BLAST MANAGEMENT STRATEGY

For Boggabri – Tarrawonga – Maules Creek Complex

JULY 2014

Idemitsu Australia Resources
Boggabri Coal Pty Ltd

Whitehaven Coal Pty Ltd
Tarrawonga Coal Pty Ltd, Maules Creek Coal Mine

IDEMITSU

WHITEHAVEN COAL

IDEMITSU BOGGABRI COAL

DOCUMENT CONTROL				
Version	**Date**	**Prepared by**	**Reviewed by**	**Approved by**
01	January 2013	J McDonough / B Dillon	B Bird	J Green
02	June 2013	B Bird	J Green	J Green
03	July 2014	B Bird	D Martin, L Johnson	D Martin
04				

Distribution Control

Controlled copies will be distributed to and retained by relevant personnel including key Boggabri Coal Pty Limited (BCPL), Boggabri Coal Expansion Project (BCEP), Whitehaven Coal, agency and Contractor representatives.

Company	Position
BCPL	Environment Superintendent
BCEP Whitehaven Coal (Tarrawonga) Whitehaven Coal (Maules Creek)	Environment Representative Group Environmental Manager Environmental Manager
Department of Planning and Environment (DPE)	Planning Officer
Contractors	Project Manager

Uncontrolled Copies

Uncontrolled copies may be issued on the authority of the BTM environment representatives as listed in the table are. Such copies will neither be numbered nor kept up to date.

Contents

Tables

Figures

Glossary

Glossary	
AEMR	Annual Environmental Management Report
BCEP	Boggabri Coal Expansion Project
BCM	Boggabri Coal Mine
BCPL	Boggabri Coal Pty Limited
BLMP	Blast Management Plan
BLMS	Blast Management Strategy
BTM Complex	Boggabri-Tarrawonga-Maules Creek Complex
CCC	Community Consultative Committee
CL	Coal Lease
DP&I	NSW Department of Planning and Infrastructure (now DPE)
DPE	NSW Department of Planning and Environment
EA	Environmental Assessment
EP&A Act	*Environmental Planning and Assessment Act, 1979*
GHG	Greenhouse Gas
IAR	Idemitsu Australia Resources Pty Limited
MCC	Maules Creek Coal Project
Mtpa	Million Tonnes Per Annum
OEH	NSW Office of Environment and Heritage
PAC	NSW Planning Assessment Commission
ROM	Run of Mine
TCM	Tarrawonga Coal Mine

1. Introduction

1.1 Background and purpose

The purpose of this cumulative Blast Management Strategy (BLMS) is to document the approach that will be taken by mines within the Boggabri-Tarrawonga-Maules Creek Complex (BTM Complex)[1] to monitor and collectively manage cumulative blasting impacts. This strategy details the relevant cumulative blasting impact assessment criteria for each mine and outlines the cumulative blast management protocols that will be implemented within the BTM Complex.

The BTM Complex is an existing mining precinct centred within and around the Leard State Forest, approximately 15 km northeast of Boggabri in the Narrabri Shire local government area. The BTM Complex includes the existing Tarrawonga Coal Mine (TCM) in the south, the Boggabri Coal Mine (BCM) to the north and the proposed Maules Creek Coal Mine (MCC) to the northwest, which is currently under construction. BCM is managed by Boggabri Coal Pty Limited (BCPL), a wholly owned subsidiary of Idemitsu Australia Resources Pty Limited (IAR). MCC is managed under a joint venture between Whitehaven Coal Limited (75%), ITOCHU Australia Limited (15%) and J-Power Australia (10%). TCM is also a joint venture operation, with ownership shared between Whitehaven Coal Mining Limited (70%) and BCPL (30%). A summary of the ownership details for mines within the BTM Complex is provided below in Table 1.1.

Table 1.1 Management and ownership of BTM Complex mines

Mine	Management	Ownership	Share
Boggabri Coal Mine	Boggabri Coal Pty Limited	Idemitsu Australia Resources	100%
Maules Creek Coal Mine	Maules Creek Coal Joint Venture	Aston Coal 2 Pty Limited (owned 100% by Whitehaven Coal Limited)	75%
		Itochu Coal Resources Australia Maules Creek Pty Ltd (ICRA MC)	15%
		J-Power Australia (J-Power)	10%
Tarrawonga Coal Mine	Tarrawonga Coal Pty Limited (TCPL) - Tarrawonga Joint Venture	Whitehaven Coal Mining Limited	70%
		Boggabri Coal Pty Limited	30%

Project applications for the continued operation of BCM (application number 09_0182) and the development of the MCC (application number 10_0138) were determined by the NSW Planning Assessment Commission (PAC) in July and October 2012 respectively, under delegation by the NSW Minister for Planning and Infrastructure. Subsequent to this, the (then) Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPAC), now the Commonwealth Department of the Environment (DoE), granted conditional approval for both the BCM Extension (EPBC 2009/5256) and the MCC Project (EPBC 2010/5566) on 11 February 2013. Given the level of public interest in these projects and the potential for cumulative impacts, approvals were granted subject to stringent conditions related to the management of cumulative impacts.

[1] In previous environmental assessments and approval documents this group of mines has been referred to as the Leard Forest Mining Precinct. For the purposes of this strategy and all other relevant cumulative impact management documents, all references to the 'Leard Forest Mining Precinct' have been replaced with the term 'BTM Complex'.

The TCM application for continuation of mining was approved on 22 January 2013, with similar cumulative impact management conditions to those detailed in the BCM and MCC. The (now) DoE granted EPBC approval (EPBC 2011/5923) to the Tarrawonga project on 11th March 2013.

Approval conditions require the preparation of a suite of regional strategies for environmental management, developed in partnership by all three mines of the BTM Complex. This BLMS has been developed to serve as the regional strategy for blast management within the BTM Complex, in accordance with each project's approval requirements. Approval conditions relevant to the management of cumulative blast impacts within the BTM Complex are detailed in Table 1.2.

Table 1.2 Approval requirements for cumulative blasting impact management

Project/ Approval	Condition	Details
Boggabri Coal Mine Project Approval 09_0182	Schedule 3, Condition 20	During mining operations on site, the Proponent shall…
		(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and
	Schedule 3, Condition 22	The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. The plan must…
		(h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts*.
Maules Creek Coal Mine Project Approval 10_0138	Schedule 3, Condition 23	During mining operations on site, the Proponent shall…
		(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and
	Schedule 3, Condition 25	The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. The plan must…
		(h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts of all mines within the precinct*.
Tarrawonga Coal Mine	Schedule 3, Condition 19	During mining operations on site, the Proponent shall…
		(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines;
	Schedule 3, Condition 21	The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. The plan must…
		(h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts*. **The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.*

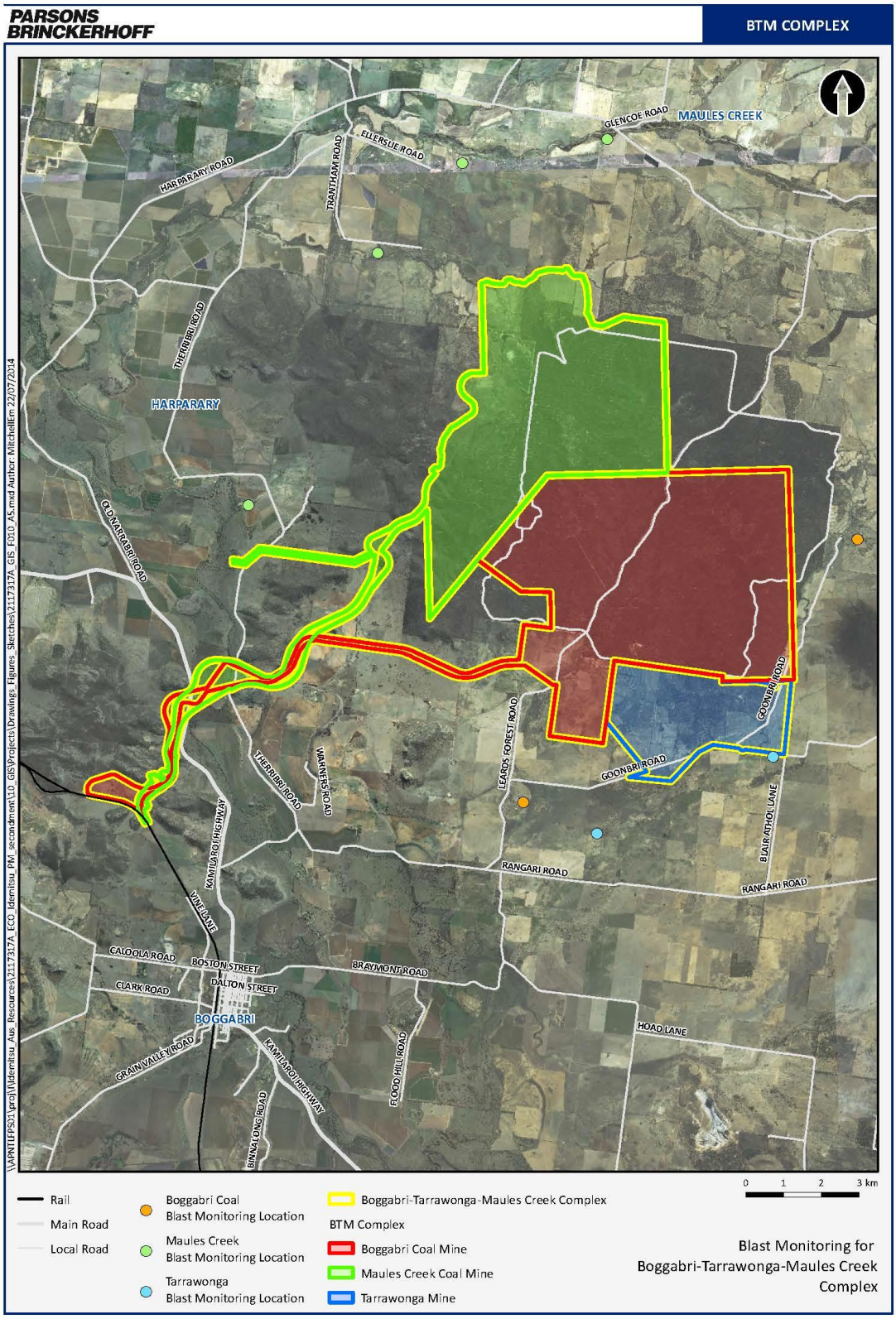

Figure 1.1 Location of the BTM Complex mines

1.2 Document structure

The structure of this report is as follows:

- **Section 1** provides an introduction to the BLMS, including the background to the BLMS, and the scope of the BLMS.
- **Section 2** provides an overview of the BTM Complex mines (BCPL, TCM, MCC).
- **Section 3** outlines the requirements for regional strategies.
- **Section 4** describes blast management criteria for each individual mine
- **Section 5** describes existing monitoring networks and the use of predictive meteorological forecasting to guide blasting activities.
- **Section 6** outlines strategies for cumulative impact management, communication, incident management and reporting.
- **Section 7** discusses strategies for the management of corrective and preventative actions.
- **Section 8** describes the document control process for this BLMS.
- **Section 9** provides a list of references used in this document.

1.3 Scope

This document is the overarching strategy for management of blasting within the BTM Complex.

Individual mines will manage their ongoing operations and associated blast management impacts in accordance with their site specific BMPs. Statutory requirements relating to blasting will be provided in each individual site's management plan.

It is envisaged that any extensions to mining operations in the BTM Complex will be incorporated into this strategy in the future.

2. The BTM Complex

2.1 Boggabri Coal Mine

The Boggabri Coal Mine is an existing open cut mine located within and adjoining the Leard State Forest, approximately 15 km northeast of the town of Boggabri in the Narrabri Shire local government area (the Project). The current operations include an open cut pit, infrastructure area, water management structures and a 17 km private haul road to the Boggabri coal loading rail terminal.

The original development consent for BCPL (DA36/88) allowed the mine to produce 5 million tonnes per annum (Mtpa) of run of mine (ROM) coal by open cut methods with mining operations undertaken 24 hours a day, seven days a week. However, a 2011 modification restricted the extraction rate to 3.5 Mtpa of ROM coal as part of a 2 year extension to mining operations. A modification, approved in June 2012, allowed for an increase in height of the overburden emplacement area (OEA) by 55 m. This modification was submitted to allow for the continuation of operations until an earlier major project application was assessed. The earlier major project application was lodged under the now-repealed Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and was approved by the PAC, under delegation by the Minister in July 2012.

The Boggabri Project Approval (DA 09_0182) allows Boggabri to extend its mining operations for a further 21 years, and increase its production rate to 7 Mtpa of ROM coal from a total resource of 145 Mt. The Project includes operation of existing ancillary equipment; construction of a new coal handling and preparation plant; a 17 km rail spur line; bridges over the Namoi River and Kamilaroi Highway; a rail load-out facility located at the mine; upgrade of the overburden and coal extraction haulage fleet (with an option for a drag-line); upgrade of electricity transmission lines; and other ancillary infrastructure.

A modification (Modification 3) was lodged in November 2013 to allow BCPL to transport coal from site by road until the rail spur is commissioned, which was approved in March 2014.

2.2 Maules Creek Coal Mine

The proposed Maules Creek Coal Mine is located directly to the northwest of Boggabri Coal Mine. There is an existing development consent covering coal mining within an area delineated as Coal Lease 375 (CL 375). This consent has been commenced, but no extraction of coal has occurred. Aston Resources Pty Limited, which has subsequently been acquired by Whitehaven Coal, submitted a project application under Part 3A of the EP&A Act seeking a contemporary Project Approval for coal mining and ancillary activities within this area.

The project application sought approval for extraction of up to 13 Mtpa of ROM coal for 21 years. Other key features of this Project include transportation of coal by rail to Newcastle; and development of site infrastructure including the CHPP and associated facilities; train loading facility; rail spur and loop; a mine access road; communications and power reticulation; explosives storage; and a water pipeline from the Namoi River.

The Maules Creek Coal Project (MCC) application (number 10-0138) under the now-repealed Part 3A of the EP&A Act was granted approval by the DP&I in October 2012. Condition 16 (g) of the Project Approval (as detailed in Table 1-2) also requires the preparation of a BLMS for the BTM Complex.

Two modifications to the project have subsequently been lodged. Modification 1, lodged in April 2013, sought approval for construction and operation of high voltage transmission lines and an associated

switching station, following detailed design; a minor extension to an existing 11 kV transmission line; and realignment of the CHPP area and associated facilities. Project approval was received in July 2013. Modification 2 was lodged in February 2014 seeking approval for an optimised design for key water related infrastructure components (raw water pipeline and pump station). This modification was approved in March 2014.

2.3 Tarrawonga Coal Mine

The Tarrawonga Coal Mine is an existing coal mining operation which obtained approval by the (now) DP&I to extract 2 Mtpa of ROM coal in 2005 (DA88-4-2005). TCPL, a subsidiary of Whitehaven Coal, submitted a project application in July 2011 for an extension of open cut mining operations with an increased production rate to 3 Mtpa of ROM coal for a further 17 years from 2013 to 2030. Key features of the Project include construction of a services corridor, including haul road link; use of upgraded facilities at Boggabri Coal Mine, including the proposed rail loop and spur; construction of new mine infrastructure and service facilities; waste rock emplacement expansion; and realignment of a section of Goonbri Creek.This project application was determined by the PAC on 22nd January 2013 and included the requirement that the proponent shall prepare and implement a Blast Management Plan for the Project that must include a BLMS for the BTM Complex.

A modification was lodged with the DP&I in May 2013 to allow for the processing of up to 3 Mtpa of ROM coal from Tarrawonga Coal Mine at the Boggabri Infrastructure Facilities in Coal Lease (CL) 368, and the associated transport of up to an additional 3 Mtpa of product coal along the private Boggabri rail spur. This modification is currently being assessed.

A further modification was lodged with the DP&I in February 2014 to allow continued trucking of Tarrawonga coal to the Whitehaven CHPP located north of Gunnedah post commissioning of the Boggabri Coal CHPP and rail spur. This modification is currently being assessed.

3. Regional strategies

The conditions of approval for the Boggabri Coal Mine and Maules Creek Coal specifically require the three mines of the BTM Complex produce joint strategies for:

- noise management
- blast management
- air quality management
- water management
- regional biodiversity (developed over 3 stages)
- biodiversity offsets.

Additionally, the conditions require cooperation and consultation between the mines with respect to:

- Aboriginal heritage conservation
- operational noise and air quality management, including online communications of onsite activities and monitoring; operating conditions and reactive dust management; and air quality and Greenhouse Gas (GHG) management
- transport, specifically options for transporting workers
- management of social impacts
- membership of Community Consultative Committees (CCC).

This BLMS addresses the requirement for a BLMS over the BTM Complex area and outlines the process that will be followed to scope, select and deliver joint monitoring and data management for blasting. Consultation for the BLMS is described in Appendix A.

4. Blasting criteria

4.1 Boggabri Coal Mine

The relevant blasting criteria have been extracted from the most recent BCPL Project Approval, and are summarised in Table 4.1.

Table 4.1 Boggabri Coal Mine blasting assessment criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
All public infrastructure	-	50 (or alternatively a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS2187.3-2006, or its latest version)	0%

The process for day to day management of compliance with respect to these conditions is outlined in the BCPL Blast Management Plan (BLMP).

4.2 Maules Creek Coal

The relevant blasting criteria have been extracted from the most recent Maules Creek Project Approval (project application 10_0138) and are summarised in Table 4.2.

Table 4.2 Maules Creek Coal blasting assessment criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
All public infrastructure	-	50 (or alternatively a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS2187.3-2006, or its latest version)	0%

The process for day to day management of compliance with respect to these conditions will be outlined in the MCC BLMP.

4.3 Tarrawonga Coal Mine

Relevant blasting criteria have been extracted from the recommended conditions of approval for project application 11_0047 for the Tarrawonga Coal Mine, and are summarised in Table 4.3.

Table 4.3 Tarrawonga Coal Mine blasting assessment criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
All public infrastructure	-	50 (or a limit determined by the structural design methodology in AS2187.2-2006, or its latest version, to the satisfaction of the Director-General	0%

4.4 BTM Complex

Table 4.4 summarises the current assessment criteria for the three mines of the BTM Complex.

Table 4.4 BTM Complex blasting assessment criteria

Criteria	Boggabri	Tarrawonga	Maules Creek
Blasting Hours	9AM – 5PM	9AM – 5PM	9AM – 5PM
Blasting Days	Monday to Saturday inclusive, excluding public holidays. Blasting outside of these days require written approval of the Director-General	Monday to Saturday inclusive, and no blasting is allowed on Sundays, public holidays or at any other time without the written approval of the Director-General	Monday to Saturday, excluding Sundays and public holidays unless prior approval from Office of Environment and Heritage (OEH) is given.
Blasting Frequency	1 blast per day, unless an additional blast is required following a blast misfire; and 4 blasts a week, averaged over a calendar year (i.e. maximum of 208 blasts per annum).	1 blast per day, unless an additional blast is required following a blast misfire.	Up to an average of 4 blasts per week, or approximately 200 blasts per calendar year.

The EA for Boggabri Coal Mine (for application 09_0182) also includes the following commitment: *'Boggabri Coal will manage its blasting practices such that the recommended DECCW guidelines, existing at the time of approval; will be met at all privately owned receivers'*. (Hansen Bailey, V.1, p. 86)

The EA further states that:
'*blast events will continue to be coordinated with the adjacent Tarrawonga Mine and any other future mining operations in the area to avoid any potential cumulative impacts'* (Hansen Bailey, V.1, p. 86).

The assessment criteria for the three mines, as outlined in Table 4.4, have been considered in preparation of the BLMS. Day to day management of blasting activities for the mines is detailed in their respective BLMPs.

5. Blast monitoring

5.1 Existing monitoring network

The mines of the BTM Complex already have comprehensive blast management systems in place. The existing blast monitoring network will continue to be used. The locations of monitors within the existing blast monitoring network are shown in Figure 1.1.

It is expected that little change will be required to the existing blast monitoring network to continue to ensure compliance with respect to blasting in the BTM Complex. However, there will need to be additional cooperation between mines of the BTM Complex, to minimise the potential for cumulative impacts. Protocols described in this BLMS will be used with the existing monitoring programs to ensure that blasting schedules are coordinated to avoid cumulative impacts on sensitive receivers.

5.2 Predictive forecast meteorology

It is proposed that more extensive changes will be made to the air quality networks within the BTM Complex in order to manage compliance. The changes, which are detailed in the BTM Complex Air Quality Management Strategy, include a proposed predictive forecast meteorology system, with half hourly forecasts up to 48 hours in advance. This system will download global meteorological data and forecasts on a daily basis that will be used to guide the planning of blasting activities.

As with any predictive forecast, confidence reduces with longer predictions, however the half hourly 48-hour forecasts will provide useful information for guiding the drilling and loading of blasts at each mine within the BTM Complex. The forecasts for the next 24-hour and 12-hour periods will provide more confidence in predictions for the day ahead and how weather may affect the proposed schedule for firing a blast.

Once the proposed meteorological system is configured and operating, the outcomes will be evaluated by a competent meteorologist or atmospheric science professional against actual meteorological data and the meteorological system will be validated and improved, where possible.

6. Cumulative blast management

6.1 Mitigation of cumulative blast impacts

The key management measure for the mitigation of cumulative blast impacts will be scheduling of blasts to ensure each mine fires their blast at separate times. Processes to mitigate blasting impacts associated with operations will be addressed in each mines' individual BLMPs. Each mine has or will develop a BLMP that outlines a consistent approach for the scheduling of blasts in consultation with other mines in the BTM Complex.

At least 24 hours' notice will be provided prior to a proposed blast. If there is no conflict regarding the scheduled blast times, there will be no further correspondence. If there are conflicting blast times between the mines, a revised schedule for firing the blasts will be agreed upon. The schedule will be developed to ensure blasts are fired with a considerable time gap between them to reduce any potential cumulative impacts.

If a late change to the blast schedule has occurred on any operation, outside the 30 minutes prior or 30 minutes after the scheduled time, then the mine operator is required to communicate these changes to the other operations. This will avoid any blasts to occur concurrently and avoid the cumulative impact of blast ground vibration and overpressure.

Cumulative air quality impacts will be dependent on blast locations, metrological conditions, time of blast events and dispersion of individual dust and fumes from each blast. A predictive forecasting tool will be investigated by the BTM complex which may assist in scheduling of blast events across the Complex.

6.2 Communication

Regular meetings will be held by the BTM Complex to discuss monitoring results and future operational events. Meeting minutes will be documented and distributed to each site.

When blasting criteria are identified as exceeded as a consequence of blasts from two or more mines, discussions will be held within the BTM Complex and the agencies and affected landholders (where an exceedance occurs on privately-owned land). This will include confirmation from the BTM Complex as to the blast time and identified time of exceedance from monitor reports to assist in identifying if the impact was due to more than one blast, or if it relates to single mines blasting activities.

The mines of the BTM Complex will also, if required, share baseline property inspection reports that are completed at the request of neighbouring landholders, in accordance with each site's Project Approval. Process to identify main source of blasting impacts

If there is uncertainty around the source of a blasting related incident (e.g. exceedance of assessment criteria or damage to a neighbouring building or other infrastructure), a meeting will be held by the BTM Complex representatives to review relevant data and investigate the cause of the incident. If the cause cannot be determined, then the BTM Complex will engage a suitably qualified expert to undertake an independent blast impact investigation. The outcomes of the investigation will help determine the responsibility of the mines for any corrective actions.

6.3 Blasting related incidents

Blasting related incidents such as misfires or exceedances of assessment criteria will be reported and managed in accordance with each mines' BLMP and incident management process. Incidents will be managed in accordance with the requirements of the *Protection of the Environment Operations Act 1997,* Coal *Mine Health and Safety Act 2002* and *Coal Mine Health and Safety Act Regulation 2006*.

6.4 Reporting

Management reports will be prepared regularly, noting performance against criteria. External reporting will include:

- individual Company websites
- Community Consultative Committees (CCCs)
- Annual Environmental Management Reports (AEMRs)
- annual returns
- exceedance reporting.

7. Corrective and preventative actions

7.1 Blasting criteria exceedance

If the monitoring results of a blast identify an exceedance of the mines relevant criteria, written notification of the exceedance will be provided to the other mines within the BTM complex, in addition to any investigation undertaken according to the respective mine's BLMP.

7.2 Unpredicted contingency

Unpredicted events, such as storms or earth tremors, will be identified and reported as impacting on vibration results on a case by case basis.

8. Document control

The BLMS has been developed with the input of representatives of BCPL, TCM and MCC.

8.1 Review and revision

The BLMS will be reviewed and revised at least every two years or on an ‘as required’ basis to incorporate improvements identified by the BTM Complex or appropriate requirements of government agencies. It will be the collective responsibility of the BTM Complex to review the BLMS.

9. References

Notice of Modification DA 88-4-2005 MOD 1 for the Tarrawonga Coal Mine.

Notice of Modification DA 36/88 2011 MOD 2 for the Boggabri Coal Mine.

Boggabri Coal Pty Limited, Boggabri Coal Mine Blast Management Plan (2012), Boggabri Coal Pty Limited, NSW

Whitehaven Mining Pty Limited, Tarrawonga Mine Blast Management Plan (2012), Whitehaven Mining Pty Limited, NSW

Appendix A

Regulatory Consultation

Consultation	Date	Details	Response
Boggabri Coal BLMP and BTM Complex BLMS lodged with the (then) DP&I	17.01.2013	BLMS for BTM Complex and BLMP lodged with DP&I.	Comments were received from the (then) DP&I in April 2013. Comments received were incorporated in Revision 2 of the BLMS.
Boggabri Coal CCC Meeting April 2013	30.04.2013	BLMP and BLMS was presented to the CCC for comment.	The BLMP and BLMS were presented to the CCC, with opportunity for feedback given. No further comment was received.
Blast Management Plan for Tarrawonga Coal Mine sent to EPA for comment	06.05.2013	The management plan contains details of the proposed BLMS for the BTM Complex	The EPA received the management plan and responded on 06.05.2013 that "the Environment Protection Authority (EPA) encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and designated environmental objectives. However, we do not approve or endorse these documents as our role is to set environmental objectives for environmental/ conservation management, not to be directly involved in the development of strategies to achieve those objectives"
Blast Management Plan for Boggabri Coal Mine sent to EPA for comment	June 2013	The management plan contains details of the proposed BLMS for the BTM Complex	The EPA received the management plan and responded on 18.06.2016 that 'The Environment Protection Authority (EPA) encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and designated environmental objectives. However, we do not approve or endorse these documents as our role is to set environmental objectives for environmental/ conservation management, not to be directly involved in the development of strategies to achieve those objectives'.
Revised Boggabri Coal BLMP and BLMS lodged with (then) DP&I	July 2013	Revised BLMS and BLMP lodged for approval.	Further comments were received and addressed on 14.6.2013. Plans were relodged and approved on 31 July 2013.
Whitehaven Coal joint CCC Meeting November 2013	19.11.2013	The BLMS was presented to the CCC meeting.	The BLMS was reviewed and discussed at the meeting. Comments were considered in preparation of this version of the BLMS.
Blast Management Plan for Boggabri Coal Mine sent to EPA for comment	28.01.2014	The management plan contains details of the proposed BLMS for the BTM Complex	The EPA received the management plan and responded on 12.02.2014 that "the Environment Protection Authority (EPA) encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and designated environmental objectives. However, we do not approve or endorse these documents as our role is to set environmental objectives for environmental/ conservation management, not to be directly involved in the development of strategies to achieve those objectives"

Consultation	Date	Details	Response
Blast Management Plan for Tarrawonga Coal Mine presented to CCC	08.05.2014	BLMP was presented to CCC for comment.	BLMP was signed off at the May CCC meeting on May 8th.
Blast Management Plan for Maules Creek Coal Mine sent to EPA and community members for comment	20.06.2014	The management plan contains details of the proposed BLMS for the BTM Complex	The EPA received the management plan and responded that "the Environment Protection Authority (EPA) encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and designated environmental objectives. However, we do not approve or endorse these documents as our role is to set environmental objectives for environmental/ conservation management, not to be directly involved in the development of strategies to achieve those objectives"