BLAST MANAGEMENT PLAN

Edition	Rev.	Comments	Author	Authorised By	Date
1	0	Initial document	RW Corkery & CO Pty Ltd	Chris Burgess	January 2006
	1	Amendments to monitoring locations	Trevor Thompson	Danny Young	November 2008
	2	2010 modification review	Jill Scealy	Danny Young	March 2011
	3	PA 11_0047 review	Lachy Johnson	Jill Johnson	December 2014
	4	PA 11_0047 review	Lachy Johnson	Jill Johnson	December 2016
2	1	PA 11_0047 review	Todoroski Air Sciences	Environmental Superintendent	August 2018
	2	PA 11_0047 review	Todoroski Air Sciences	Environmental Superintendent	October 2019
	3	PA 11_0047 review	Todoroski Air Sciences	Environmental Superintendent	October 2020
	4	PA 11_0047 review- MOD7	Todoroski Air Sciences /TCM	TCM	May 2021

Contents

Figures

Tables

Appendices

ACRONYMS USED THROUGHOUT THIS DOCUMENT

AS	-	Australian Standard
AR	-	Annual Review
AEMR	-	Annual Environmental Management Report
BMP	-	Blast Management Plan
CCC	-	Community Consultative Committee
EPA	-	Environment Protection Authority
DPI&E	-	Department of Planning, Industry and Environment
EPL	-	Environment Protection Licence
MEG	-	Regional NSW – Mining, Exploration and Mining
MIC	-	Maximum Instantaneous Charge
ML	-	Mining Lease
TCM	-	Tarrawonga Coal Mine/Tarrawonga Coal Pty Ltd

1 INTRODUCTION

The Tarrawonga Coal Mine (TCM) is located approximately 15 km northeast of Boggabri, 10km north of the Canyon Coal Mine (formerly Whitehaven, in closure) and south of, and adjacent to, the Boggabri Coal Mine (BCM) (Figure 1). The mine site is contained within Mining Lease (ML) 1579, ML 1693, ML 1685 and ML 1749 as shown in Figure 1. The mine site is being developed by Tarrawonga Coal Ltd (TCPL), which is owned by Whitehaven Coal Mining Pty Ltd.

The mine site operates under Project Approval (PA) 11_0047 (granted 22 January 2013), and have made 8 Modifications since this date. TCPL also operates under Environment Protection Licence (EPL) 12365.

This Blast Management Plan (BMP) has been prepared to ensure that the blasting associated with the mine's operations are in compliance with criteria stated in PA 11_0047. To ensure this, the BMP has been prepared in accordance with Condition 3(21) of PA 11_0047.

The following sub-sections identify the monitoring locations and the nature of the monitoring equipment to be used, equipment setup and post-blasting procedures as well as blast information analysis and reporting procedures.

The original BMP was prepared in consultation with the EPA and the Tarrawonga Community Consultative Committee (CCC).

Information regarding blast management and performance to date is available in the site's Annual Environmental Management Reports (AEMR)/Annual Reviews (AR).

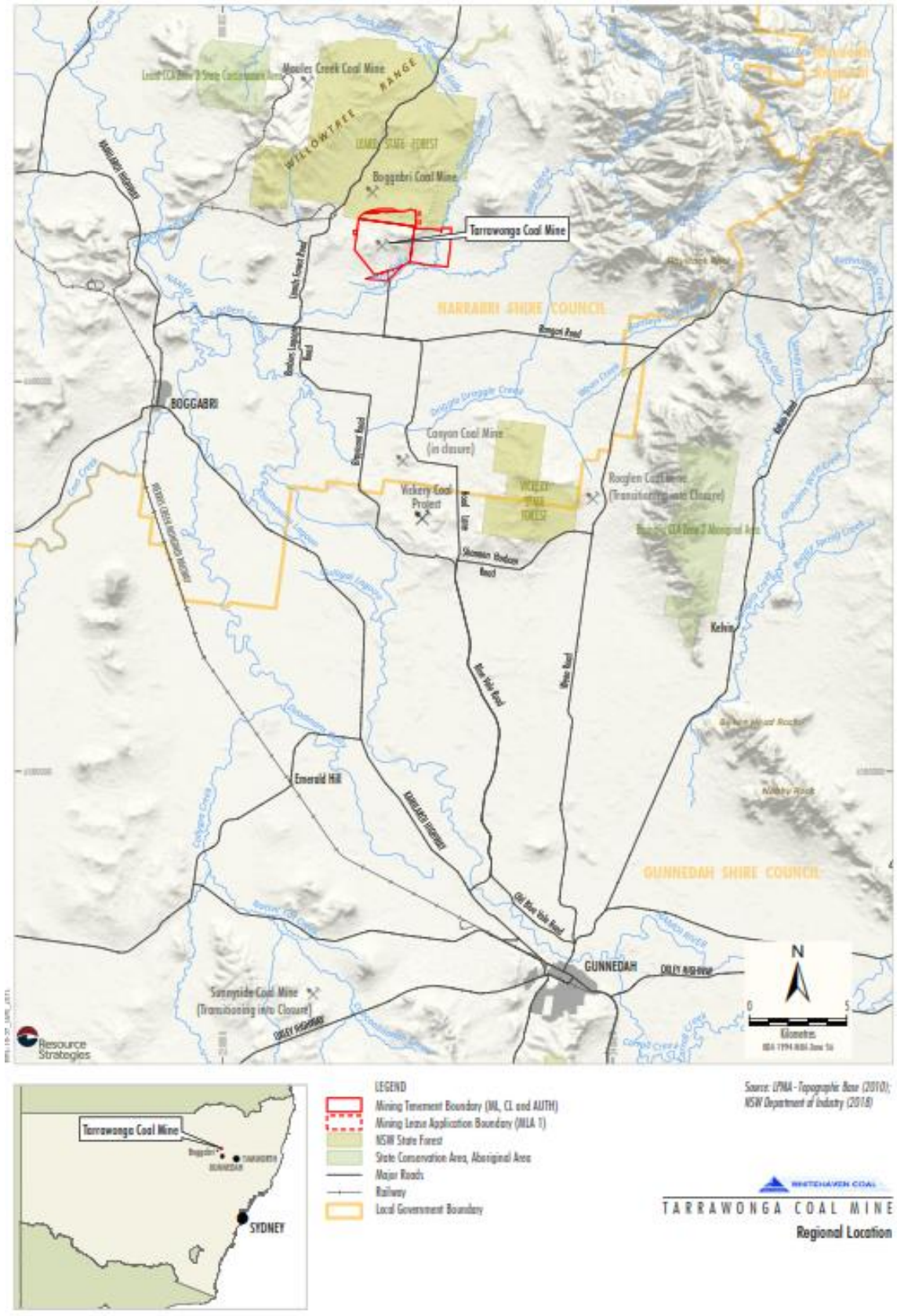

Figure 1 Tarrawonga Coal Mine Location

2 STATUTORY REQUIREMENTS

2.1 PA 11_0047

This Blast Management Plan (BMP) follows the management plan requirements specified in Schedule 5 Condition 3 of PA 11_0047 and complies with the requirements of Schedule 3 Condition 21, which states:

Blast Management Plan

21. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:

(a) be submitted to the Secretary for approval by the end of May 2013;

(b) be prepared in consultation with the EPA and interested members of the local community who would potentially be affected by blasting;

(c) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site;

(d) describe the measures that would be implemented to ensure:

- *best management practice is being employed; and*
- *compliance with the relevant conditions of this approval;*

(e) include a road closure protocol for blasting within 500 metres of a public road, that has been prepared in consultation with council;

(f) include a specific blast fume management protocol to demonstrate how emissions will be minimised, including risk management strategies if blast fumes are generated;

(g) include a monitoring program for evaluating blasting performance, which includes

- *compliance with the applicable criteria; and*
- *minimising blast fume emissions; and*

(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.

Blasting Criteria

In addition, the Project Approval includes the following conditional requirements from Schedule 3 relevant to blast management at the Tarrawonga Coal Mine:

14. The Proponent shall ensure that blasting does not cause any exceedance of the criteria in Table 4.

Table 4: Blasting 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 AS 2187.2-2006, or its latest version, to the satisfaction of the Secretary)*	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner to exceed the limits in Table 5, and the Proponent has advised the Department in writing of the terms of this agreement.

Blasting Hours

15. The Proponent shall only carry out blasting on the site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

Blasting Frequency

16. The Proponent may carry out a maximum of:

(a) 1 blast a day; unless an additional blast is required following a blast misfire; and

(b) 4 blasts a week, averaged over a calendar year, for the project.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.

Note: For the purposes of this condition a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine

Property Inspections

17. If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open-cut pit on site, for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Proponent shall:

(a) commission a suitably qualified, experienced and independent person, whose appointment is

acceptable to both parties, to:

(b) establish the baseline condition of any buildings and/or structures on the land, or update the previous property inspection report; and

(c) identify any measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and

(d) give the landowner a copy of the new or updated property inspection report.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.

Property Investigations

18. If any owner of privately-owned land within 2 kilometres of blasting operations, or any other landowner nominated by the Secretary, claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim in writing from the landowner, the Proponent shall:

(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and

(b) give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Secretary.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.

Operating Conditions

19. During mining operations on site, the Proponent shall:

(a) implement best practice blasting management to:

• protect the safety of people and livestock in the surrounding area;

• protect public or private infrastructure/property in the surrounding area from any damage;

• minimise the dust and fume emissions of any blasting; and

• minimise blasting impacts on heritage items in the vicinity of the site;

(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

(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.

20. The Proponent shall not undertake blasting on-site within 500 metres of:

(a) any public road without the approval of Council; or

(b) any land outside of the site not owned by the Proponent, unless:

• the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised the Department in writing of

the terms of this agreement; or

• the Proponent has:

- *demonstrated that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and*
- *updated the Blast Management Plan to include the specific measures that would be*

implemented while blasting is being carried out within 500 metres of the land, to the satisfaction of the Secretary.

2.2 Other Statutory Requirements

Other relevant statutory requirements relevant to blasting include, but are not limited to:

- Dangerous goods and explosives notifications and licencing with WorkCover NSW in accordance with the *Work Health and Safety Act 2011*, *Work Health and Safety Regulation 2011* and *Explosives Act 2003*.
- Implementation of an Explosives Control Plan and management of notifiable incidents under the *Work Health and Safety (Mining) Act, 2013.*

3 BLASTING CONTROLS AND MANAGEMENT PROCEDURES

Tarrawonga Coal Mine seeks to minimise air blast overpressure, ground vibration levels, fly rock, fume, dust and offensive odour from blasting activities. Control of ground vibration, overpressure and fly rock impacts will be achieved by implementing the procedures and safe guards indicated as follows:

- Comply with the relevant procedures prior to the commencement of any blast by referring to the relevant internal documents.
- Undertake a pre-blast environmental assessment with consideration given to meteorological conditions such as cloud cover, wind speed and direction and the category of inversions prior to each blast;
- Comply with blast loading and pre blast designs, unless risks are determined by the Shot-Firer at the time of loading that may be mitigated through changes to design;
- Use of suitable stemming material and the use of adequate stemming lengths to ensure maximum internment of explosive charges, therefore minimising overpressure; and
- Use of monitoring data to consider any likely overpressure or vibration level exceedance and incorporate necessary aspects into blast design..

The internal documents relating to explosives management include information on storage, issue and transport of explosives and bulk products, shot planning, drilling blast holes, blast monitoring, relevant legislation, training, review, auditing and explosives safety requirements. The documents are prepared and implemented in accordance with relevant legislation and in consultation with SafeWork NSW and the Mines Inspector from the Department of Trade and Investment. They are not provided with this BMP on the basis of the security sensitive information they contain.

3.1 Structural and Human Impacts

The Tarrawonga Coal Project Environmental Assessment assessed the potential for structural damage from blasting at surrounding project related and privately owned properties. The assessment identified that the potential for a marginal exceedance of structural damage vibration criteria was limited to the project related “Blair Athol” residence, located to the south-east of the project site, later in the project life. The residence will be vacated when structural damage criteria exceedances are predicted and a structural inspection will be undertaken prior to reoccupation if monitoring confirms that an exceedance in blast criteria occurred.

Predicted overpressure and ground vibration levels at all other receivers are such that the potential for structural damage or impacts on human comfort resulting from blasting is negligible.

There is no other land, with the exception of public roads, which falls within 500m of blasting operations over the life of the mine.

3.2 Aboriginal and Non – Aboriginal Heritage

The nature of the known artefacts (isolated finds, artefact scatters and culturally modified trees) suggests that blasting is likely to have minimal impact on these features, with minimal predicted impacts from blast vibration and fly-rock. Known artefact sites within the blast exclusion zone will be subject to regular inspections to verify blasting activities are not causing any damage, or impacting upon, those artefact locations.

An assessment of blast vibration will be undertaken where a known artefact site that could potentially be impacted lies within the 300m exclusion zone.

A non-aboriginal heritage site (survey marker tree) is located near receiver 1d. This tree is predicted to be subject to vibration levels marginally in excess of 10 mm/s, the structural damage criterion of buildings. It is noted however that, generally speaking, trees are less susceptible to blast vibration damage than buildings and no periodic monitoring of the tree is proposed.

3.3 Livestock

Avoidance of impacts on livestock from fly-rock is managed via a procedure for Blast clearance and Firing (Appendix 1). Where livestock are identified as being within the blast clearance zone, appropriate measures will be taken to relocate livestock from this location prior to blasts proceeding. At no stage throughout the life of the mine will blasting activities be within 500 metres of privately owned land.

3.4 Management of Road Closures

A *Tarrawonga Coal Mine Road Closure Management Plan* (Appendix 2) developed in consultation with Narrabri Shire Council (NSC), be implemented to minimise impacts on the local community. The main objectives are to:

- Ensure safety and protection of the public, residents, property and livestock when blasting within 500m of a public road (i.e Goonbri Road);
- Coordinating blast schedules with neighbouring mines to minimise cumulative impacts of blasting;
- Notify in advance relevant stakeholders, including the public and nearby properties, of blasts that will temporarily close local roads;
- Minimise road closures and the potential impacts on road users, local residents and businesses, through avoiding peak traffic periods.

3.5 Air Vibrations (Overpressure)

Noise (the audible part of the air vibration spectrum) and air-blast (the remaining sub-audible part of the air vibration spectrum) generation can be controlled by ensuring that the explosion energy is consumed in fragmenting and displacing the overburden by the time the gases vent

(via the broken burden rock and/or ejected stemming material) into the atmosphere.

This objective will be met by implementing the following measures:

- Where practicable, the blast face is orientated away from or at an oblique angle to nearby residences;
- Blast hole spacing is implemented in accordance with blast design;
- The burden distance and stemming length are carefully selected and then implemented precisely;
- Appropriate quality materials (eg. 20mm aggregates) are used for stemming;
- Charges are fired in correct sequence and with inter-row delays that provide good progressive release of burden; and
- The maximum weight of explosive detonated in a given delay period (the Maximum Instantaneous Charge - MIC) is limited to conservative and proven levels.
- Conducting blasting both before the establishment, and after the break-up, of low-level atmospheric temperature inversions (category F & G).

3.6 Ground Vibrations

When a confined explosive charge detonates, a fraction of the liberated energy is manifested as seismic energy (i.e. as ground vibrations). The magnitude of ground vibrations depends upon:

- The MIC for the blast;
- The distance between the blast and a residence or sensitive structure; and
- The characteristics of the intervening material (rock, soils, geological structures, etc.) through which the ground vibration wave propagates.

Ground vibration will be controlled by ensuring:

- The minimum practicable weight of explosive detonates at an instant (i.e. minimising the MIC) by using the maximum number of delay periods in each blast; and
- Most of the energy liberated by the charge(s) on a given delay number is consumed in providing good fragmentation, adequate displacement, rather than in creating ground vibrations (i.e. by ensuring that the burden distance and effective sub-drilling are not too large).

3.7 Dust and Other Post-Blast Emissions

Control of blast associated dust generation, offensive odour and fumes will be achieved by the following:

- Blast design will be developed in accordance with the Blas Planning, Design &

Record Keeping (Appendix 3). The scope of this procedure is to allow safe blasting of overburden and coal, while ensuring suitable fragmentation and muck pile profile to match the chosen digging equipment, whilst remaining within the environmental limits set for the mine.

- Undertaking a pre-blast environmental assessment with consideration given to meteorological conditions such as cloud cover, wind speed and direction and the strength of temperature inversions prior to each blast;
- Minimising the potential for the delay in firing of shots which have been loaded, especially into wet holes, considering the restrictions of existing weather conditions;
- Ensuring that blasts are fired in suitable weather conditions that lower the potential for blast generated dust and/or fumes to be blown towards neighbouring properties. A blast checklist is used to determine the wind speed and wind direction conditions for which the decision will be made on whether to proceed or postpone the blast;
- In Tarrawonga Centre (TC) pit if stability category F or G conditions are detected and/or wind speeds are emanating from the West or North West, blasting may be delayed if it is considered these conditions could pose a risk to environmental compliance, until more favourable weather conditions are encountered;
- In Tarrawonga North (TN) and Hill (TH) pits, if stability category F or G conditions are detected and/or wind are emanating from the 50-90 degrees direction and winds are greater than 7m/s, blasting may be delayed until consent has been given for firing by Boggabri Coal Mine (BCM).
- After the blast initiation, monitor and photograph and/or video any blast fume to record the direction of travel and dispersion of the fume cloud, this will be undertaken from two directions where practical;
- Tarrawonga Blast Fume Management (Appendix 5) will be adhered to by all relevant associated personnel;
- Pollution Incident Response Management Plan (PIRMP) (Appendix 4) is applicable across all Tarrawonga Coal Mine operations subject to EPL 12365 and is implemented in the event of a pollution incident. The PIRMP details how sensitive receivers will be advised and actions to take in a declared emergency situation; and
- In the event a blast fume cloud is created and is travelling in the direction of local residences, the fume cloud will be continually monitored and every endeavour will be made to contact nearby personnel and residents as soon as possible to inform them of any impending fume and provide advice to remain indoors until the fume has passed.

3.8 Cumulative Blast Management Strategy

TCM along with Boggabri Coal Mine and Maules Creek Coal Mine have developed the BTM

Complex Blast Management Strategy in order to minimise cumulative blasting impacts (refer to Appendix 6).

4 INSPECTIONS AND NOTIFICATIONS

4.1 Pre-Blasting Inspections

WHC owns all the lands with buildings and/or structures within 2 kms radius south of the approved open-cut pit onsite therefore conditions 1, 17 and 18 of Schedule 3 do not apply

4.2 Pre-Blasting Notification

4.2.1 Public Notification

TCM maintains a list of contact details of, surrounding landholders and neighbours who have requested to be notified prior to each blast;. TCM provides notification to any person who expresses an interest in being notified about the blasting schedule at the mine. Notification includes email, phone call or text message (depending on the individual's preference) generally 24 hours prior to the blast and/or on the day of the blast.

Notification to the general public about proposed blasting dates and times is provided via the blast notification sign at the entrance to the mine site. In addition, details about each upcoming blast (including date, time and road closure information) are provided under the "Community" tab on the Whitehaven Coal website.

4.2.2 Liaison with Adjacent Mines

TCM, Boggabri Coal Mine and Maules Creek Coal Mine have developed the BTM Blast Management Strategy which specifies that generally 24 hours' notice be provided prior to a proposed blast. Notification is in the form of an email or text message to relevant mine personnel. Where possible, TCM schedule blasts to initiate generally at, 12:00pm however weather condition depending, the blast can be put forward or postponed.

Boggabri Coal schedules blasts to initiate at either 11.00am or 3pm (generally), and Maules Creek Coal schedules blasts to initiate at 1pm (generally). This ensures cumulative impacts are avoided if blasts are scheduled on the same day. Personnel from all three mines liaise accordingly (e.g. via email or phone) if blast times need to be altered.

5 MONITORING AND REPORTING

5.1 Monitoring Program

5.1.1 Parameters Measured and Monitoring Frequency

Monitoring must be undertaken for each blast as specified in Table 1.

Table 1 Monitoring Parameters

Parameter	Units of Measure	Frequency	Sample Method
Blast Noise	DB(Lin Peak)	Every Blast	Type 1 noise blast logger
Blast Vibration	mm/s	Every Blast	Geophone logger or similar

In addition to blast monitoring at the nominated sites, TCM also completes an Environmental Blast Checklist **Appendix 7** which includes a notification checklist, pre-blast weather conditions assessments every hour prior to the blast (commencing at 5 hours prior to the blast) and at the time of the blast and a post-blast assessment which includes fume rating.

All blasts are also captured via video for playback in the event of a blast not performing to expectations. This allows for subsequent review and identification of possible contributors to a blast outcome.

5.1.2 Monitoring Locations

Blast monitors are currently established at the private properties “Coomalgah” and the project related “Tarrawonga” property to monitor air-blast overpressure (dBL) and peak particle velocity (mm/s), i.e. ground vibration. The closest resident to the “Tarrawonga” monitoring location is at the “Barber’s Lagoon” property.

Blast monitoring at the “Tarrawonga” residence will not be used to directly evaluate compliance at this residence, but may be used to infer compliance at other, more distant locations including Barber’s Lagoon. This is because Tarrawonga has become a mine-owned residence, where compliance is now not required.

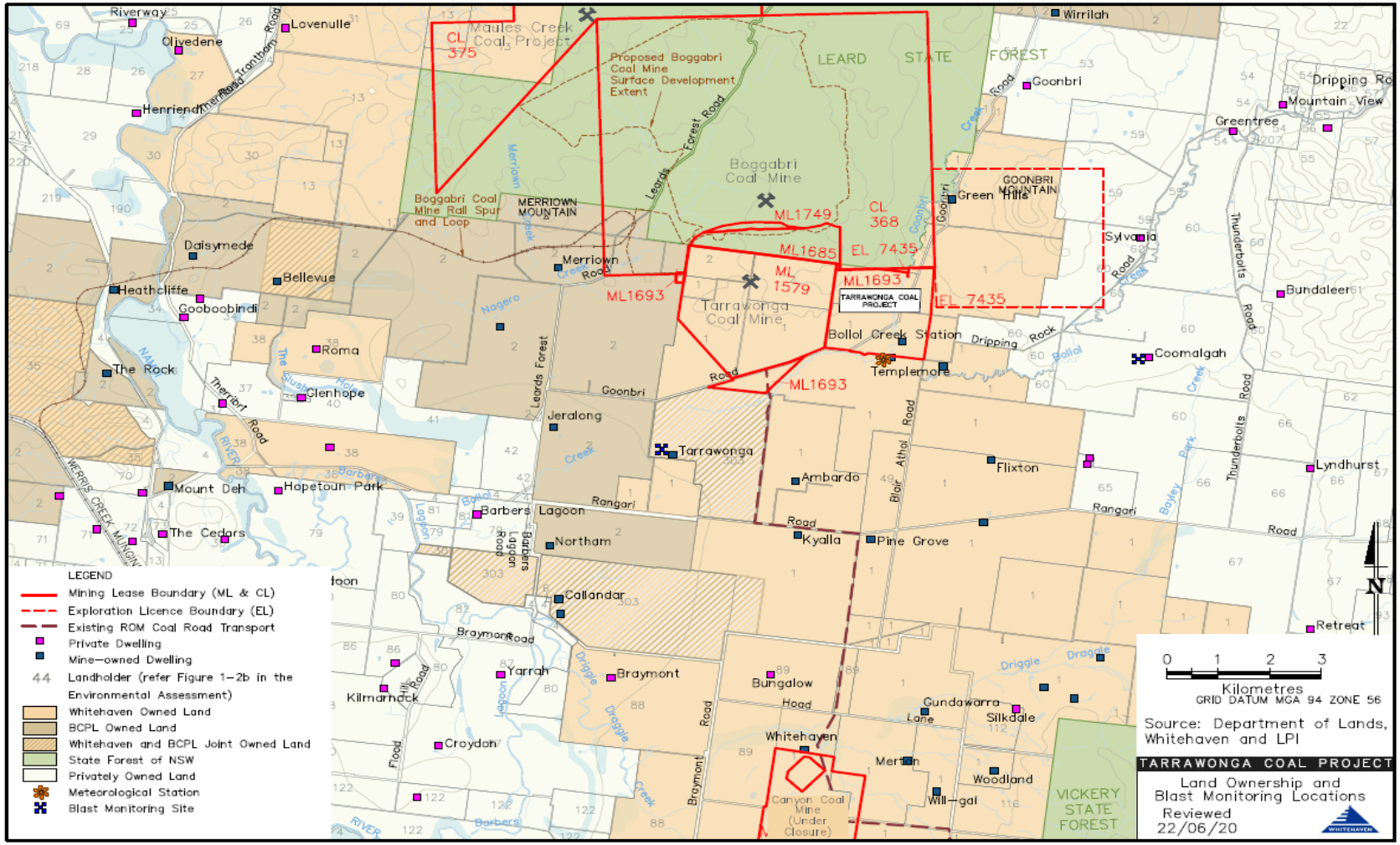

Figure 2 Land Ownership and Blast Monitoring Locations (No changes in 2021)

5.1.3 Blast Fume Monitoring and Reporting

Blast fume monitoring will be undertaken for every blast. The results of the blast will be recorded and any incident of fume will undergo internal investigation and ranking. The Department of Planning and Environment and the NSW EPA will be notified of any level 3C fume event leaving the premises and any level 4 or 5 fume event. Fume is rated on the Australian Explosives Industry and Safety Group Inc. – Code of Good Practice: Prevention and Management of Blast Generated NOx Gases in Surface Blasting.

5.2 Reporting

Blast monitoring results are reported via Community Consultative Committee (CCC) meetings and Annual Reviews.

Reporting of exceedances is discussed in Section 6.1.2.

6 MANAGEMENT OF INCIDENTS, EXCEEDANCES, NON COMPLIANCES AND COMPLAINTS

6.1.1 Blasting Related Incidents

Safety related incidents (such as misfires) will be recorded and managed via the Whitehaven incident management process and in accordance with the Work, Health and Safety (Mines) Act 2013 and Work, Health and Safety (Mines) Regulation 2014.

6.1.2 Blasting Criteria Exceedance

6.1.2.1 Agency Notification

In the event that the monitoring results of a blast identify an exceedance of:

- Peak vector sum velocity (ground vibration) – 5mm/s (ppv); and/or
- Peak overpressure – 115dBL,

TCM will initiate investigation as to the cause of the exceedance.

It is noted that the above criteria are able to be exceeded for up to 5% of the blasts in any one year but not to exceed a:

- Peak vector sum velocity (ground vibration) - 10mm/s (ppv); and/or
- Peak overpressure – 120dBL.

As required by Schedule 5 Conditions 8 of PA 11_0047, TCM will notify DPIE of any blasting related non-compliances or exceedances as soon as practicable after TCM becomes aware of the issue and will provide DPIE with a detailed written report on the incident.

Exceedances and incidents will also be discussed in the Annual Review.

6.1.2.2 Landholder Notification

As required by Condition 3 of Schedule 4 of PA 11_0047, results obtained showing an exceedance of blasting criteria, TCM will notify the affected landowners and tenants in writing of the exceedance as soon as practicable, and provide regular monitoring results to each of these parties until the mine is complying with the relevant criteria.

6.1.2.3 Pollution Events

In the case of potential pollution events the reporting procedures outlined in the Tarrawonga Blast Fume Management (Appendix 5) and the site Pollution Incident Response Management Plan (PIRMP) (Appendix 4) will be adhered to.

6.1.3 Complaints

Any complaints received will be managed in accordance with complaints management protocol described as follows:

- A publicly advertised telephone complaints line will be in place to receive complaints during operating hours and record complaints at other times.
- Each complaint received will be recorded on a Complaints Register, which will include the following details:
    - The date and time of complaint.
    - Any personal details the complainant wishes to provide or if no such details are provided a note to that effect.
    - The nature of the incident that led to the complaint.
    - The action taken by TCM in relation to the complaint, including any follow-up contact with the complainant.
    - If no action was taken by TCM, the reason why no action was taken.
- The Environmental Officer or representative will be responsible for ensuring that an initial response is provided generally within 24 hours of receipt of a complaint (except in the event of complaints recorded when the mine is not operational).
- Additional measures will be undertaken as required to address the complaint. This may include visiting the complainant, or inviting the complainant to the mine site.
- Once the identified measures are undertaken, the Environmental Officer or representative will update the Complaints Register.
- If necessary, follow-up monitoring will take place to confirm the source of the complaint is adequately mitigated.

A copy of the Complaints Register will be kept by TCM and made available to the Tarrawonga Coal Mine Community Consultative Committee (CCC) and the complainant (on request). Complaints register is also available on the Whitehaven website and updated as required. A summary of complaints received every 12 months will be provided in the Annual Review. Based on the nature of individual complaints, specific contingency measures may be implemented to the (reasonable) satisfaction of the complainant. The Environmental Officer or representative retains responsibility to ensure that complaints received are properly recorded and addressed appropriately.

6.1.4 Property Investigations

In accordance with Schedule 3, Condition 18 of PA 11_0047, if any owner of privately-owned land within 2 kilometres of blasting operations, or any other landowner nominated by the Secretary, claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim in writing from the landowner, the Proponent shall:

(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and

(b) give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Secretary.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution. However as mentioned in section 4.1, WHC owns all the properties within the 2kms of blasting operations.

6.1.5 Unforeseen Impact Protocol

Unforeseen impacts in relation to blasting are generally considered to be in relation to criteria exceedances or non-compliances (e.g. failure to monitor) and complaints, which are addressed in Section 6.

7 DOCUMENT REVIEW AND CONTINUOUS IMPROVEMENT

This document will be reviewed in accordance with the requirements of Condition 5 Schedule 5 of PA 11_0047.

Most recent

Appendix 1	Blast Clearance and Firing
Appendix 2	Road Closure Management Plan
Appendix 3	Blast Planning, Design and Record Keeping
Appendix 4	PIRMP
Appendix 5	Tarrawonga Blast Fume Management
Appendix 6	BTM Complex Blast Management Strategy
Appendix 7	Example of Environmental Blast checklist template