
- monitoring implementation of mitigation strategies and social conditions potentially impacted by CRM; and
- recording and reporting on CRM's compliance with Queensland Government conditions for construction and operation.

The strategy for monitoring during CRM construction is illustrated in Figure 3, and detailed in the following sections. Regular monitoring will allow corrective action to be undertaken, if data indicates that mitigations or stakeholder engagement need to be enhanced. Following construction, less regular monitoring may be required, and this will be determined in the review of the SIMP following completion of construction.


Figure 3: SIMP Monitoring Strategy for Construction



8.2.1 Monitoring SIMP Delivery and Compliance

BMA has assembled the SIMP and supporting appendices as the framework for compliance with the Coordinator-General's conditions. Monitoring of compliance and SIMP delivery during construction will be managed by BMA. Monitoring will include:

- reviewing the Commitments Register and internal schedule, to record progress, identify any gaps and identify corrective action;
- analysing trends in stakeholder inputs and complaints;
- reviewing reports on the progress of partnerships and major strategies;

- 
- reviewing workforce and accommodation data, air quality monitoring results and demand on Police and Emergency services; and
 - tracking Local Buy Program outcomes.

BMA will also monitor the number of employees and contractors directly employed in BMA mining operation positions, and proportion of non-resident employees and contractors. This data will be published on the BHP Billiton website from January 2012, at six-monthly intervals.

Reports with data as specified in Table 21 will be provided to the Moranbah BCN during the construction period. Annual reports will be provided to the Coordinator-General and will include:


- compliance with conditions and progress against the implementation program;
- community engagement and complaints outcomes;
- progress against KPIs; and
- SIMP amendments required to reflect change in circumstances or the project.

8.2.2 Monitoring impacts and mitigation

The SIMP Delivery Team will co-ordinate monitoring, to ensure the implementation and effectiveness of mitigations are measured, tracked and reviewed. The process for monitoring impacts and the effectiveness of mitigations during construction is:

- collate internal data:
 - employment;
 - Local Buy strategy implementation;
 - accommodation usage;
 - complaints register and stakeholder issues;
 - workforce composition; and
 - housing production;
- develop data sharing agreement with DSDIP to facilitate collation of data from Government agencies, including:
 - community safety (QPS);
 - emergency services demand (QPS and DCS);
 - demand for supported housing (Dept of Communities Child Safety and Disability Services);
 - demand for services from resident and non-resident workers (Moranbah District Support Services);
- input data to a baseline register;
- input data on the status of KPIs quarterly or as available; and
- monitor and report changes to the Moranbah BCN as denoted in Table 24.

BMA will also monitor the effectiveness of workforce-community cohesion strategies, through consultation, surveying and records analysis.



Monitoring for CRM will include BMA's participation in addressing cumulative impacts, but is unable to estimate or measure the success of joint strategies to address cumulative impacts.

8.2.3 Key Performance Indicators

Impacts and the effectiveness of mitigations will be monitored against Key Performance Indicators, using data listed in Table 21. Data collection processes have been initiated as part of project, contractor and partnership management processes, to support the monitoring program. A data register will be developed to include indicators, baseline status, accountability for data collection and protocols for sharing Project and stakeholder information.

Indicator data will be monitored quarterly or as specified in Table 21 during construction, and annually during operation. An annual review of KPIs and social indicators will be undertaken to inform the Annual Report.

Table 21: CRM SIMP Indicators Framework and Measures for 2012-2014

Values	Indicator	Measure	Responsibility
1. Housing and accommodation	Provision of accommodation for non-resident workers	<ul style="list-style-type: none"> number and proportion of resident and remote construction workers and contractors (six-monthly) as per amended Condition 18) number and proportion of resident and remote operations workers (six-monthly) number of beds and occupancy rate of BMAAV, BPAV and MAC Services Coppabella Accommodation Villages, compared to total number of non-resident workers (six-monthly) 	BMA and EPCM contractor
	Provision of houses in Moranbah by 2013, as conditioned	<ul style="list-style-type: none"> dwellings built in Moranbah by 2013 (six-monthly) 	BMA
	Provision of additional dwellings in the Bowen Basin. as conditioned	<ul style="list-style-type: none"> dwellings built in Bowen Basin by 2015 and 2017 (six-monthly) 	BMA
	Less than 12 houses rented in Moranbah for non-resident workers on CRM and less than five for Daunia	<ul style="list-style-type: none"> number of CRM and Daunia employees and contractors renting housing in Moranbah (six-monthly) 	BMA and EPCM contractor
2. Community safety	No negative impact on community safety	<ul style="list-style-type: none"> number of complaints and resolution rate (quarterly) feedback from QPS and QAS on co-operation with BMA, and any investigations regarding CRM workers 	QPS, QFRS and QAS
		<ul style="list-style-type: none"> Moranbah District Support Services data on demands due to CRM and Daunia (bi-annually) 	MDSS


Values	Indicator	Measure	Responsibility
3. Social and Health Infrastructure	Minimal demand on social and health infrastructure	<ul style="list-style-type: none"> number of presentations to Moranbah Hospital from CRM and Daunia workers for non-urgent matters (six-monthly) 	Qld Health (Moranbah Hospital)
4. Community and workforce cohesion	CRM workers' relationship to local community	<ul style="list-style-type: none"> BCN feedback (quarterly) Community Perception Survey data e.g. safety, amenity and workforce –community interactions (every 2-3 years) 	BMA
5. Impacts on landholders	No negative impact on amenity or lifestyle of adjacent landholders	<ul style="list-style-type: none"> number of complaints received and resolved within 48 hours (quarterly) number of complaints resolved within 14 days (quarterly) 	BMA
6. Community development and sustainability	Improved social amenity and social resources Moranbah	<ul style="list-style-type: none"> Completion of major initiatives including Aquatic Centre and Regional Youth and Community Services Centre Reports on implementation of partnerships, funding and sponsorships (annually) 	BMA Partners in major initiatives and partnerships
7. Employment opportunity for local people	Provision of local employment opportunities at BMA's existing operations	<ul style="list-style-type: none"> Queensland job vacancy rate for mining, oil and gas industries in Queensland, as available (six-monthly) 	BMA DSDIP
	Provision of up to 275 ¹⁹ residential positions at Peak Downs as a result of deferred expansion facilitated by CRM	<ul style="list-style-type: none"> number of workers employed by Peak Downs (six-monthly) from commencement of deferred Peak Downs expansion operations 	BMA
8. Local business opportunities	Positive economic contribution to Moranbah businesses from CRM	<ul style="list-style-type: none"> outcomes of Local Buy program (quarterly) 	BMA

8.3 Participation of stakeholders in monitoring

The BCN will enable BMA to regularly inform, consult and where appropriate collaborate with stakeholders affected by project activities. BMA will provide monitoring data as identified in Section 8.2 to the Moranbah BCN, as part of its quarterly reports. The BCN will provide feedback on:

- issues and concerns in the community;

¹⁹ This is subject to execution planning and may be revised.

- 
- satisfaction with mitigation strategies, including information and engagement strategies; and
 - community perceptions about workforce, housing and social and health infrastructure demands.

The need for corrective actions will be identified through monitoring, BCN input and the complaints register. BMA will initiate a register of required corrective actions and report progress in quarterly reports.

BMA will engage with the following stakeholders during construction and the first twelve months of operation, to support collection and reporting of monitoring data:

- Queensland Police Service;
- Moranbah Hospital;
- DSDIP;
- Isaac Regional Council;
- Moranbah schools;
- Moranbah District Support Services;
- Department of Community Safety; and
- Moranbah Traders.

BMA will also monitor wider community perceptions as part of its periodic Community Perception Surveys.

8.4 Monitoring Cumulative Impacts

No one company can monitor cumulative impacts. Monitoring relies on data held by other companies and the Queensland Government, and needs to take into consideration factors such as disparate roles for implementation, varying compliance and disclosure regimes, and the difficulty of co-ordinating complex mitigation systems.

BMA actively participates in forums which monitor and discuss cumulative impacts. Presently these groups include the SRC Local Leadership Group, the Bowen Basin Community Network, interagency groups, Moranbah Cumulative Impact Group, Mackay Whitsundays and Central Highlands Regional Economic Development Corporations; and the Local Industry Working Group.

BMA is willing to participate in baseline or monitoring studies, including the study of cumulative social impacts of mining in the Isaac Region LGA. However, the Queensland Government is best placed to collate and monitor cumulative impacts data, in co-operation with Regional Councils and resource companies. Baseline data could include:

- Government and industry resources committed to local and regional community services, education and health services in Moranbah and the Bowen Basin, compared to FTE population;
- provision of hospital, police, community health services and GPs compared to Moranbah and Bowen Basin's FTE populations and other mining communities;

- Moranbah social infrastructure provision relative to a population of 11,00 and 14,000 people;
- housing ownership by industry, government and private tenure, and housing cost trends;
- availability of land for medium density housing and commercial uses;
- EIS and housing study figures, workforce projections and mitigation strategies;
- cumulative demands on the regional road network, and Peak Downs Highway and Moranbah Access Road safety;
- community safety and crime trends;
- school and childcare enrolments, and community service utilisation trends;
- training initiatives and outcomes in the Bowen Basin; and
- local and regional business capacity, employment and turnover.

8.5 Reviews and audits

BMA will undertake annual reviews of the SIMP, in consultation with stakeholders including DSDIP and Department of Communities Child Safety and Disability Services, Councils, strategy partners and other affected stakeholders. Over time, there will be changes in the policies, planning targets and operations of both Government and BMA. The annual SIMP review will take stock of changes and propose SIMP amendments as required to reflect current conditions.

The first review will be undertaken in mid 2013, and will incorporate strategies developed from the Bowen Basin Coal Growth Projects Housing Impact Plan, as well as:

- compliance with conditions;
- assessment of progress against the SIMP commitments register; and an explanation of why any actions were not undertaken as planned;
- stakeholder engagement activities and outcomes;
- complaints management and resolution;
- an overview of the effectiveness of mitigation; and
- if required, recommendations to improve future performance.


Following each annual review, a progress report will be provided to the SIA Unit (DSDIP).

An external review and audit of the SIMP effectiveness and delivery will be undertaken by an independent third party. This will be done in consultation with relevant stakeholders including government departments, service providers and other affected stakeholders, at the completion of construction (2014).

The SIMP will then be reviewed and thereafter every three years for the duration of operations and decommissioning, or until such time as BMA and the Coordinator-General agree that the timeframe requires amendment. A report on each audit's findings will be provided to the Coordinator-General within 60 days of completion of the relevant period.

8.6 Amendments and termination of the SIMP

The Coordinator-General's conditions allow that a SIMP may be altered, re-structured, re-scoped or terminated through agreement by both government and the proponent, following consultation with key



stakeholders. Should monitoring, a change in government policy of the project or engagement results indicate that the SIMP should be amended, BMA will agree to a process to facilitate amendments with the DSDIP SIA Unit. This will include:

- advising the Coordinator-General of the circumstances under which an amendment is required;
- drafting the form of amendment being considered;
- engaging stakeholders in reviewing the proposed changes;
- the monitoring and reporting strategy which will apply to the amendments; and
- providing the final form of proposed amendment for DSDIP approval.

Appendix A: Summary of EIS Conditions for CRM – Social Impact Management

Table 22 summarises EIS conditions relevant to the SIMP and social impact management, and identifies where they are addressed in the SIMP. Subsequent Change Request reports provided additional conditions relevant to the SIMP, and these are summarised in Table 23.

Table 22: Coordinator General’s Conditions for CRM Social Impact Management

EIS Cond.	Requirement	SIMP Section
5	General communications requirements, as specified	6
6	Establish Moranbah BMA Community Network (Moranbah BCN) to the satisfaction of the Coordinator-General	6
7	Prepare a community communication strategy to be initiated prior to the commencement of construction	6
8	Consultation, review, complaints and non-conformance process	6
10 a	Submit a draft (SIMP) consistent with the Social Impact Assessment (SIA) Unit guideline for review by the Coordinator-General prior to release for consultation	1-8
10 b	Consultation and Communication on the draft SIMP	1.5
10 c-d	Submission of final draft SIMP for the Coordinator-General’s approval, and operation of CRM only when final SIMP has been approved	7.4
10 e	Implementation of the SIMP	7
10f	Develop a SIMP monitoring plan, as specified	8
10g	Submit an annual progress report, undertake external audits of the SIMP and submit audit reports to the CG within 60 days of the relevant period	8
10h-l	Include a process to facilitate any SIMP amendments, to be agreed with the SIA unit of DIP	8
11 a (i-ii)	Proponent specific measures for managing social impact, including documents to be provided, and incorporating into the SIMP	5.2
11a (iii)	Provide copies of the CRM Road Impact Assessment and Road-Use Management Plan (RMP) to the Coordinator-General for consideration before the release of the draft SIMP	Provided
11 b	Engage in consultation with QPS on road safety education, good order code of conduct for BMA controlled Accommodation Villages, planning matters, fatigue and journey management, and collaborative strategies to monitor and address matters over which BMA has control	5.2.4

EIS Cond.	Requirement	SIMP Section
11 c	Provide “CRM Emergency Management Queensland Procedure”, including the disaster management plan to Emergency Management Queensland prior to construction and include strategies to monitor and review the Plan with DCS	Provided
11d	Ensure that the One-BMA Standard and the Workforce and Community Cohesion Program are developed and incorporated into the CRM SIMP.	Appendix C
11 f	Proponent must include all commitments in the SIMP.	5.1.1, Table 11
11 h (i) – (iii)	A workforce accommodation, details of recruitment plans and strategies and Employee health and welfare programs targeted to non-resident workers.	2.3 and 5.2.5
14a	From the commencement of construction, and at 12-monthly intervals in the CRM SIMP report to the Coordinator-General the accommodation arrangements for the construction workforce.	8
14 b	If the number of newly residing full time CRM construction workers exceeds 12, the proponent must provide new dwellings for those personnel and provide evidence in the SIMP reports ²⁰	5.2
14 e	Endeavour to provide sufficient construction camp units at each stage of the CRM development to accommodate the CRM construction workforce at an approved location.	2.3
17	Participate in the study of cumulative social impacts of mining in the Isaac Region LGA, contribute to the cost of the study, and collaborate in the development of cumulative mitigation and management strategies,	5.3
18a	From the commencement of operation at yearly intervals for 20 years, report to the Coordinator-General in the SIMP the accommodation arrangements for the CRM operational workforce, as specified	8.2
18 b-e	Accommodation and new dwellings for operational workers newly residing in Moranbah dwellings	5.2
18 f-o	Co-operate with OESR in the development of the BBCG project housing impacts study and Housing Impacts Plan, as specified (and as amended in the Coordinator-General’s report on project change of 14 July 2011)	5.2
18 p	Operation of the CRM cannot commence unless the Coordinator-General approves the final housing plan	5.2
18 q	Housing impact mitigation and management strategies recommended in the final approved plan must be included in future revisions of the CRM SIMP.	8.5

²⁰ I have interpreted this condition because it didn’t make sense – please confirm or amend

18 r	The Coordinator-General may specify implementation of the recommended housing management strategies in the final plan to cover any or all of the components of the BBCG project in the Goonyella Riverside Expansion EIS Assessment Report and/or any relevant Change Report for any component of the BBCG project.	5.2
19	From the commencement of construction of the Daunia Mine, and at 12-monthly intervals during construction report to the Coordinator-General the accommodation arrangements for the Daunia Mine construction workforce, and provide new dwellings if newly residing workers exceed 5 in Moranbah or Nebo	5.2

Table 23 Change Request Summary

Change Request Number	Description	Status
Change Request 1	Sought changes to the location and accommodation capacity of CRM's construction and operational workforce	Approved February 2011
Change Request 2	Sought administrative amendments to conditions relating to the granting of the Caval Ridge Mine Environmental Authority	Approved November 2010
Change Request 3	Sought administrative amendments to conditions relating to the Housing Impact Study	Approved July 2011
Change Request 4	Sought changes to the proposed Operational Workforce arrangements.	Approved September 2011
Change Request 5	Seeking changes to the alignment of the rail loop and spur	Approved April 2012.

Table 24: SIMP Guidelines & Section References

Guideline	SIMP Section
Summary of the project, objectives and expected outcomes	Section 2
Social and cultural area of influence	Section 3
Social and cultural issues in the area of influence	Section 3
Affected stakeholders	Sections 1.5, .4.1 and 6.1
Overview of stakeholder engagement outcomes	Sections 1.5, 3.2.5, and 4.1
Impact analysis – phase, stakeholders, type of impact	Section 4
Potential contribution of project to regional development	Section 4.2



Summary of social impacts	Section 4.3
Cumulative impacts	Section 5.3
Timeframes for implementation	Section 5.4
Mitigation and management strategies, collaboration, responsible parties, timeframe and key performance indicators	Sections 5, 6 and 7
Strategies supporting or linking to existing local, regional and state plans, strategies and programs	Sections 4.2 and 5
Existing activities, strategies and initiatives being implemented	Section 5.1
Strategies to address cumulative impacts	Section 5.3
Stakeholder engagement strategy	Section 6
Dispute resolution process	Section 6
Monitoring, reporting and review provisions	Section 6



Appendix B BMA Five Year Community Development Strategy



BHP Billiton Mitsubishi Alliance

Our Communities

Community Development Plan 2011–2016



RECOGNISING OUR RELATIONSHIPS

BHP Billiton Mitsubishi Alliance (BMA) began its operations in the Bowen Basin in the 1960s and we've been making positive contributions to local communities ever since.

From 2009 to 2011 financial years, BMA invested more than A\$100 million in community programs, partnerships and other social and recreational facilities in Moranbah, Dysart, Emerald and Blackwater.

Our current commitments include:

- Starting the \$46 million Moranbah Airport upgrade.
- Rolling out a \$4 million Blackwater Community Support Package including \$2.2 million for the Blackwater Aquatic Centre upgrade and almost \$1 million for childcare.
- Implementing a \$13 million Moranbah Community Support Package focused on delivering a new Youth and Community Centre and affordable accommodation.
- Supporting the flood recovery in Emerald with more than \$11 million contributed to the Premier's Disaster Relief Fund from BHP Billiton and BMA. This is in addition to funding for local recovery projects focused on health and emotional wellbeing, and sport and recreational facilities. BMA's workforce also rallied to provide funds and volunteering support, which was matched through the BHP Billiton Matched Giving program.
- Funding upgrades to childcare, education and recreational facilities in Dysart amounting to over \$5 million.
- \$14.5M through the Community Partnerships Program and Local Development Program, forging partnerships with key organisations and providing donations to enhance liveability and address social challenges across BMA's communities.
- \$20 million towards Council special rates and charges to support maintenance of roads, council infrastructure and community facilities.



We're proud of our history in Central Queensland, but we're also excited for the future. With thousands of our employees living and working in the Bowen Basin, BMA is committed to ensuring the ongoing wellbeing of our communities by providing economic stability and growth and developing initiatives that deliver long-term benefits.

It's these initiatives, and more, which contribute to making our communities safe, healthy, skilled and vibrant.

Our partnership channels

BMA's community partnerships are underpinned by our Community Development Program which has four areas:

- Regional Social Infrastructure Program
- Community Partnerships Program
- Skills for Growth
- Local Development Program.

OUR COMMUNITY APPROACH

To ensure this plan addressed the needs of our communities, we consulted with community groups, government agencies and non-government organisations. Through this process, we came up with four areas of focus:

1. Safe communities
2. Healthy communities
3. Skilled communities
4. Vibrant communities

1 Safe Communities

Road safety and transport

BMA will champion road safety and education initiatives across our communities by:

- Assisting communities to appeal to government for priority road upgrades.
- Continuing to fund local road upgrades assessed as a priority on a case-by-case basis.
- Contributing to initiatives focused on road safety education and actively participating in road safety groups such as the Mining Industry Roads Safety Alliance (MIRSA), the Road Alliance Action Group (RAAG) and student road safety awareness and defensive driving.

Police and emergency services access

While government has responsibility for the provision of police and emergency services, we will continue to support the provision of specialised equipment to improve these services in partnership with government, regional councils, industry and community groups.

2 Healthy Communities

Recycling for Kids and environmental programs

BMA will boost our existing environmental initiatives and investigate partnership opportunities to deliver sustainability projects. We will:

- Continue the Recycling for Kids initiative at Gregory Crinum Mine, which has raised over \$620,000 in four years. The recycled scrap metal helps provide specialist medical equipment for children at Emerald Hospital and critical research through the Royal Brisbane Children's Hospital Foundation.



- Investigate the roll out of the Recycling for Kids program across BMA's other operations.
- Deliver new environmental partnerships, including the EarthSmart Program in primary schools and a Natural Resource Management Expo in the Central Highlands region.

Health and medical services

BMA will work in partnership with government, regional councils, industry and community groups to address critical shortages in health and medical services by:

- Contributing to the provision of specialised health and medical services across the Bowen Basin including support to attract and retain doctors across communities.
- Developing a plan with other key stakeholders to attract and retain specialist services in the Bowen Basin, for example paediatric services.

3 Skilled Communities

Education and skills development

To strengthen opportunities for our workforce and local families, BMA will work with the education and training sector to enhance the delivery of literacy, numeracy and core curriculum across our communities.

We will do this by:

- Developing and implementing a BMA Scholarships Program for non-mining careers in the Bowen Basin.
- Partnering with primary schools in Central Queensland, as well as the University of Queensland and Education Queensland 'Supporting schools and teachers to improve students' reading achievement in rural communities' program and Education Queensland's 'ScienceSpark' initiative.
- Funding apprenticeships, cadetships, traineeships and scholarships relating to mining industry skills needs through the Skills for Growth program.

- Supporting programs that address skills shortages through the Community Development Program.

Attraction and retention of professionals

BMA will champion social and regional development by promoting the Bowen Basin region and attracting new residents and businesses in key services by:

- Trialling a settlement programme for new families settling in Dysart.
- Contributing to initiatives that promote the region and its liveability through the Community Development Program.

4 Vibrant Communities

Relationships

We have formed BMA Community Networks (BCNs) across Central Queensland, which play a vital role in identifying and developing priority projects. The BCNs guide our approach by:

- Identifying priority community projects, issues and opportunities.
- Reviewing and enhancing the Community Development Management Plan and community Stakeholder Engagement Management Plan.
- Providing an important liaison and consultative forum for our growth projects.

Workforce and community cohesion

BMA promotes workforce and community cohesion between resident and non-resident workers through:

- Developing accommodation villages that are visually appealing and provide suitable facilities and services to attract a diverse workforce.
- Developing and implementing a BMA standard for workforce behaviour that adopts industry best practice.

Small business vibrancy

BMA has demonstrated its commitment to the growth of the Blackwater, Emerald, Dysart and Moranbah communities through the launch of the Local Buying Program in early 2011 to provide additional opportunities for small local businesses. Our focus is to:

- Implement the Local Buying Program to provide additional competitive supply opportunities for local small businesses.
- Roll out a small-business support and development program.
- Support small-business education and training initiatives more broadly through the Community Development Program.

Social infrastructure

Our focus on childcare, recreation and social facilities, and affordable accommodation underpins our commitment to enhanced social infrastructure in Moranbah, Dysart, Blackwater and Emerald. BMA's approach is to:

- Work collaboratively to ensure that BMA's special rates and charges contributions to local government focus on agreed priorities, and that these charges are shared fairly between companies and the community.
- Partner with Councils, industry and key stakeholders to deliver recreation and social facilities that improve regional liveability for our workforce families.
- Contribute \$5 million over five years to deliver affordable accommodation in Moranbah and Dysart for essential workers that are not employed in the mining industry.
- Continue to provide an affordable accommodation subsidy program for priority areas – particularly relating to childcare, health and medical services.
- Investigate a longer-term affordable accommodation program.

Indigenous relations

BMA has launched an Indigenous Relations Plan '*In Partnership*' to encourage employment and training, business development, education, wellbeing and cultural exchange for Indigenous people.

Social policy

We will continue to be an active partner of the Queensland Resources Council and other key stakeholders to enhance social policy relating to the mining industry and the Bowen Basin by:

- Supporting regional development organisations.
- Collaborating with other companies to support and commission industry research on the social and cumulative impacts of mining.
- Actively participating in social policy debate and discussion by providing government submissions on regional development and social policy.
- Being an active member of working groups including the Queensland Resources Council's Social Policy and Indigenous Working Groups and the Sustainable Resource Communities Bowen Basin Leadership Group.

OUR PROGRAMS

A key value for us is sustainability, which means putting health and safety first, being environmentally responsible and supporting our communities.

We will partner with and support our communities to become safe, healthy, skilled and vibrant, providing attractive lifestyle options for our workforce.

We aim to:

- Be considered a socially-responsible citizen
- Earn support of our communities for BMA's growth plans
- Enhance the liveability of communities
- Promote cohesion between the resident and non-resident workforce in the Bowen Basin
- Promote a sense of community pride.

We are successful when our communities value their relationship with us.

Regional Social Infrastructure Program

We provide contributions towards regional infrastructure through, and in partnership with government and industry in our communities.

This includes funds towards new and existing priority community infrastructure, council rates and special rates and charges, maintenance of local roads, airports, council infrastructure, community facilities and water supply.

Community Partnerships Program

Through the *Community Partnerships Program* we partner with government, businesses, industry bodies, and not-for-profit organisations to deliver programs that address the social, economic and environmental needs of our host communities.

Skills for Growth

We recognise we're only as good as our people, so our priority is investing in attracting, developing and retaining talented, highly skilled and motivated people.

Through *Skills for Growth* we can offer our people the best training and apprenticeship opportunities as well as scholarships, cadetships, and vacation and graduate work.

Local Development Program

Our people are the greatest sources of inspiration for our local initiatives which is why we have the *Local Development Program*.

Through this program, our mine sites can support a range of local initiatives in areas such as community health and welfare, environment and sustainability, safety, and sport and recreation.



OUR FIVE-YEAR COMMITMENT

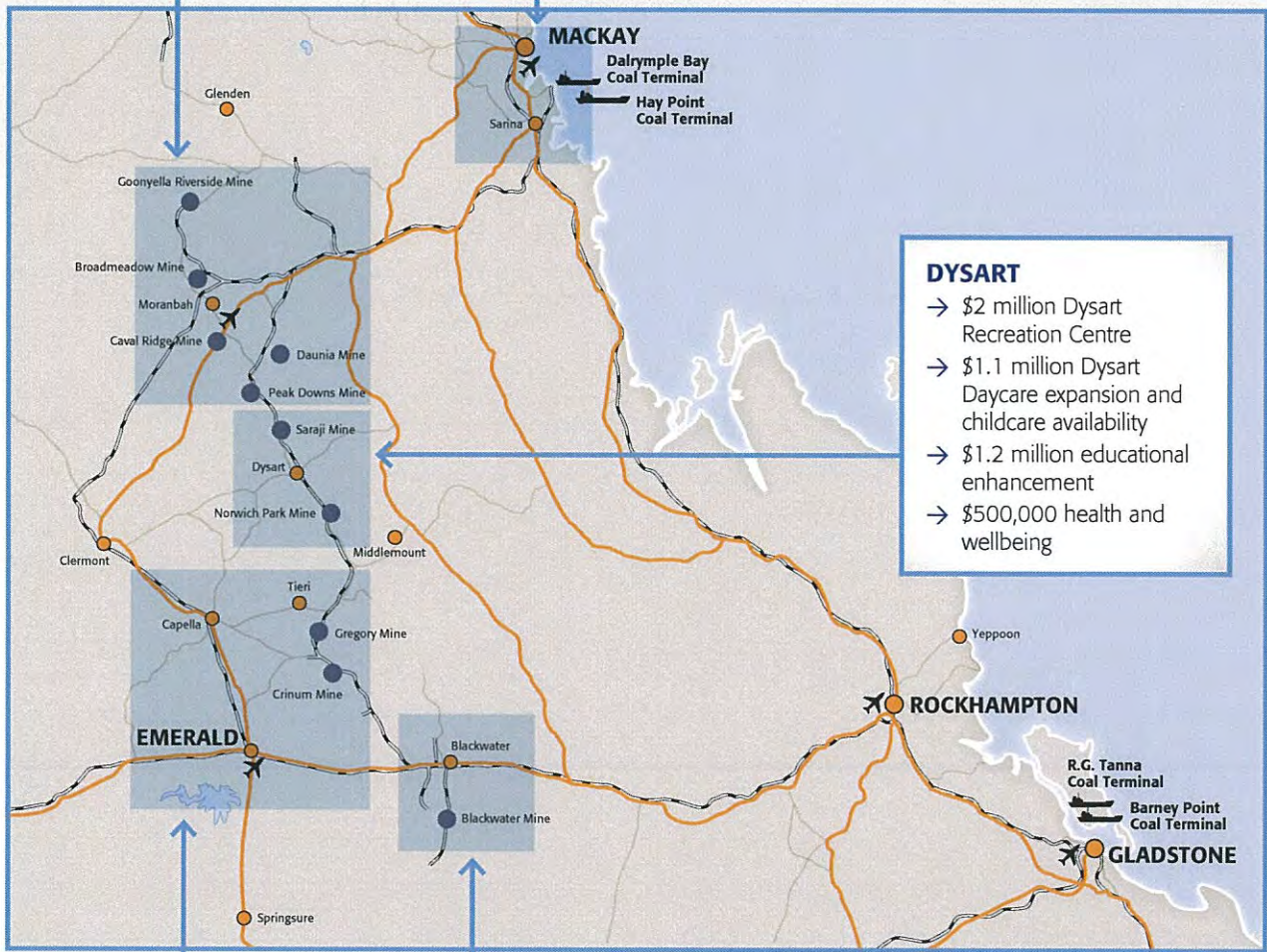
BMA is already delivering numerous priority projects that will make a difference in our communities. Take a look at the map below to find out what's happening in your area.

MORANBAH

- \$5.5 million Moranbah Youth & Community Services Centre
- \$2.5 million Greg Cruickshank Aquatic Centre
- \$5 million affordable accommodation

MACKAY/SARINA

- \$90,000 Mackay Engineering College
- \$240,000 Learning for Life Program, The Smith Family
- \$150,000 Sarina Community Coastcare Program
- \$45,000 Kidspace, Artspace Mackay



DYSART

- \$2 million Dysart Recreation Centre
- \$1.1 million Dysart Daycare expansion and childcare availability
- \$1.2 million educational enhancement
- \$500,000 health and wellbeing

EMERALD / CAPELLA

- \$620,000 Recycling for Kids
- \$141,000 Childcare training & development
- \$88,000 supported accommodation for people with disabilities
- \$360,480 flood recovery

BLACKWATER

- \$2.2 million Blackwater Aquatic Centre
- \$988,000 childcare availability and upgrades
- \$385,000 All Abilities Park
- \$275,000 Sport & Recreation Master Plan
- \$220,000 Blackdown Tableland National Park Co-management Plan
- \$700,000 Blackwater International Coal Centre

ABOUT BMA

BHP Billiton Mitsubishi Alliance (BMA) is Australia's largest exporter of metallurgical coal and is a partnership between BHP Billiton and Mitsubishi Development Pty Ltd. The two companies share equal ownership of seven Bowen Basin coal mines – Blackwater, Broadmeadow, Goonyella Riverside, Peak Downs, Saraji, Norwich Park and Gregory Crinum – and the Hay Point Coal Export Terminal near Mackay.

For more information visit www.bhpbilliton.com



Appendix C Community Workforce Cohesion Strategy

Caval Ridge Mine

Workforce and Community Cohesion Strategy

July 2012

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1 Introduction

Caval Ridge Mine (CRM) is a multi-seam, open cut coal mine forming part of BHP Billiton Mitsubishi Alliance's (BMA) growth projects in the northern section of the Bowen Basin. CRM is located southeast of Moranbah, within the Isaac Regional Council Local Government Authority.

This Workforce and Community Cohesion Strategy (the strategy) has been prepared to strengthen opportunities to influence social cohesion, and address concerns raised by the Moranbah community in response to BMA's use of an up to 100 per cent remote workforce for the operation of CRM. Its purpose is to facilitate increased local economic and other community benefits, support respectful relationships between non-resident workers and local residents, and promote a harmonious village lifestyle for workers. The strategy has been prepared as part of the CRM Social Impact Management Plan (SIMP) in response to the conditions of approval established for the mine by the Coordinator-General, and is an appendix to the CRM SIMP.

The strategy has been informed by a number of sources including information provided through community engagement processes during the preparation of the CRM Environmental Impact Statement (EIS) and SIMP, a review of literature on social cohesion in resource communities (summarised in Table 1), and interviews with personnel at other mining operations addressing similar issues. In some areas the strategy adopts a community development approach to build joint ownership between the accommodation village management, non-resident workers and the community for the initiatives developed. This approach will also promote information exchange, and increase the opportunities and resources available.

Key features of the strategy include:

- capturing economic benefits through 'Local Buy' programs and local spending by non-resident workers on goods and services;
- cultivating an awareness of and respect by workers for local values and expected standards of behaviour;
- promoting mutual respect and breaking down stereotypes held by local residents about non-resident workers;
- supporting existing social investments in community facilities, services and affordable housing in Moranbah; and
- promoting an environment conducive to positive relations by fostering a comfortable, active and socially inclusive lifestyle within the accommodation villages.

2 CRM Workforce

A non-resident workforce will be engaged for both the construction and operations stages of CRM. Construction and operations workers will be housed in two accommodation villages - the BMA Accommodation Village 5 kilometres (km) southeast of Moranbah, and the Buffel Park Accommodation Village on 18 km southeast of Moranbah housing. Details about the accommodation villages and their management are included in the Draft Accommodation Village Management Plan, which has also been submitted as an Appendix to the CRM SIMP.

The construction workforce will peak at approximately 1,760 workers in late 2013, with a range of rosters available, including two rosters with local rest days. Given the workforce size and the potential numbers of non-resident workers, the construction workforce is likely to have the most obvious potential impact on social cohesion. However, this impact will be over a relatively compressed time frame. Some operations workers will be employed before construction ends, so this could see a peak of more than 2,000 non-resident workers for CRM in the Moranbah area in late 2013.

The operations workforce is expected to build to approximately 400 employees during 2013, with approximately 550 employees plus some 100 contractors required for steady-state operations from 2014. The operational workforce, which will be present at the mine for the estimated 30 year life of mine, is expected to work a seven day roster, with no local rest days.

Additional information about the workforce and accommodation villages is provided in the SIMP, including in:

- Section 2.2: Caval Ridge Workforce;
- Section 2.3: Accommodation Villages;
- Section 5.2: Mitigating CRM's Impacts;
- Section 6: Stakeholder Engagement; and
- Section 8: Monitoring and Review.

3 Cohesion strategy

3.1 What is social cohesion?

Social cohesion refers to a common set of values, customs, and interactions that contribute to a shared sense of belonging, and to positive attitudes and behaviours within a group or community (Jenks and Jones, 2009; Friedkin, 2004 Cuers and Hewston, 2006).

Social cohesion is a key element of social capital, which includes the structures, networks and trust which contribute to the development of strong communities and human productivity (Cuers and Hewston, 2006; Briney et al, 2010; World Bank, 2003). Social cohesion fosters a sense of belonging and mutual respect, reduces crime, and increases the positive identity of communities.

The introduction of a large non-resident workforce to an area may raise concerns about a decrease in social connections, familiarity between residents, and sense of safety. Through a literature research, seven key factors with the potential to influence social cohesion between host communities and non-resident workers were identified, many of which align with matters raised by the community and company personnel. Key factors identified in the literature are summarised in the Appendix, and provide a relevant framework for this Cohesion Strategy. They include:

1. Local economic development
2. Participation in the Moranbah community
3. Worker behaviour
4. Population and service impacts
5. Village life
6. Worker and family support
7. Social inclusion

These factors can generate both opportunities (e.g. contributions to new or expanded community facilities) and impacts (e.g. lost potential for worker local spend). Not all impacts will be felt in all communities, and equally, not all non-resident workers will experience the same effects.

3.2 Strategy

The key intents of the strategy include:

1. **Local economic development** - capture local economic development opportunities for the host community from the presence of mining and manage non-resident workers;
2. **Participation in the Moranbah community** - facilitate opportunities for personal interaction between non-resident workers and Moranbah residents, to promote mutual familiarity, respect for and understanding of local values and to break down community stereotypes of non-resident workers;
3. **Worker behaviour** - develop a culture of behaviour amongst non-resident workers that is respectful towards local values, customs and expectations, in line with BMA and Bechtel workforce conduct policies;
4. **Population and service impacts** - contribute to community facilities and services provision to meet additional demand generated by non-resident workers and to support community needs;
5. **Village Life** - provide an attractive, comfortable, harmonious and healthy residential environment for non-resident workers. Reduced stress within the workforce will facilitate positive behaviour within the local community;
6. **Worker and Family Support** - support non-resident workers and families to adapt to the non-resident lifestyle. Reduced stress within the workforce will facilitate positive behaviour within the local community; and
7. **Social Inclusion** - promote a culture of inclusion, courtesy and respect within accommodation villages.

Table 1 describes the intended outcome for each cohesion factor identified above; the strategies and actions required to achieve the intent; and the responsible portfolio areas and the timing of actions.

Table 1: Caval Ridge Mine Cohesion Strategy

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
1. Local economic development						
Intent: To capture local economic development opportunities for the host community from the presence of mining and manage non-resident workers.						
Apply BMA's <i>Local Buy Program</i> to the construction and operation of accommodation villages (i.e. whole of life of project).	Establish a strategy for local spend in Moranbah and the Isaac Region as a key performance indicator for BMA and Bechtel.	Bechtel Operations (BMA)		✓	✓	✓
	Implement Bechtel's <i>Supplier Enhancement Program</i> to enhance local businesses' opportunity to supply CRM construction	Bechtel		✓		
	Implement BMA's <i>Local Buy Program</i> to build business capacity in Moranbah and the Isaac region As part of C-Res and its Community Foundation, work with local businesses on priorities including: <ul style="list-style-type: none"> • growth and innovation, • employment programs, • regional promotion, and • local business training and development. 	Operations (BMA)			✓	✓

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
Support housing provision for non-resource workers	Implement affordable housing and other initiatives in BMA's Community Development Program to support business capacity development. [See also: SIMP S5.2.6]	Communities (BMA)		✓		✓
Work with local businesses to identify non-resident worker needs and local spend opportunities.	Facilitate development of local enterprise initiatives aimed at selling goods and / or services to non-resident workers e.g. through the development of a local business directory or mobile retail services delivery to Buffel Park Accommodation Village for workers ¹ .	Communities (BMA) Operations (BMA)		✓		✓
	Encourage non-resident workers to shop locally by providing bus transportation from accommodation villages to Moranbah during business hours	Bechtel		✓		
2. Participation in the Moranbah community						
Intent: To facilitate opportunities for personal interaction between non-resident workers and Moranbah residents, to promote mutual familiarity, respect for and understanding of local values and to break down community stereotypes of non-resident workers.						
Promote volunteering and participation in the local community by non-resident workers.	Encourage non-resident construction workers to meet residents in the Moranbah community (during their rest days and other opportunities) through taking part in, e.g.: <ul style="list-style-type: none"> programs organised by accommodation village Health and Lifestyle Co-ordinator (see Village Life below) 	Bechtel		✓		

¹ Buffel Village is on freehold land

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	<ul style="list-style-type: none"> local volunteering (e.g. working bees), fundraising and / or donations skill sharing opportunities 					
	Investigate the operational logistics of and identify opportunities for providing 'volunteer and sports leave' of 1 to 2 days a year, to encourage operations workers to participate in local volunteering and / or community activities.	Operations / Communities (BMA)			✓	✓
	Provided that safety management at Caval Ridge Mine and the accommodation villages is maintained, make equipment available to the community in times of need (e.g. fire fighting units, community events, Medivac services).	Bechtel Operations (BMA)		✓		✓
Manage access by non-resident workers to Moranbah on local rest days to achieve a balanced worker presence, to ensure that demands on town services and facilities remain within the capacity of the service providers, and to limit the opportunity for anti-social behaviour.	<p>Provide a diverse range of activities at the accommodation villages on rest days (including day trips to places of interest in the region) to engage non-resident construction workers. Provide bus transportation to Moranbah for specific purposes such as:</p> <ul style="list-style-type: none"> for organised events, community sports, recreation or volunteering activities for personal shopping during business hours, with a limited stay (e.g. 2 hour maximum). <p>Provide bus transportation from the accommodation villages to Moranbah at up</p>	Bechtel		✓		

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	<p>to one 52 seater bus at a time in the first instance, until the town's capacity to absorb additional visitors is ascertained (as monitored through discussion with the Moranbah BMA Community Network - Moranbah BCN).</p> <p>Maintain the existing practice of transporting workers by bus to Moranbah and accompanying them with a nominated 'responsible person'.</p> <p>Provide limited parking at the accommodation villages for use by private vehicles, and require a parking permit to be issued on a case-by-case basis.</p>					
Host joint company and community events.	BMA and Bechtel to host one company /community event per year (e.g. sports events, cultural events, Christmas celebrations, open days, mine tours) open to non-resident workers (i.e. employees and contractors).	Bechtel Operations (BMA)		✓		✓
3. Worker behaviour						
Intent: To develop a culture of behaviour amongst non-resident workers that is respectful towards local values, customs and expectations.						
Integrate local values and expected standards of worker behaviour into workplace codes of conduct, induction training and role modelling for non-resident workers.	Define local values, including expected standards of behaviour in the community, and incorporate in the induction training package (including a hard copy handout).	Bechtel BMA (Approvals and Comms) / HR (BMA)		✓	✓	✓

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	<p>Ensure the following codes of conduct apply to workers while at work, in the community and at the accommodation villages:</p> <ul style="list-style-type: none"> • Bechtel's <i>Work Rules</i> and <i>Accommodation Village Code of Behaviour</i> (applicable primarily to construction workers) • BMAs <i>Workplace Conduct Policy</i> (applicable primarily to operations workers) 	<p>Bechtel</p> <p>BMA (Operations)</p>		✓		✓
	<p>Ensure that BMAs <i>Workplace Conduct Policy</i> and Bechtel's <i>Work Rules</i> and <i>Accommodation Village Code of Behaviour</i> apply to non-resident workers in transit via BMA arranged transport to their point of origin.</p> <p><i>[See also: SIMP S5.2.1.1 Worker Conduct; and 5.2.1.2 Respect for Local Values.]</i></p>	<p>Bechtel</p> <p>Operations – HR (BMA)</p>		✓		✓
	<p>Adopt a 'buddy system', assigning one suitable, established non-resident worker for each new recruit for at least the first rostered period to provide mentoring support and role modelling on appropriate behaviours and acceptable village culture.</p>	<p>Bechtel</p> <p>HR (BMA)</p>		✓		✓
<p>Apply strict standards to the use of drugs and alcohol.</p>	<p>Apply a zero tolerance to alcohol at work.</p> <p>Adopt regular breath testing for blood alcohol and drug levels. Apply the <i>Workplace Conduct Policy</i> (BMA, applicable to operations workers), and the</p>	<p>Bechtel</p> <p>HR (BMA)</p>		✓		✓

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	<i>Work Rules</i> (Bechtel, applicable to construction workers) which prohibit the possession or use of illegal drugs and restrict the consumption of alcohol.					
Adopt and apply effective complaints mechanisms in relation to worker behaviour and communicate these to the Moranbah community.	<p>Apply the complaints reporting channels and procedures established in the <i>BMA Community Complaints and Grievance Procedure</i> (applicable to all BMA managed activities including construction and operations), including reporting back to the BCN on complaints received and responses taken.</p> <p>Review complaints recording procedures to ensure that behaviour related complaints can be disaggregated in monitoring and reporting.</p>	<p>Bechtel</p> <p>External Affairs / Communities (BMA)</p>		✓	✓	✓
	Provide information to the Moranbah community through the Moranbah BCN and local media about CRM's expected standards of behaviour, how these are promoted and upheld by BMA and how to report a complaint if inappropriate behaviours occur. [See also: S 8 – Monitoring and Reporting]	Communities (BMA)		✓		✓
<p>4. Population and service impacts</p> <p>Intent: To contribute to community facilities and services provision to meet additional demand generated by non-resident workers and to support community needs.</p>						

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
<p><u>Affordable housing</u> Promote access to affordable housing for low income households, and to support the attraction and retention of key workers (e.g. non-mine workers in health and education services, or small business operations).</p>	<p>SIMP Section 5.2.2 describes specific initiatives to address affordable housing including:</p> <ul style="list-style-type: none"> the provision of accommodation villages to accommodate all non-resident workers (to avoid placing additional demand on available local housing stock) a commitment of \$5 million towards Isaac Regional Council's Housing Trust during 2012-2015 provision of \$1 million in subsidised housing assistance to community organisations in the Bowen Basin (including childcare centres, emergency and health services, and local community support groups). <p>A Housing Impact Plan commissioned by BMA (due late 2012) will provide detailed mitigation strategies for housing impacts on non-resource workers, including a program for monitoring the effectiveness of strategies for providing affordable non-resource worker housing .</p>	<p>Bechtel and BMA</p> <p>Communities (BMA)</p>		<p>✓</p> <p>✓ \$3.5 million</p> <p>✓</p>	<p>✓</p> <p>✓</p>	<p>✓</p> <p>✓ \$1.5 million</p>
	<p>Consider offering accommodation for visiting government agency personnel in accommodation villages to raise their awareness about village standards and practices.</p>	<p>External Affairs (BMA)</p>		<p>✓</p>		<p>✓</p>
<p>Community facilities and</p>	<p>Contributions to the provision of community facilities and services to meet additional</p>	<p>Bechtel</p>		<p>✓</p>		<p>✓</p>

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
services	<p>needs generated by non-resident workers are addressed in the SIMP S5.1 and S5.2.3 – Social and Health Infrastructure, and include:</p> <ul style="list-style-type: none"> • A Community Partnership Program (CPP) supporting regional community and economic development (S5.1.2) • Health services mitigation strategies (S5.2.3.2) • Co-operation with Queensland police, ambulance and fire services (S5.2.3.3) • Traffic management and road safety (S5.2.4.2) • Emergency Management Plan (S5.2.4.3). 	Communities (BMA)				
<p>5. Village Life</p> <p>Intent: To provide an attractive, comfortable, harmonious and healthy residential environment for non-resident workers. Reduced stress within the workforce will facilitate positive behaviour within the local community.</p>						
Recruit a diversity of non-resident workers across a range of age, gender and other attributes to promote positive behaviour through better social balance.	<p>Apply BMA's <i>Workforce Diversity Strategy</i> which aims to increase access to mining related jobs for women and Aboriginal people, during operations</p> <p><i>[See also: SIMP S5.2.5.3 – Employment Diversity and S5.2.5.4 Indigenous Employment and Business]</i></p>	Bechtel HR (BMA)		✓	✓	✓
Adopt management practices to promote	Accommodate workers in the same area each visit and provide secure storage for	Accommodation Provider Village		✓	✓	✓

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
sense of belonging and harmony in accommodation villages.	personal effects. Cluster accommodation in 'quiet zones' for night shift workers.	(BMA and Bechtel)		✓	✓	✓
Promote a range of healthy lifestyle activities for non-residential workers.	Engage Health and Lifestyle Co-ordinators to facilitate a diverse program of leisure, recreation and social activities to encourage worker participation on work days and rest days. Community Liaison officers (in association with BMA Communities) to liaise with the local agencies to identify opportunities for joint participation by non-resident workers and residents in sport and other community activities: <i>[See also: Participation in the Moranbah Community (above); Managing worker access to Moranbah; and SIMP S5.2.3. Health service mitigation]</i>	Accommodation Village Provider (Bechtel) Communities (BMA)		✓		✓

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
Produce regular updates for non-resident workers at Caval Ridge Mine	Provide regular updates for workers at each accommodation village including such information as: <ul style="list-style-type: none"> - upcoming activities and events in the village and in the community - promoting healthy lifestyle and health awareness - providing information about personal and other support resources available - stories by workers about FIFO life and community interactions 	Bechtel BMA (HR and Internal Comms)		✓		✓
6. Worker and Family Support Intent: To support non-resident workers and families to adapt to a non-resident lifestyle. Reduced stress within the workforce will facilitate positive behaviour within the local community.						

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
Provide services and other resources to support non-resident workers and their families. [See also: SIMP S5.2.3.2 Health service mitigation]	Provide BMA's <i>Employee Assistance Program</i> (and Bechtel's equivalent) offering telephone counselling for non-resident workers and their immediate families, and regular on site counselling. Team building and supervisor interpersonal skills training (to promote a supportive workplace) Facilitate access for non-resident workers to the following services as needed: <ul style="list-style-type: none"> • Health programs including drug and alcohol awareness programs and mental health awareness; • Relationship skills training, with a focus on maintaining relationships over long distances (e.g. short courses, resource kit and/or on-line information). 	Bechtel HR (BMA)		✓		✓
Develop initiatives to support families 'at home'	Develop a strategy to monitor and respond to the likely and emergent needs of the CRM non-resident workforce families [See also: SIMP S5.2.3.2 Health service mitigation]	Operations (BMA)			✓	

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	Develop and provide an information pack for non-resident workers' partners including information about: <ul style="list-style-type: none"> • available resources (e.g. on-line social networks) • BHP Billiton's EAP counselling services • what to expect of a remote workforce lifestyle • support (e.g. through Relationships Australia) • company practices for notifying families in the case of an emergency (and vice versa) • information about the location, community and mine that the family member will be working in. 	HR (BMA)				✓
	Investigate provision at BPAV of: <ul style="list-style-type: none"> • Couples accommodation; • co-ordinated rosters to support family friendly practices; • occasional accommodation village and mine site open days • special occasion celebrations for visiting families (and the community). 	HR (BMA)				✓ ✓

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	Support convenient communication between non-resident workers and their families through access to internet (e.g. for access to Skype and social networking software).	Project (BMA)		✓		✓
7. Social Inclusion						
Intent: To promote a culture of inclusion, courtesy and respect within accommodation villages.						
Apply Equal Opportunity practices consistent with BMA's <i>Workplace Conduct Policy</i> to the village to ensure that all workers are treated fairly and equitably, and can live free from discrimination, harassment, victimisation or any other inappropriate conduct.	<u>Women:</u> Foster support networks for women in mining through the Women in Mining and Resources Queensland network, BMA's <i>Diversity Digest</i> , and mentoring programs.	Bechtel HR (BMA)		✓	✓	✓
	<u>Indigenous people:</u> Develop material promoting an understanding of Aboriginality, local cultural awareness and cultural heritage training (latter supported by local Traditional Owners), and include in induction training	BMA – Indigenous Relations and HR		✓		✓
	Provide transitional support where needed to assist Aboriginal workers to integrate (e.g. through mentoring or pastoral care). <i>[See also: Worker Behaviour (above); Workforce Diversity Strategy, codes of conduct and buddy system; and SIMP S5.2.5. Indigenous Employment and Business, and BMAs 'In Partnership' Plan]</i>	Bechtel HR (BMA)		✓		✓
	<u>Cross-cultural awareness and support</u>					

Strategy	Actions	Responsibility	Timing			
			6 months Prior	Construction Phase	6 months Prior	Operations Phase
	Monitor the need for cross-cultural awareness within accommodation villages and develop a cross-cultural support program as needed (e.g. induction training, language support, cultural celebrations and events)	Bechtel HR (BMA)		✓		✓

4 Monitoring Program

Table 2 outlines the monitoring program for the Cohesion Strategy, which complements the CR SIMP monitoring program (outlined in Section 8 Monitoring of the SIMP).

The table identifies the additional content required of the Caval Ridge SIMP monitoring program to capture all relevant indicators for the Cohesion Strategy.

The schedule for monitoring will be followed during the construction period, and revised if necessary for the operational period.

Table 2. Content for Inclusion in the CRM SIMP Monitoring Program

Key Performance Indicators	Cohesion Factor	Monitoring Data	Monitoring Activity	Responsibility	Timing	
					Construction	Operations
Positive economic contribution to Moranbah businesses	Local Economic Development	As per CRM SIMP KPI Framework. Add: <ul style="list-style-type: none"> Worker visits to Moranbah for shopping Local retail services available to workers 	<ul style="list-style-type: none"> Through communication with local businesses, identify workers use of businesses and where possible the value of their trade 	Accommodation Village Provider (Bechtel) BMA	Half-yearly	Half-yearly
<i>Community and workforce cohesion: Community satisfaction with CRM workers' relationship to local community</i>	Participation in Community Worker Behaviour	As per CRM SIMP KPI Framework, add: <ul style="list-style-type: none"> Worker participation in community-based activities (operations) Number of complaints and resolution rate Community perceptions of safety, amenity, identity, worker behaviour 	<ul style="list-style-type: none"> Record worker participation in community events, Matched Giving and volunteering BMA Community Complaints and Grievance Procedure reporting BCN feedback Community Perception Survey 	BMA (Communities) Accommodation Village Provider for participation in community events	Quarterly	Half-yearly
					Quarterly	Half-yearly
					Quarterly	Half-yearly
						Biennial

Key Performance Indicators	Cohesion Factor	Monitoring Data	Monitoring Activity	Responsibility	Timing	
					Construction	Operations
<p><i>Employment opportunity and diversity: Increased participation of women and Indigenous people in the workforce</i></p> <p>Add: Worker satisfaction with village life</p>	Village Life and Social Inclusion	<p>Add:</p> <ul style="list-style-type: none"> Level of village harmony and worker satisfaction Gender, age and Aboriginality of workforce 	<ul style="list-style-type: none"> Workforce and management surveys Complaints and grievance records Workforce demographics 	BMA / Bechtel	Annual Quarterly	Annual Half-yearly Annually
NB: Data for this factor is for internal monitoring purposes and will not be reported.	Worker and Family Support	<ul style="list-style-type: none"> Number of EAP (or Bechtel equivalent) services used 	<ul style="list-style-type: none"> EAP records (anonymous reporting) by non-resident workers and their families 	BMA / Bechtel	Quarterly	Quarterly

Appendix 1: Supporting Information

Tables 3 and 4 provide a summary of literature findings on cohesion issues between host communities and non-resident workers; and relevant community issues identified in consultation with stakeholders in Moranbah during the development of the CRM SIMP.

Table 3: Summary of Literature Findings on Cohesion Issues between Host Communities and Non-Resident Workers

Potential Impacts on Communities	Potential Impacts on Non-Resident Workers
<p>Theme: Local Economic Development</p> <ul style="list-style-type: none"> Loss of business development opportunity Leakage of income back to non-resident workers' home communities reducing opportunities, primarily for small businesses Opportunities for access to jobs for locals, including Aboriginal people 	<p>Theme: Village Life</p> <ul style="list-style-type: none"> Quality of living conditions, including physical environment, management practices, housing, lifestyle, safety and sense of community
<p>Theme: Connection with Community</p> <ul style="list-style-type: none"> Long working hours (12 hour roster) limiting opportunities for non-resident workers to participate in community sports, community events, community groups and volunteering Population turnover and presence of strangers 	<p>Theme: Worker and Family Support</p> <ul style="list-style-type: none"> Emotional state (e.g. loneliness and isolation, relationship dysfunction) and access to appropriate psychosocial resources Communication with family and friends Families reluctant to visit because of expense of accommodation
<p>Theme: Population and Service Impacts</p> <ul style="list-style-type: none"> Lost opportunity to turn around regional population decline and secure demand for services Inaccurate reflection of population data in census, affecting funding for health and other services Increased demand on community infrastructure, services and facilities (e.g. roads, police, health services) Lost opportunity to attract partners with the potential to contribute skills (e.g. education and health workers), volunteering and community leadership Key worker (e.g. teachers, medical, government) attraction and retention difficulties associated with high housing costs 	<p>Theme: Connection with Community</p> <ul style="list-style-type: none"> Some non-resident workers wanting some connection with the community they work in Lack of community understanding about life as a non-resident worker (e.g. community activities and programs aligned with traditional 5 day working week) Knowledge of what's available in the community (e.g. regional attractions, cultural wealth, services)
<p>Theme: Worker Behaviour</p> <ul style="list-style-type: none"> Anti-social behaviour associated with dominance of single men; drug and alcohol abuse; concern about safety for and influence on young people 	<p>Theme: Social Inclusion</p> <ul style="list-style-type: none"> Cross-cultural awareness and support (Aboriginal and overseas workers) Gender and disability awareness and support

Sources: Beach et al (2003); Consultancy North (Undated); Tasman A (2009)

Table 4: Summary of Community Issues - Social Cohesion and Non-resident Workforce

<i>Source: CRM Draft SIMP, S3.2.5 Community Values – Community Perceptions Surveys</i>
<p>Community values:</p> <ul style="list-style-type: none"> • Family oriented community – good for raising children • Strong community spirit • Casual relaxed lifestyle <p>Key issues affecting values:</p> <ul style="list-style-type: none"> • High housing costs • Increased traffic • Sustaining businesses (high labour costs and labour shortages) • Decline in government services • Large numbers of non-resident workers not understanding local values
<p>Non-residents workers</p> <ul style="list-style-type: none"> • Remote workers should be accommodated out of town • Balance worker numbers so towns' people are not outnumbered
<p>Community Organisations</p> <ul style="list-style-type: none"> • Impact on Moranbah District Services to be monitored (see CRM SIMP Section 8).
<p>Local Business</p> <ul style="list-style-type: none"> • Remote workforces may contribute less to business turnover
<ul style="list-style-type: none"> • Indigenous employment – interest in opportunities

Reference List

Beach R, Brereton D, and Cliff D (2003). *Workforce Turnover in FIFO Mining Operations in Australia: An Exploratory Study*. A research report by CSRM and MISHC. Accessed 26/7/11 at <http://www.csr.com.au/Publications/ResearchReportsandPapers.aspx>

BHP Billiton (2009). *Olympic Dam Expansion Draft Environmental Impact Statement 2009, Chapter 19 Social Environment*. Accessed 29/7/11 at <http://www.bhpbilliton.com/home/aboutus/regulatory/Documents/odxEisChapter19SocialEnvironment.pdf>

BHP Billiton (2011) *Olympic Dam Supplementary EIS*. Accessed 29/7/11 at <http://www.bhpbilliton.com/home/aboutus/regulatory/Documents/Olympic%20Dam%20Supplementary%20EIS/Documents/Chapter%2021%20Social%20Environment.pdf>

BMA BHP Billiton Mitsubishi Alliance (Undated). *Communities Strategy*.

Briney, A, Clarkson, H, Madden P, Porritt, J and Tuxworth, B (2010). *Stepping up: a framework for public sector leadership on sustainability*, Forum for the Future

Carrington K, Pereira M (2011). *Social Impact of Mining Survey: Aggregate Results Queensland Communities*, School of Justice, Queensland University of Technology. Accessed 30/8/11 at <http://eprints.qut.edu.au/42056/1/42056.pdf>

Chamber of Minerals and Energy (2005) *A Discussion of the Triple Bottom Line Impact of Fly In / Fly Out Operations in Western Australia's Resources Sector*, WA. Accessed 30/8/11 at http://www.peopleforthe future.com.au/files/files/20_FIFO_Report.pdf

Consultancy North (Undated). *Best of Both Worlds? Fly In – Fly Out Research Project*, Final Report, A Research Report funded by the Lotteries Commission, published by Pilbara Regional Council. Accessed 26/7/11 at http://www.prc.wa.gov.au/main/index.php?option=com_docman&task=doc_view&gid=15&tmpl=component&format=raw&Itemid=61

CSRM (2006) *Community Engagement and Development. Leading Practice Sustainable Development Program For The Mining Industry*. Accessed 26/7/11 at <http://www.csr.com.au/Publications/GuidesHandbooks.aspx>

CSRM (2007). *Assessing and Managing The Socio-Economic Impacts Of Projects. A review of current mining industry practice*. Briefing Paper prepared for Queensland Government, Department of State Development. Accessed 26/7/11 at <http://www.csr.com.au/Publications/ResearchReportsandPapers.aspx>

CSRM (Undated). *Indigenous Employment in the Australian Minerals Industry*. Sponsored by Rio Tinto and conducted under the auspices of the Minerals Council of Australia's Social Policy Taskforce. Accessed 27/7/11 at http://www.csr.com.au/docs/CSRM%20Report_FINAL%20TO%20PRINT_singles.pdf

CSRM, *Indigenous Employment in the Australian Minerals Industry*. Undated. Sponsored by Rio Tinto and conducted under the auspices of the Minerals Council of Australia's Social Policy Taskforce.

Cuers S, Hewston J, Eds (2006). *Strong Communities Handbook*. Publisher: Queensland University of Technology, Brisbane.

Esteves AM, Brereton D, Samson D, Barclay MA (2010). *Good Practice Guide to SMEs Procurement, Practice Guide for the Australian Mining, Oil And Gas Sectors*, CSRM, University of Qld, Accessed 26 7 11 at <http://www.csrq.edu.au/docs/4361%20CSRQ%20SME%20Report%20Email%20V2.pdf>

Franks, D (2009). *Avoiding Mine-Community Conflict: From Dialogue To Shared Futures*. The Centre for Social Responsibility in Mining, University of Queensland in J Wiertz & CJ Moran, Proceedings of the 'First International Seminar on Environmental Issues in the Mining Industry', (Enviromine), Santiago, Chile. Accessed 26/7/11 at http://www.csrq.edu.au/docs/Franks_Avoiding%20Conflict_2009.pdf

Friedkin N E (2004). *Social Cohesion*. Annual Review of Sociology, Vol. 30, 2004, p 409-525

Healy K, Hampshire A, Ayres L, Ellwood S, Mengede N (2007) *Creating Better Communities: A Study of Social Capital Creation in Four Communities*. Benevolent Society, NSW

International Finance Corporation (2009). *Workers' accommodation: processes and standards. A guidance note by IFC and the EBRD*. World Bank and European Bank for Construction and Redevelopment

Jenks, M. and Jones, C. A. (2009). *Dimensions of the Sustainable City*. Netherlands, Springer

Kemp D (2009). *Mining and community development: problems and possibilities of local-level practice*. Community Dev Journal 45(2): 198-218 Accessed 26/7/11 at <http://cdj.oxfordjournals.org/content/45/2/198.full.pdf+html?sid=25f61ac0-68c6-439b-97b5-af430a6ee6de>

Petkova-Timmer V, Lockie S, Rolfe J (2007) *The Development of Moranbah: Stakeholder Analysis Research Report No. 3, The Impacts of the Coal Mining Expansion on Moranbah and Associate Community*, prepared by the Centre for Environmental Management, Central Queensland University.

REDC (Undated). *Mackay Whitsunday Isaac Liveability Audit Report*, prepared in partnership by Queensland Government, Rio Tinto Coal, Mackay Regional Council, Whitsunday Regional Council and Isaac Regional Council.

Rio Tinto (2006). *The Way We Buy, Our statement of procurement practice*. Accessed 26 7 11 at http://www.riotinto.com/library/3608_policies.asp

Rio Tinto (2008). *Social Investment. Working with Australian Communities, 2008*. Accessed 26/7/11 at http://www.riotinto.com/library/3608_corporate_publications.asp

Rio Tinto(2009). *Why Gender Matters. A resource guide for integrating gender considerations into communities work at Rio Tinto*, prepared by Centre for Social Responsibility in Mining, University of Qld. Accessed 26 7 11 at http://www.riotinto.com/library/3608_corporate_publications.asp

Sibbel AM (2010). *Living FIFO: The Experiences and Psychosocial Wellbeing of Western Australian Fly-in/Fly-out Employees and Partners*. Thesis for Doctor of Philosophy, Edith Cowan University

Sibbel, A.M. (2010) *Living FIFO: The Experiences and Psychosocial Wellbeing of Western Australian Fly-in/fly-out Employees and Partners* - PhD Thesis Edith Cowan University

Syme Marmion & Co (2010). *Extractive Industries & Sustainable Regional Development Final Report*, prepared for Western Australian Regional Development Council. Accessed 26/7/11 at <http://www.rdl.wa.gov.au/aboutus/partners/Pages/Regional-Development-Council.aspx>

Tasman A (2009). *Fly-in Fly-out and regional impact assessments. A regional development impact assessment framework for fly-in fly-out projects*. Final report prepared for the Regional Development Council, Accessed 28 7 11 at <http://www.rdl.wa.gov.au/aboutus/partners/Pages/Regional-Development-Council.aspx>

Taylor JC & Simmonds JG (Monash University) (2009) Family Stress and Coping in the Fly-in Fly-out Workforce, *The Australian Community Psychologist* Volume 21 No 2 December 2009 © The Australian Psychological Society

Urban Land Development Authority (2011). *Non-Resident Worker Accommodation Guideline for Locating and Designing High Quality Accommodation Facilities*. ULDA Guideline No. 03. Accessed 30/8/11 at http://www.ulda.qld.gov.au/dbase/upl/Nonresident_worker_guideline_and_Landscape_guidelines_Part1.pdf

World Bank Group (2003) *Social Capital and Collective Action*. Social capital and development. The World Bank Group, Washington D.C.



Appendix D Indigenous Engagement Strategy



BHP Billiton Mitsubishi Alliance

In Partnership

Indigenous Relations Plan 2011–2016



BMA aims to build sustainable relationships with Indigenous people through education, training and employment, in social, cultural and economic partnership.

BHP Billiton Mitsubishi Alliance (BMA) is Central Queensland's largest employer with over 10,000 employees and contractors. Indigenous participation in our workforce, our suppliers' workforce and the community is an important element of our Workforce Diversity Strategy.

BMA's Indigenous Relations Plan targets six focus areas identified through consultation with key stakeholders, including Traditional Owner representatives across the Bowen Basin.

The plan will be further developed in consultation with stakeholders and key strategies will be introduced over the next five years.

Strategies will be based on the needs and priorities of the Indigenous people of Central Queensland, the local community and BMA.

Our commitment

BMA is committed to providing social, cultural, and economic benefits for Indigenous people that will continue after mining operations have ceased.

Our principles

- Respect the Cultural Heritage and Human Rights of Indigenous people
- Support Indigenous people, and improve their economic status through education, employment, health and wellbeing
- Engage openly and transparently with Indigenous people to maintain effective partnerships



HERITAGE AND NATIVE TITLE

We acknowledge the importance of managing Indigenous Cultural Heritage and addressing Native Title issues.

We will continue to work with Traditional Owners and Native Title groups to ensure that Native Title and Cultural Heritage issues are properly assessed and managed with sensitivity, and in accordance with legislative and regulatory requirements.

BMA contributing to Communities

BMA is an active community partner, with a proud history in Central Queensland.

BMA's focus is on building partnerships, promoting respect and providing opportunities to the Indigenous people of Central Queensland through six focus areas:

- education
- workforce diversity – pathways to employment
- business development
- knowledge sharing and cultural exchange
- wellbeing
- engagement

BMA's Indigenous Relations Plan, aligns BMA's strategy with the BHP Billiton Charter on the social and economic development of Indigenous people.

FOCUS AREAS

1. Education

Improve lifelong learning and education participation rates for young Indigenous people in Central Queensland.

Priorities:

- Work with schools in Central Queensland in relation to literacy, numeracy and educational support programs for young Indigenous people
- Launch a Community Scholarship Program incorporating Indigenous scholarships

2. Workforce Diversity – pathways to employment

Create opportunities for Indigenous people to acquire skills and experience that are transferable to the broader workforce.

Priorities:

- Work with the Indigenous people of Central Queensland to identify their needs and aspirations in relation to future employment
- Develop a Pathways to Employment Program for skilled and unskilled work entry

3. Business Development

Enhance commercial opportunities.

Priorities:

- Undertake an awareness program with Indigenous stakeholders to outline BMA's process for tender-based contracts and becoming an approved vendor
- Develop an Indigenous business capability register
- Work with the Indigenous people of Central Queensland to identify opportunities to supply BMA operations directly, or in collaboration, with other business and industry

4. Knowledge sharing and cultural exchange

Support cultural understanding and exchange opportunities.

Priorities:

- Continue to build strong relationships with the Indigenous people of Central Queensland
- Improve cultural awareness and understanding



THE PATHWAYS TO EMPLOYMENT PROGRAM WILL FOCUS ON:

- improving recruitment policies and practices to better attract and retain Indigenous employees within BMA
- identifying appropriate training programs in consultation with Indigenous people
- introducing a workforce support and mentoring program



- Promote the Indigenous Cultural Heritage of the region through the Community Partnerships Program
- Participate in culturally significant events

5. Wellbeing

Improve health and wellbeing of Indigenous communities in Central Queensland.

Priorities:

- Continue to support initiatives to improve the health and wellbeing of Indigenous people in Central Queensland through the Community Partnerships Program

6. Engagement

Engage openly and transparently.

Priorities:

- Establish an Indigenous Advisory Committee to provide advice on the implementation of this Plan
- Continue to engage with Traditional Owner and Native Title groups in relation to Native Title and Cultural Heritage

Photographs → **Page 1:** Supporting NAIDOC week celebrations in Blackwater, Ghungalu Gubba dancers. **Page 2:** Knowledge Sharing – Goonyella Riverside Mine. **Page 3:** Field work on site. **Page 4:** Indigenous paintings, South Walker Creek. Blackwater youth workshops.

GOALS: FY11–12

- Develop an Educational Support Program with an initial focus on schools in Blackwater
- Pilot an Indigenous Training and Employment Program
- Trial a Vendor Awareness Program for Indigenous business
- Implement a Cultural Awareness Program across BMA operations
- Establish the Indigenous Advisory Committee



In implementing this plan, BMA will comply with applicable laws and internal BMA policies and procedures.

BMA (BHP Billiton Mitsubishi Alliance)
GPO Box 1389 Brisbane QLD 4001



Appendix E Accommodation Village Management Plan



Buffel Park Accommodation Village Management Plan

December 2012



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1 Introduction

BMA's Buffel Park Accommodation Village (BPAV) will house the Caval Ridge Mine (CRM) construction and operations workforces. Bechtel, BMA's Engineering Procurement and Construction Management (EPCM) contractor for CRM, commenced construction of BPAV in March 2012. During CRM construction, Bechtel will manage BPAV, through its specialist accommodation village management contractor, Cater Care Services (Cater Care).

This Buffel Park Accommodation Village Management Plan (AVMP) details the management plan strategies for BPAV during CRM's construction. In accordance with the Queensland Government's *Major Resource Projects Housing Policy* (MRPHP) August 2011, it details:

- the size, design and location of villages, and duration for which villages will be required;
- relativity of the size of the village to the size of the nearest town, and social impacts of the village;
- proximity of villages to mining sites and assessment of likely safety issues for workers travelling to and from the site;
- a management plan for the village, including strategies for managing 'neighbour' interactions, gender and cultural issues in the village, and alcohol and drug use;
- strategy for provision of recreation, infrastructure and social services; and
- decommissioning plans for the proposed village.


The Accommodation Village has undergone a detailed design and development approval process, including site master planning; visual, traffic and ecological assessment; and integrated infrastructure assessment and delivery. Approval for the development of BPAV was provided by the Queensland Government on 2 September 2011¹. BMA's development application for Buffel Park included additional information which addresses the MRPHP, including how the proposed development satisfies relevant planning standards, engagement with stakeholders, and comprehensive detail on design and infrastructure provision.

The AVMP has considered the findings of the CRM Social Impact Assessment (SIA), which detailed the potential social impacts and mitigations associated with the project, as part of the project's environmental impact statement (EIS).

The AVMP is an appendix to the CRM Social Impact Management Plan (SIMP). The CRM SIMP was prepared as a condition of project's approval, and was developed following extensive consultation with local and regional stakeholders. The SIMP details how the project will work with stakeholders to mitigate potential social impacts and maximise social benefits during the construction and how strategies will be implemented and monitored.

A Workforce and Community Cohesion Strategy has also been prepared for CRM. This strategy details BMA's approach to ensuring workers and the community share mutual respect for local social values. Principles and actions detailed in the Cohesion strategy complement this AVMP, with respect

¹ Queensland Government (2011) Co-ordinator-General's Report on Application for Project Change: Accommodation Village location and capacity 17 February 2011



to increased local economic and other community benefits, building respectful relationships between non-resident workers and local residents, and promoting a harmonious village lifestyle for workers.

2 Accommodation Village Details

2.1 Location

'Buffel Park' (Lot 12 on SP151699) is a property of 10,074 hectares, owned by BHP Coal Pty Ltd and the other entities which comprise the Central Queensland Coal Associates (CQCA) Joint Venture.

Buffel Park is located adjacent to the Caval Ridge Mining Lease Area (ML70403). The Buffel Park Accommodation Village (BPAV) is located on the property, next to the Peak Downs Highway, approximately 17 kilometres south of Moranbah. Under the Belyando Planning Scheme, Buffel Park is within the Rural Zone.

2.2 Design

The Buffel Park Accommodation Village will utilise approximately 140 hectares of the Buffel Park property. The philosophy behind the design development for BPAV has been to locate the accommodation village within the existing bushland setting to the greatest degree possible.

BPAV includes separate dedicated components for the construction and operational workforces. A high standard of accommodation will be provided. The accommodation units are prefabricated structures and comprise "outward facing" ensuited bedrooms arranged in clusters, with a shared common services area that accommodates air-conditioning units and hot water services.

The overall plan of development for BPAV includes:

- the access and service road extending from the Peak Downs Highway into the site;
- the common infrastructure and services area located to the north of the service road;
- the construction component, including its core facilities as the western portion of the development footprint; and
- the operations component, including its core facilities as the eastern portion of the development footprint.

Bushland and open space around the periphery of the site will provide a landscape buffer to minimise the visual impacts of the development and provide opportunities for active and passive recreation. An extensive pedestrian network within the village will also be provided.



2.3 Infrastructure

Social and health infrastructure is described in Section 3.

Physical infrastructure provided within the village includes waste management and recycling facilities, bus parking and transit facility, water and energy infrastructure, a sewerage treatment plant, as well as roads and paths.

Where possible the design has been developed to share services and facilities (such as water and sewerage treatment) between the two components, in order to minimise the environmental effects of the village. Given the location of BPAV, integration of village infrastructure (e.g. power, water, sewerage and communal facilities) with town infrastructure was not possible.

2.4 Capacity and duration

As noted, BPAV will include dedicated sections for the Construction and Operational workforces. Rooms will be made available for all non-local BMA, EPCM contractor and contracted workers.

The construction component of BPAV will include 1,380 rooms for construction workers, with existing approvals authorising up to 2,000 rooms as required. Accommodation will become available from the third quarter of 2012 for the construction workforce, village management and support staff.

Existing approvals require that post the completion of CRM construction (expected in late 2013), the construction component of BPAV will be downsized. Some accommodation units and facilities will be maintained within BPAV to accommodate maintenance crews and operations contractors. The precise number of rooms to be maintained will be determined based on workforce requirements at the time.

Existing approvals authorise the operation component of BPAV to up to 445 rooms. These rooms will be maintained for the longer term, to reduce pressure on accommodation demands in Moranbah.


2.5 Decommissioning the BPAV construction component

Existing approvals require the decommissioning of part of the construction component of BPAV post construction. Should decommissioning occur it is likely to include:

- advice to suppliers and contractors regarding downscaled requirements;
- consultation with the Isaac Regional Council, Queensland Police and Department of Transport and Main Roads regarding potential impacts of facility removal on traffic conditions;
- consideration of future use of buildings, equipment or other components, either on site or in another location;
- information to the community and stakeholders ahead of traffic movements; and
- rehabilitation of the site in accordance with the development approval conditions.

2.6 BMAAV

BMA is also constructing the BMA Accommodation Village (BMAAV), located approximately five kilometres south of Moranbah off the Moranbah Access Road. BMAAV will accommodate staff,



contractors and visitors to BMA projects, thereby minimising demands on housing and short term accommodation in Moranbah.

Construction of BMAAV began in late 2011, with 800 rooms operational by June 2012. A total capacity of 1,200 rooms will be provided. Delays associated with the Development Applications for the Buffel Park Accommodation Village resulted in a need to accommodate up to 800 CRM construction workers at BMAAV. Accommodation has also been made available at BMAAV for non-local contractors engaged in construction of BPAV.

The location of the two Accommodation Villages is shown in Figure 1.



Figure 1: Figure 1: Buffel Park and BMA Accommodation Village Locations



3 Village Management

The purpose of BPAV's management strategies is to implement practices that support:

- a safe and inclusive living environment for residents;
- respect for local community values; and
- mutual respect between non-resident workers and the local community.

This section summarises key components of the management arrangements, strategies and services employed to address these goals. Further detail is provided in the CRM SIMP, including in:

- Section 2.3: Accommodation Villages;
- Section 5.2: Mitigating CRM's Impacts;
- Section 6: Stakeholder Engagement; and
- Section 8: Monitoring and Review.

3.1 Village management specialist

During construction, BMAAV and BPAV will be managed by Bechtel, through its specialist accommodation village management contractor, Cater Care Services (Cater Care). Cater Care is a leading national provider of catering and related services to mining and remote operations and is a private wholly owned Australian company.

The Cater Care Project Manager is responsible for the implementation of the operational procedures and mobilisation of site services, and will be the senior on-site person, responsible for the delivery of contract services.

BMA may assume management of the village following construction, or employ a contractor to manage it.

3.2 Facilities and services

BPAV will provide a high quality, safe and healthy social environment which is attractive to workers. The following facilities will be provided:

- administration office;
- ensuite accommodation rooms;
- kitchen diner facilities;
- wet mess;
- cinema/tv room;
- recreation room;
- first aid room;
- residents' laundry;
- central ablutions facility; and
- fully equipped gymnasium.

Key facilities and services are described below.



3.2.1 Administration Office

The Administration Office services are the first point of contact for residents, and forms the nucleus of communication throughout the Village. Key elements of service delivery in the administration's office include:

- providing check-in and checkout procedures, and general information on building matters and location staff;
- providing Conditions of Occupancy booklets, issue welcome packs and delivering new visitor/residents inductions;
- maintaining a daily movements and occupancy register, sighting appropriate ID Issue village clearances and ensuring that any unauthorised personnel are identified; and
- managing entertainment systems and internet access.

The Village Administration Office will also coordinate the residents' ancillary services, such as post and mail receipt, and issue keys to the site facilities such as the Gymnasium.

3.2.2 Social, health and recreation infrastructure

BMA is committed to maintaining the health and well-being of its workers and contractors' workers. Social, health and recreation facilities and service at BPAV will include:

- access to a health clinic, paramedic and emergency services staff, trauma kits, and defibrillators;
- gyms, outdoor recreation space, sporting field and sports equipment;
- social meeting places and barbecue facilities;
- employee assistance program for counselling and emotional health issues (both workers and their families); and
- regular health promotion and nutrition programs delivered through the Villages' dining facilities.

3.2.3 Healthy lifestyle programs


Cater Care will provide employees whose responsibility is to ensure workers have access to recreation options, access to essentials from town, and health and well-being programs. This will include a Healthy Lifestyle Coordinator at BPAV, who will be responsible for:

- developing and implementing a Healthy Lifestyle (HLS) Management Plan;
- development and encouragement of access to recreational and social activities;
- management of sporting activities and site based gymnasium facilities;
- issue and return of Project supplied sports equipment; and
- facilitating positive nutritional awareness.

3.2.4 Alcohol and drug management

BMA encourages the responsible consumption of alcohol, and prohibits the possession and use of illegal drugs in the Accommodation Village.

The Village Management contractor will operate the wet mess in accordance with the Liquor Licensing Act and Tobacco Products Control Act 2006. Responsible service of alcohol will be



practiced in the licensed camp facility. The licensee will also participate in local Liquor Accord meetings with other proprietors in the Moranbah area.

The Village Management contractor will also encourage resident participation in site based sporting activities at the Village. This encouragement will not at any time include the encouragement to consume alcohol.

BPAV includes facilities for both self and supervised testing for drugs and alcohol for fitness for work, as workers will not be permitted to access the work site when adversely affected.

If a worker is tested with a blood alcohol level above zero, they must return to their accommodation for the shift and be fit for work (i.e. blood alcohol level of 0.0) when they return for the next shift.

If a worker exhibits anti-social behaviour as a result of alcohol, or returns a positive test for illegal drugs, they are removed from the work site and from the accommodation village, and their employer is responsible for returning them safely to their usual place of residence (i.e. home).

3.3 Social impacts and neighbour interactions

BMA has located the Accommodation Village for CRM outside Moranbah to minimise impacts on the town and its community. Social impacts relating to accommodation arrangements are detailed, along with mitigation strategies, in the CRM SIA and SIMP.

As BPAV is located 15 kilometres from Moranbah, 'neighbour' interactions are restricted to:

- demands on police and emergency services;
- potential impacts on adjacent land holders;
- interactions in the township of Moranbah;
- local businesses' supply to the camp; and
- traffic on roads servicing Moranbah.

Relevant mitigation strategies are summarised below.


3.3.1 Local services

As detailed in the CRM SIMP (Section 2), the project intends to ensure that remote workers access social, recreational and health services on site. Therefore, demands to local infrastructure are expected to be minimal.

BMA has consulted widely with local services including Queensland Health and the Moranbah Hospital, the Queensland Fire and Rescue Services, Queensland Police Service and Queensland Ambulance Services at local and regional level. Consultation assisted to develop strategies to mitigate CRM impacts on emergency services and the Police, and maximise alignment and co-operation on community safety issues.

The CRM SIMP details a number of strategies developed in consultation with local services to mitigate workers' impacts on the hospital, medical services, police and emergency services in Moranbah and the region. These are detailed in Sections 5.2.3 and 5.2.4 of the SIMP.

BMA and Bechtel are establishing co-operative relationships with local stakeholders, and working closely together to ensure an integrated approach. Actions undertaken in this regard include:

- 
- relationships established between BMA, Bechtel and local Police officers;
 - development of induction materials by both BMA and Bechtel, addressing SIMP requirements with regard to conduct, health and local values;
 - development of workforce conduct and accommodation village rules for construction;
 - articulation of requirements for all non-local workers to stay in the accommodation village to major contractors, and provision of sufficient rooms for this to occur; and
 - participation by BMA and Bechtel managers in the monthly Moranbah BCN to ensure issues are anticipated and addressed.

3.3.2 Adjacent landholders

Neighbouring properties to the south and west are used for grazing. As part of the project's stakeholder engagement plan for construction, BMA is in regular contact with adjacent landholders to ensure potential impacts (such as dust or noise) are avoided or resolved quickly.

Any potential impacts from BPAV will be managed in the same manner, and will be based on respectful relationships with neighbouring land owners.

BMA's complaints management system (detailed in Section 6 of the CRM SIMP) is also available to land holders, to address any complaints.

3.3.3 Interactions in Moranbah

Workers staying at BPAV may visit Moranbah to access goods and services. A bus service will be provided to facilitate access to town for access to local shops and services such as banking.

BMA has developed a Code of Conduct and a Community and Workforce Cohesion Strategy (as discussed in the introduction to this Plan) to mitigate impacts of the increased number of non-resident workers in the area. These aim to:

- cultivate an awareness of and respect by workers for local values and expected standards of behaviour; and
- promote an environment conducive to worker harmony and positive relations.


3.3.4 Local employment and business opportunity

Cater Care may give special consideration, in regard to employment opportunities, to local communities and Indigenous people to ensure that these groups have equal access to employment within BPAV, and to ensure a cost-effective utilisation of locally available resources.

Cater Care has a long term and beneficial relationship with a number of suppliers throughout Queensland, including many in the Mackay region. Mackay owned and operated businesses including Frescos Meats and Mackay Reef will be used in the provision of this contract to supply all meat and poultry, and most seafood. Cater Care also intends to use the Emerald Laundry for its laundry needs.

3.3.5 Traffic

During construction, the remote workforce will fly to Moranbah or Mackay airports from their points of origin, and be bussed to BPAV and the mine site. Workers will also be bussed between the village and the worksite to minimise traffic volumes and maximise travel safety.



Buffel Park adjoins the CRM mining lease, so trips to work will be short (in the order of a few kilometres). A small number of workers are expected to use light vehicles between BPAV and the mine site.

Organised commuting arrangements and discouragement of the use of private vehicles will minimise traffic impacts on the Peak Downs Highway and other busy local connectors.

3.4 Safety and security management

Consistent security is crucial at BPAV to ensure a safe living environment. Security officers will be employed on a 24 hour basis to ensure the safety and security of BPAV and the workforce. Access to the site for all residents and employees will only be via the Project designated access gates in approved vehicles. All vehicles and bags may be subject to a security search.

All necessary emergency procedures will be documented in various plans. These include:

- Emergency Response Management Plan;
- Emergency Evacuation Procedures and regular emergency evacuation drills; and
- Cyclone Response Management Plan.

Parking space for emergency service vehicles will be provided immediately in front of the First Aid Room.

All BPAV staff will be trained to fulfil the necessary requirements of the plans and procedures. They will also receive the following training:


- senior first aid;
- basic fire fighting, fire extinguisher training and fire warden training;
- evacuation procedures; and
- snake handling.

3.5 Resident Conduct

Expectations of behaviour in the village and in town will be made explicit in on-boarding (orientation during the first weeks of work) and induction programs for CRM, as detailed in the CRM SIMP and Workforce and Community Cohesion Strategy.

Each employee employed by CRM is accountable for:

- complying with Project Environmental, Safety and Health regulations, procedures and practices;
- taking responsibility for their own personal safety and that of their team members;
- ensuring they are fit for work;
- complying with the applicable cultural and heritage requirements for the Project and the community; and
- behaving in a manner that is appropriate, respectful and mindful of the potential impact and consequences of anti-social or unreasonable behaviour.



Compliance with Bechtel's 'Work Rules' (for construction) and BMA's Workplace Conduct Policy (for operations) will be required. These policies provide detailed guidelines to ensure that all workers are treated fairly, and are free from discrimination, harassment or any other inappropriate conduct. Workers demonstrating behaviour that does not comply with the requirements of these policies will face disciplinary action in line with the terms of their employment.

A BPAV Code of Behaviour will also be implemented. The code specifies expected behaviours, as well as a detailed list of misconduct which may result in termination of accommodation rights and/or employment.

3.6 Gender and cultural issues

BMA, Bechtel and Cater Care are Equal Employment Opportunities (EEO) employers and welcome the benefits that diversity can bring. CRM aims to recruit workers across a range of age, gender and other groups (as described in the SIMP at Section 5.2.5), to promote balance and positive behaviour amongst the workforce. If residents include migrants to Australia, specific induction, training and support programs will be developed as required.

BMA and its contractors are committed to ensuring that all employees are treated fairly and equitably and believes that each employee has the fundamental right to a work environment free from discrimination, harassment, sexual harassment, victimisation or any other inappropriate workplace conduct.

BMA and its contractors will not tolerate any form of inappropriate workplace conduct. Disciplinary action may be taken against any employee who breaches this policy, which may include termination of employment.

EEO Contact Officers are provided at all BMA sites to create a supportive environment to discuss EEO issues, listen and clarify problems, and explain the options for resolution of problems.



4 Conclusion

This AVMP has outlined:

- the location, design, capacity and duration of facilities at BPAV;
- a summary of potential social impacts and mitigations relating to the Village;
- village management, including
 - facility and service provision;
 - co-operation with local services;
 - alcohol and drug management;
 - measures to promote positive relationships between village residents; and
 - safety and security measures.

The CRM SIMP contains a process and indicators to monitor the effectiveness of management, mitigation and engagement strategies, including the provisions listed above.

This AVMP may be revised for the operational period as part of SIMP revision. The AVMP will be reviewed during review of the CRM SIMP at the end of construction, and revised if required for the operational period.



Appendix F Draft Housing Impacts Plan

○ □ □ □ **BBCG Project**
Draft Housing Impacts Plan



BHP Billiton Mitsubishi Alliance
November 2012



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"Be the change you want to C in the world"

November 2012

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Disclaimer

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Executive Summary

In August 2010, the Coordinator-General provided conditional approval for the Caval Ridge Mine Project EIS. Along with the Daunia Mine, the Caval Ridge Mine project is a component of BHP Billiton Mitsubishi Alliance's (BMA) Bowen Basin Coal Growth (BBCG) Project. In 2008, the BBCG Project was declared a significant project in accordance with the *State Development and Public Works Organisation Act 1971*. As a result, BMA was required to produce Environmental Impact Statements (EIS) for both the Caval Ridge Mine and the Daunia Mine, as these are the two components of the BBCG Project that have proceeded.

Among the conditions imposed as part of the Coordinator-General's report on the Caval Ridge Mine EIS, the Coordinator-General required BMA, per Condition 18(f) of his Report¹ to undertake a Housing Impacts Study, and prepare a Housing Impacts Plan. The BBCG Project Housing Study was completed in October 2012, and has been used to guide the development of this Housing Impacts Plan. The Housing Impacts Study was made available to key stakeholders in September and October 2012 to enable consultation on, and the finalisation of, the Terms of Reference for this Housing Impacts Plan. The Terms of Reference for this Plan, approved by the Coordinator-General on 1 November 2012, are attached as Appendix 1 and described in Section 1.

BMA is committed to ensuring that its activities positively contribute to the social and economic fabric of Moranbah, and is committed to accommodating its own workforce, plus providing a fair and reasonable contribution towards affordable housing.

¹ As per Caval Ridge Mine SIMP Section 1.2, this condition was amended by the Coordinator-General's July 2011 Report on *Application for Project Change* to enable OESR's involvement.

Housing Impacts Study

The purpose of the Housing Impacts Study was to:

- Provide an understanding of the housing and related contexts in Moranbah in 2011;
- Identify the potential impacts of the Caval Ridge Mine and Daunia projects on the demand for housing from low to moderate income households in Moranbah; and.
- Determine a fair and equitable response such that BMA can meet its responsibility in mitigating housing impacts associated with those projects.

The Study's key findings are summarised briefly in Section 1, and the completed study is available at:

<http://www.bhpbilliton.com/home/aboutus/regulatory/pages/default.aspx>

Housing Impact Plan

As part of the conditional approval for Caval Ridge Mine's EIS, the Coordinator-General required BMA to ensure that housing and accommodation were provided for the workforces associated with Caval Ridge Mine and Daunia.

In respect to this requirement, BMA is primarily relying on the Buffel Park Accommodation Village (BPAV), which is currently being constructed for accommodating Caval Ridge's employees, as well as the MAC Coppabella Accommodation Village, which is accommodating Daunia's employees. Once finalised, BPAV will have approximately 2,000 rooms including 445 rooms for the operations workforce. In addition, as at September 2012, 800 rooms were available for use by the Caval Ridge construction workforce at an existing accommodation village on the Peak Downs Mining Lease known as the BMA Accommodation Village (BMAAV).



At peak (in 2013) approximately 2,600 beds will be required for Caval Ridge Mine and Daunia Mine workforces, and this will stabilise at around 1,050 beds in the operational period post 2014-15. Thus the combination of the BPAV, BMAAV and the long term commitment to the MAC's Coppabella Accommodation Village will easily account for the Caval Ridge Mine and Daunia operations' workforces.

In addition to the above commitments, BMA is also upgrading and increasing its housing stocks in Moranbah and other Bowen Basin communities, including the following:

- During FY12, BMA delivered 69 new townhouses and houses, including 51 in Dysart and 18 in Moranbah;
- BMA plans to deliver further dwellings in Moranbah in FY13 in accordance with the Coordinator-General's conditions;
- Upgrading 185 houses in Moranbah;
- Working with the Issac Regional Council (IRC) to align housing and urban renewal initiatives; and,
- Meeting with ULDA and IRC to share information about housing initiatives and potential opportunities.

Affordable Housing Contributions

The Housing Impacts Study identified the potential impact of Caval Ridge and Daunia Mines on access to affordable housing for low to moderate income households. The study identified the impact of increased local spending and local business growth that would increase non-resource employment.

Affordable housing contributions were determined by noting the direct and indirect impacts likely to be associated with the BBCG and localising these to Moranbah. The assessment indicated that at peak demand in 2013, when Caval Ridge Mine's peak construction will coincide with Daunia's early operations, 37 dwellings for non-resource low to moderate households would be required. This

would decrease as the construction workforce decreases, and remain at around 21 dwellings during the mines' operations.

To meet the affordable housing requirements, BMA has provided or committed to the following:

- Investment in the Isaac Affordable Housing Trust (IAHT) of \$5 million by 2016, expected to deliver the equivalent of 13 affordable dwellings;
- Rental subsidies to assist housing for community organisations' to the value of approximately \$986,000 for 2012 and 2013;
- Relinquishment of 3 of BMA's leases over Department of Public Works and Housing dwellings in 2012, to enable their use by non-resource workers; and
- Relinquishment of a further 15 leases over Department of Public Works and Housing dwellings to house low to moderate, non-resource industry families, over the period 2013-2014.

Conclusions

BMA is committed to addressing impacts from its projects on the housing market as demonstrated above.

BMA will house all their workers for Caval Ridge and Daunia Mines in villages, as well as provide a series of other improvements / increase in supply to housing. In addition, the equivalent of 37 affordable dwellings will be contributed by BMA in respect to the peak period in 2013. Following the peak, the provision of housing through the IAHT and permanent relinquishment of Department of Public Works and Housing dwellings will exceed the contribution required.

BMA has a monitoring strategy in place to ensure that BMA's commitments are being met now and into the future.



1 Introduction

In August 2010, the Coordinator-General provided conditional approval for the Caval Ridge Mine Project EIS. Along with the Daunia Mine, the Caval Ridge Mine project is a component of BHP Billiton Mitsubishi Alliance's (BMA) Bowen Basin Coal Growth (BBCG) Project.

In 2008, the BBCG Project was designated a significant project in accordance with the State Development and Public Works Organisation Act 1971. As a result, BMA was required to produce Environmental Impact Statements (EIS) for both the Caval Ridge Mine and the Daunia Mine, as these are the two components of the BBCG Project that have proceeded. The BBCG Project is described briefly in Section 1.1.

Among the conditions imposed, the Coordinator-General required BMA, per the Condition 18(f) of his Report, to undertake a Housing Impacts Study, and prepare a Housing Impacts Plan. As described in Caval Ridge Mine Social Impact Management Plan (Caval Ridge Mine SIMP) Section 1.2, this condition was amended by the Coordinator-General's July 2011 Report on Application for Project Change to enable OESR's involvement, and OESR provided the data used in the preparation of the Housing Impacts Study.

The purpose of the Housing Impacts Study was to:

- Provide an understanding of the housing and related contexts in Moranbah in 2011;
- Identify the potential impacts of Caval Ridge Mine and Daunia projects on demand for low to moderate income housing in Moranbah; and,
- To determine a fair and equitable response such that BMA can meet its responsibility in mitigating housing impacts associated with those projects.

The Study was required to guide the development of the Housing Impacts Plan.

As noted in the Terms of Reference for the Housing Impacts Plan (refer Appendix 1), the Housing Impacts Plan will outline mitigation and management strategies in respect to the housing impacts identified, including:

- *“Accommodation provision for the proponent's workforce for Caval Ridge Mine and Daunia Mine;*
- *Specific recommendations on fair and reasonable contributions to non-resource worker housing required to be made by the proponent to specifically mitigate the potential impacts from the Daunia Mine and Caval Ridge Mine;*
- *Monitoring of the effect of any provision of affordable non-resource worker housing; and*
- *Performance review of the success of the workforce housing supply elements of the Plan”.*

Terms of Reference (refer Appendix 1)

BMA commissioned CChange Sustainable Solutions Pty Ltd (CChange) to prepare the BBCG Project Housing Impacts Study and Plan. The BBCG Project Housing Study was completed in October 2012 and made available to key stakeholders. This report constitutes the BBCG Project Housing Impacts Plan.



1.1 The BBCG Project

The Bowen Basin Coal Growth Project involves the production of additional coal products through the development of new BMA operations in the northern section of the Bowen Basin, near Moranbah, Queensland. These include Daunia Mine and Caval Ridge Mine. Construction of Daunia Mine commenced in 2011, and the first supply of coal is expected in 2013. Construction of Caval Ridge Mine began in March 2012, and the first supply of coal is expected in 2014.

The BBCG Project is expected to directly contribute significantly to the State's economy across all project elements. The Caval Ridge Mine and Daunia components are expected to employ a combined peak of approximately 2,600 construction workers and 1050 operational workers. Both projects will employ a 100% remote workforce for operations.

BMA is a long term member of the Bowen Basin community and is committed to the Moranbah community and its region. The BBCG Project will contribute significantly to local and regional economies through direct and indirect employment and investment expenditure, including investment in community facilities, training and local business growth. BMA is also dedicated to ensuring that they make fair and equitable contributions to housing low to moderate non-resource worker households.

1.2 Impacts Requiring Mitigation

BMA has undertaken comprehensive analyses of potential impacts and developed mitigation strategies to avoid adverse social and economic impacts from project construction and operation of the projects. The full list of mitigation actions are outlined in the Caval Ridge Mine SIMP.

Potential housing impacts that required mitigation include:

- Pressure on the Moranbah housing market due to the construction and operation workforces requiring housing and accommodation;
- Further inflation in the housing market in Moranbah if supply is not augmented in line with demand for housing and accommodation;
- Exacerbating existing pressures on hotel/motel accommodation due to resource workers utilising this accommodation if other appropriate accommodation is not provided;
- Marginalising families employed in non-resource industries due to the inability to compete for higher rentals and housing prices if housing price inflation does occur; and
- Overall increases in housing stress for a number of families in Moranbah, which can lead to other social impacts, should affordable housing contributions not be provided in line with assessed requirements.



The mitigation strategies being employed by BMA to ensure that the above impacts do not result are detailed in the Caval Ridge Mine SIMP and noted in Section 3 of this report. In summary, they include:

- Developing accommodation villages that will house all construction and operational workers for Caval Ridge Mine and establishing long term commitments to the MAC's Coppabella Accommodation Village for the Daunia Mine's employees;
- Increasing BMA housing stocks in Moranbah to ensure housing is available for workers at its other operations;
- Contributing to the Isaac Affordable Housing Trust;
- Providing subsidies to households from community organisations; and
- Increasing the affordable housing stocks of Moranbah through relinquishment of Department of Public Works and Housing dwellings.

This Housing Impacts Plan addresses the need to ensure there are appropriate opportunities in Moranbah to house families associated with the indirect employment impacts² associated with the BBCG project. This includes:

- Understanding the overall likely indirect employment impacts associated with the Caval Ridge Mine and Daunia operations; and,
- Understanding the need for housing to host non-resource, low to moderate income families.

1.3 Structure of the Report

Following the introductory section, this report is divided into:

- **Section 2**, which recaps the major findings of the Housing Impacts Study. This includes discussions on the housing and related contexts in Moranbah in 2011, the potential impacts of Caval Ridge Mine and Daunia projects on demand for low to moderate income housing in Moranbah, and the overall method and outcomes of what constitutes a fair and equitable response such that BMA can meet its responsibility in mitigating housing impacts associated with those;
- **Section 3**, which outlines how BMA will meet its required contribution to mitigate potential negative impacts on the housing market; and
- **Section 4**, which discusses BMA's proposed monitoring and performance review mechanisms.

Appendix 1 includes the full Terms of Reference for the BBCG Housing Impacts Study.

² The 'indirect contribution' to the economy exists because during construction and operation there would be purchases made from companies who would in turn spend those dollars on their inputs, and so on through the industry sectors. This is termed the 'production' impact. In addition, there is a consumption effect as employees will spend their wages creating additional demand for goods and services in the economy.



2 Summary of Housing Impacts Study Findings

Information and analyses presented in the Housing Impacts Study report indicated that the growth being experienced in Moranbah, due to the extensive coal mining operations in the Bowen Basin, is impacting on its housing market.

An inflated housing market can have wider impacts on the economic and social environments, and data and information produced as part of the Study suggested that, although in 2012 there was somewhat of an easing in the housing market, negative impacts on housing and households occurring have been occurring in Moranbah as the result of the cumulative growth in the resources industry. In relation to the abovementioned easing trend in market conditions, recent anecdotal evidence suggests more properties are coming on to the rental market and these properties are remaining available for longer. Below, the key findings of the report are noted, as are the method and outcomes of BMA's required contributions to housing for low to moderate non-resource households. BMA's overall workforce numbers and activities to house employees are also discussed³.

2.1 Key Findings regarding Housing Market

Key findings of the Housing Impacts Study report included:

- Although easing to a degree from the 2011 situation, in 2012, the housing market in Moranbah was highly inflated and this was impacting on a number of areas, including:
 - The ability for non-resource industries to secure employees, particularly in the service sector;
 - People choosing to live further away from their work place;
 - The ability for local industries to get trades workers given the combination of the high wages in the resource sector and high rental / housing prices in Moranbah;

³ It is noted that the stress in the housing market has eased somewhat since the compilation of the data associated with the Housing Study to mid 2012. Employment in the resource sector, and therefore the demand for housing, is subject to change at short notice, depending on a range of factors, such as commodity prices, labour availability and external demand. The information utilised in the Housing Study report was current as of 2011, but it is noted that changes have occurred since the data was compiled and the report initially drafted. Changes to BMA projects that impact on Moranbah include:

- In response to the challenging external environment, the Peak Downs expansion has been delayed. This delay will reduce direct demand for housing;
- Cessation of production at Norwich Park, which has led to an increase in available workers for other BMA operations. These employees have access to houses in Dysart; and,
- A focus on accommodating BMA staff in BMA-owned houses, in favour of leasing from the private market, which, as noted in Section 4.2, has led to an increase in the availability of private rental stock, together with decreases in speculation and evidence of downward pressure on rental costs.

As noted in Section 4, impacts associated with the BBCG project will be monitored over time.



- The inability for community and emergency services to keep pace with demand in some instances; and,
- The unfortunate impacts on individuals' and families' well-being from housing stress, which can lead to other social issues.
- In 2006, OESR estimated that there were at least 17 per cent of non-resource low to moderate income households paying high rents, 8 per cent of non-resource households paying moderate rents and 25 per cent of non-resource households paying low rents, who are at risk of experiencing housing stress. Together, these accounted for 88 households. In addition, there were 85 households that indicated they paid 'subsidised rents' that were considered at risk of housing stress.
- In total, 173 non-resource households in Moranbah were 'at risk', which accounts for around 8 per cent of the total number of households in Moranbah. However, it is acknowledged that there is likely to be further latent demand for further affordable housing in Moranbah.

2.2 BMA's Workforce and Housing Initiatives for existing Operating Mines

In 2010, the total BMA workforce (including contractors) in the Moranbah vicinity was 3,767, with 39 per cent being resident and 61 being non-resident.

BMA provides housing for employees of residentially-based operations who choose to live in towns and do not have access to housing in town.

BMA has a Housing and Accommodation Office in Moranbah, to provide information and advice to workers about housing options, facilitate their access to options that suit their families, and manage housing stocks.

Employees at existing operations have access to the following housing assistance options:

- Rental assistance for both BMA owned and non-BMA owned houses;
- \$45,000 paid up front towards the purchase of an existing residence;
- Up to \$60,000 paid up front towards the construction of new residence (pro-rata and non-repayable if the employee stays with BMA for 10 years);
- 50 per cent interest subsidy for 10 years on a loan up to \$300,000; and
- Capital guarantee for 10 years on the cost of a dwelling.

Around 1,097 dwellings built or owned by BMA have been subsequently sold to BMA employees (as part of BMA home ownership schemes), including 260 employees who have benefitted from the scheme in the past five years. BMA's housing includes a mix of dwelling types, including 3-5 bedroom family housing, and units and town houses for couples and singles. At January 2012, the value invested by BMA in Moranbah in houses, land and other community infrastructure was \$969 million.

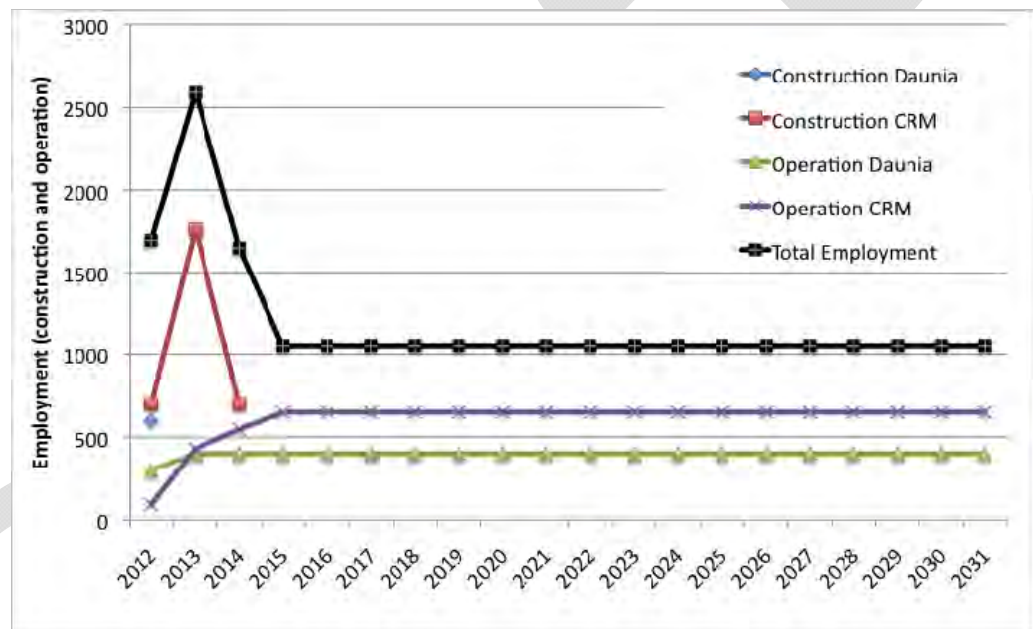


BMA is developing further dwellings in Moranbah to provide increased housing options for its workforce.

2.3 BMA's BBCG Workforce

Overall employment associated with the Daunia and Caval Ridge Mine projects is expected to peak at just under 2,600 workers during Caval Ridge Mine's construction in 2013, falling to approximately 1,050 operational employees by 2015. Between 2015 and 2031, employment is expected to remain at around 1,050 (refer to figure 2).

Figure 1: Assumed Employment Roll Out of Daunia and Caval Ridge Mine



Source: BMA information

The Housing Impacts Study showed that BMA is a major driver of growth in the Region, but they are not the only driver. Full time equivalent population forecasts produced by OESR indicated that BMA employees and their dependents accounted for around 30 per cent of total population in 2011, and BMA estimates that an additional 25 to 30 percent of the full time equivalent population contract to BMA. Depending on the population scenario that results, these proportions are likely to remain stable or increase marginally by 2018. Thus over 40 percent of all population at 2018 is likely to be attributable to factors other than employment associated with BMA's activities.

2.4 Accommodating the BBCG Project's Workforce



In accordance with the Coordinator General's Report on Application for Project Change (July 211), BMA received approval for 100 per cent of their operational workforce to be fly in fly out workers. As shown in Figure 2 above, at peak the operational workforces of Caval Ridge Mine and Daunia are likely to be around 650 and 400 respectively. All workers – both construction contractors, and operations employees and contractors – will be accommodated in accommodation villages. This will minimise the impact of these projects on the housing market.

BMA is primarily relying on the Buffel Park Accommodation Village (BPAV), which is currently being constructed, as well as the MAC Coppabella Accommodation village, which is accommodating Daunia's employees. Once finalised, BPAV will have approximately 2,000 rooms for the construction workforce and 445 rooms for the operations workforce. In addition, as at September 2012, 800 rooms were available for use by the Caval Ridge construction workforce at an existing accommodation village on the Caval Ridge Mining Lease (ML 1775) known as the BMA Accommodation Village (BMAAV). At peak (in 2013) approximately 2,600 beds will be required for Caval Ridge Mine and Daunia Mine workforces, and this will stabilise at around 1,050 beds in the operational period post 2014-15.

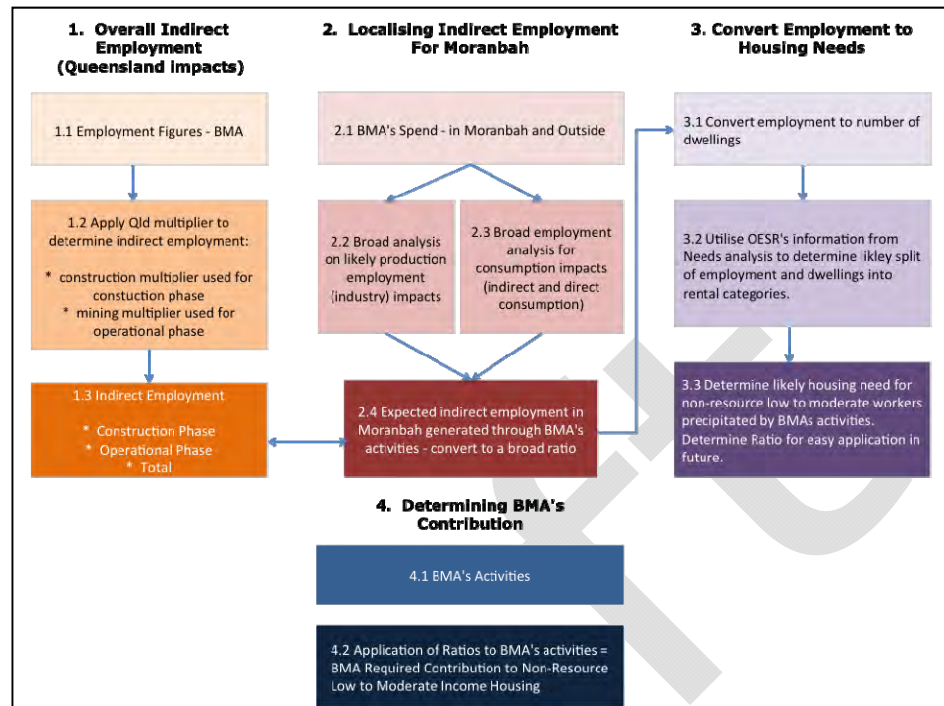
2.5 BBCG Project's Required Contribution to Affordable Housing for Non-Resource Families

A framework to determine a reasonable contribution from a major project towards non-resource workers' dwellings was determined in the Housing Impacts Study with reference to a four phase process. This included:

- **Phase 1:** Estimating the overall likely indirect employment impacts for Queensland associated with the employment and capital expenditure of BMA's Daunia and Caval Ridge Mine projects;
- **Phase 2:** Localising the likely indirect employment impacts to Moranbah using local spend data and accounting for the expenditure likely to be associated with BMA's employees and contractors;
- **Phase 3:** Converting the indirect employment to likely numbers of dwellings required for non-resource workers on low to moderate income, and determining a ratio of dwellings required per BMA construction and/or operational workers; and,
- **Phase 4:** Determining overall contributions required given expected employment of Caval Ridge and Daunia mines.



Figure 2: Method to determine BMA's required contribution to Affordable Housing



The overall results of the analysis indicated that the indirect impacts of the BBCG projects on the non-resource low to moderate housing demand would be mitigated if:

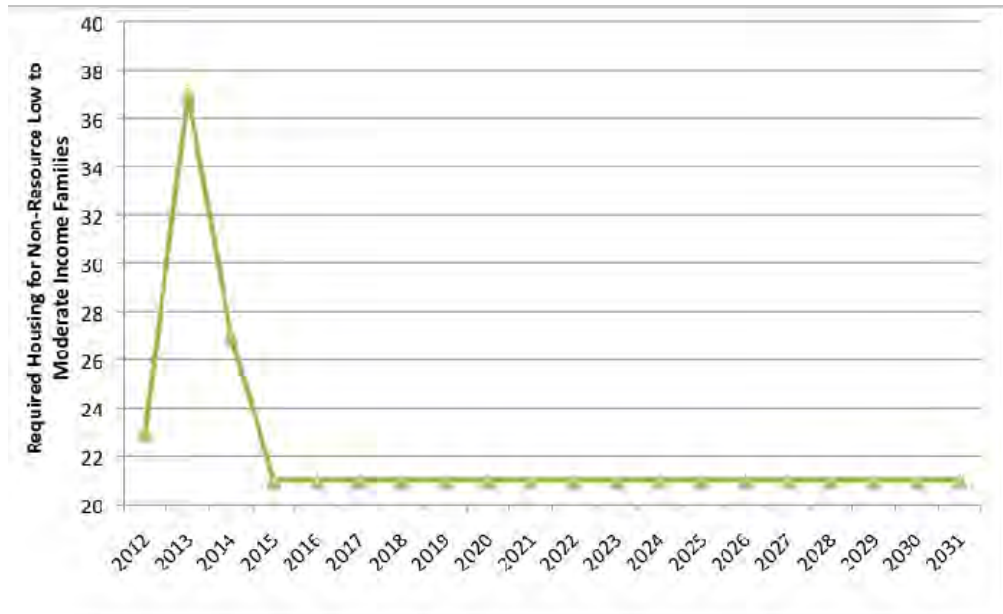
- One (1) affordable dwelling was provided for every 90 construction workers in BMA's Daunia and Caval Ridge Mine; and,
- One (1) affordable dwelling was provided for every 50 operational workers in BMA's Daunia and Caval Ridge Mine.

Applying these ratios to the expected roll out of employment for the Caval Ridge Mine and Daunia projects indicates that BMA should allow for the provision of:

- 37 houses for low to moderate income non-resource workers in Moranbah in 2013;
- 27 houses in 2014; and
- 21 houses from 2015 until decommissioning occurs, or until housing conditions change to the extent that assistance for non-resource worker housing is no longer required.



Figure 3: BMA’s Required Affordable Housing Contributions



Source: CChange, based on information and assumptions from PWC, BMA and ABS

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3 BBCG Project's Accommodation Initiatives

As part of the conditional approval for Caval Ridge Mine, the Coordinator-General required BMA to ensure that housing and accommodation was provided for the construction and operational workforces associated with Caval Ridge Mine, as well as identifying opportunities to mitigate the likely indirect requirements for affordable housing associated with the projects.

The analysis in the Housing Impacts Study also recognised that a number of other BMA housing development programs are in progress. These include the:

- delivery of 69 new townhouses and houses across Bowen Basin communities, including 51 in Dysart and 18 in Moranbah;
- upgrading of 185 houses in Moranbah; and
- plans to deliver additional dwellings in FY13 and beyond in line with the quantities identified in the Coordinator General's conditions imposed on the Caval Ridge project.

The above initiatives largely benefit workers at existing BMA mining operations (refer Section 2.2).

The Housing Impacts Study identified that:

- **For BMA's BBCG Project's workforce:** At peak (2013) just under 2,600 beds would be required for Caval Ridge Mine and Daunia operations, and this would stabilise at around 1,050 post 2015; and,
- **For non-resource low to moderate income families:** At peak (2013), 37 affordable dwellings would be required, and this would stabilise at 21 from 2015 until decommissioning, or until housing conditions change to the extent that assistance for non-resource worker housing is no longer required.

3.1 Accommodation Villages

BMA is currently constructing the Buffel Park Accommodation Village (BPAV). Once finalised, BPAV will have approximately 2,000 rooms for the construction workforce (of which 600 will remain for maintenance staff) and 445 rooms for the operations workforce. As at September 2012, 800 rooms were available use by the Caval Ridge construction workforce at an existing accommodation village on the Peak Downs Mining Lease known as the BMA Accommodation Village (BMAAV). In addition, BMA utilises the MAC's Coppabella Accommodation Village to accommodate Daunia's employees.

At peak (in 2013) approximately 2,600 beds will be required for Caval Ridge Mine and Daunia Mine workforces, and this will stabilise at around 1,050 beds in the operational period post 2014-15. BPAV together with BMAAV and the long term commitment to utilise the MAC's Coppabella Accommodation Village will easily



account for the required accommodation during construction and operation of the Caval Ridge Mine and Daunia projects.

3.2 Contribution for Affordable Housing

BMA's mitigations in respect to the BBCG Project's potential impacts on affordable housing include:

- Production of new affordable dwellings;
- Subsidising housing access for community organisations; and
- Relinquishment of housing stock leased from the Department of Public Works and Housing, to allow use by non-resource workers.

To meet the peak need of 37 affordable dwellings identified as required in the Housing Impacts Study, BMA's strategies include:

- Investment in the Isaac Affordable Housing Trust:
 - To date, \$3.5 million has been provided to Isaac Affordable Housing Trust to provide 7 dwellings, and an additional \$1.5 million will be provided to the Trust by 2016. In total, the \$5 million is expected to deliver the equivalent of 13 affordable dwellings
- Rental subsidies to community organisations:
 - BMA have provided substantial subsidies to a range of organisations in Moranbah to assist their staff to access housing. In the financial year of 2012 organisations receiving BMA's rental subsidies included:
 - Moranbah District Support Services;
 - C&K Childcare;
 - Simply Sunshine Childcare;
 - Gryphon Psychology;
 - Moranbah Ambulance;
 - Moranbah Early Learning Centre;
 - In the financial years of 2012 and 2013, the value of housing subsidies to community organisations in Moranbah will be approximately \$986,000 and this will assist approximately 6 organisations. The arrangements regarding the subsidies to these types of organisations are agreed annually;
- Relinquishment of 3 of BMA's leases over Department of Public Works and Housing dwellings. It is understood that these dwellings will be utilised to house families from State Government departments, such as Queensland Police and/or Queensland Health staff; and
- Relinquishment of a further 15 leases over Department of Public Works and Housing dwellings to house low to moderate, non-resource industry families.



In addition to the above, other BMA initiatives being pursued include:

- Working with the IRC to align housing and urban renewal initiatives; and,
- Meeting with ULDA and IRC to continue to share information about housing initiatives and potential opportunities.

Taking these initiatives into account, at least 37 low to moderate, non-resource industry families will have been assisted through BMA's activities between 2012 and 2016.

Post 2016, 31 affordable houses for non-resource industry families will be available over the longer term, when compared with the 2011 baseline, which is in excess of the required contribution of 21 affordable dwellings.

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4 Monitoring Performance

The Caval Ridge Mine SIMP details a monitoring process for housing impacts and mitigations, and includes twice-yearly reporting on:

- Number and proportion of resident and remote construction workers and contractors;
- Number and proportion of resident and remote operations workers;
- Number of beds and occupancy rate of BMAAV and BPAV Accommodation Villages, compared to total number of non-resident workers;
- Number of dwellings built in Moranbah by 2013;
- Number of dwellings built in Bowen Basin by 2015 and 2017; and
- Number of Caval Ridge Mine and Daunia employees and contractors renting housing in Moranbah.

Implementation of major initiatives such as investment in the IAHT are reported annually.

A summary of monitoring data to be collated and reported in respect to the Housing Impacts Plan is in Table 1.

Table 1: Monitoring data to be reported with respect to the Housing Impacts Plan

Requirement	Commitment	Key Performance Indicator	Timing
BMA's workforce: 2,600 beds at peak (2013) & 1,050 beds post 2015	Construct BMA Accommodation Village (BMAAV). 1,200 room village	BMAAV & BPAV built, and providing the required accommodation for the Caval Ridge and Daunia workforces	2012 to decommissioning
	Construct Buffel Park Accommodation Village (BPAV). 2,000 rooms (construction workforce) and 445 rooms (operations workforce). Long term commitment to the MAC's Coppabella Accommodation Village to cater for Daunia's employees.	Occupancy rate for BMAAV and BPAV reflecting the workforces of the Caval Ridge and Daunia workforces Continued usage of the MAC's Coppabella Accommodation Village for Daunia's operations.	
	Delivery of new dwellings across Moranbah and other Bowen Basin communities (up to 420 by 2017).	Increase supply of housing in Moranbah as per CG's Conditions for the EIS	2012 onwards



Requirement	Commitment	Key Performance Indicator	Timing
	Upgrading 185 houses in Moranbah	Upgraded houses	2012-2013
For non-resource, low to moderate income families: 37 affordable dwellings at peak (2013) & 21 affordable dwellings from 2015 until decommissioning occurs.	\$5 million investment in the Isaac Affordable Housing Trust	Provision of \$5 million to IAHT	By 2016
	Rental subsidies to assist housing for community organisations	Assistance to 6 community organisations to house non-resource workers	2011 - 2013
	Relinquishment of a total of 18 BMA leases (including 3 leases relinquished to date) over Department of Public Works and Housing dwellings	Relinquishment of 3 dwellings in 2012, and a further 15 DPWH leases by 2014	2012 - 2014
	Working with the IRC to align housing and urban renewal initiatives	Bi-monthly meetings with IRC	2012 - Ongoing
	Meeting with ULDA and IRC to continue to share information about housing initiatives and potential opportunities.	Regular updates/meetings with ULDA	2012 - Ongoing




Appendix 1: Terms of Reference

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Terms of Reference BBCG HOUSING IMPACTS PLAN

November 2012



The Terms of Reference for the Bowen Basin Coal Growth (BBCG) Housing Impacts Plan was prepared in consultation with the Moranbah BMA Community Network (BCN) and approved by the Coordinator-General on 1 November 2012.

BMA has undertaken a BBCG Project Housing Impacts Study, in compliance with the Coordinator-General's Conditions for approval of Caval Ridge Mine's Environmental Impact Statement (EIS) and subsequent reports on Applications for Project Change.

The purpose of the Housing Impacts Study was to provide an understanding of the current housing market in Moranbah and identify the potential impacts of Caval Ridge Mine and Daunia on demand for housing for low to moderate income, non-resource workers. The Study also sought to determine a fair and equitable response such that BMA can meet its responsibility to mitigate potential impacts. The Study will guide development of the Housing Impacts Plan, which will address the Daunia Mine and Caval Ridge Mine.

The Housing Impacts Plan will outline mitigation and management strategies in respect to the housing impacts identified, including:

- accommodation provision for the proponent's workforce for Caval Ridge Mine and Daunia Mine;
- specific recommendations on fair and reasonable contributions to non-resource worker housing required to be made by the proponent to specifically mitigate the potential impacts from the Daunia Mine and Caval Ridge Mine;
- monitoring of the effect of any provision of affordable non-resource worker housing; and
- performance review of the success of the workforce housing supply elements of the Plan.

A draft of the plan will be presented to the Moranbah BCN for review and input. BMA will consider feedback on suggested amendments to the plan provided by the BCN in the finalisation of the plan report. The final draft of the plan will be presented to the Coordinator-General for approval.