CANYON COAL MINE
BLASTING MONITORING PROGRAM

<table>
<thead>
<tr>
<th>Edition</th>
<th>Rev.</th>
<th>Comments</th>
<th>Author</th>
<th>Authorised By</th>
<th>Date</th>
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<tr>
<td>1</td>
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<td>Initial document</td>
<td>Emily Clements</td>
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<td>05/2018</td>
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</table>
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**ACRONYMS USED THROUGHOUT THIS DOCUMENT**

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<tr>
<th>AR</th>
<th>Annual Review (previously Annual Environmental Management Report (AEMR))</th>
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<td>DA</td>
<td>Development Application</td>
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<td>EPA</td>
<td>Environment Protection Authority</td>
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1 INTRODUCTION

The Whitehaven Coal Mine (now known as Canyon Coal Mine) is located within the Narrabri Shire, approximately 30 km north-west of Gunnedah and 15 km east of Boggabri in the Gunnedah coalfields of NSW. The mine is approved under DA 8-1-2005, as modified (a copy of which is available on the Whitehaven website).

The mine commenced operations in 2000 and ceased mining in 2009 following exhaustion of the resource. The site has undergone extensive rehabilitation and the majority of surface infrastructure, including all coal handling and processing infrastructure, has been removed.

This Blasting Monitoring Program has been prepared in accordance with Schedule 3 Condition 16 of DA 8-1-2005, as modified.
Figure 1 - Canyon Coal Mine Location
2 RELEVANT CRITERIA

Schedule 3 of DA 8-1-2005 states the following conditions in regard to blasting. Note that blasting no longer occurs due to the site now being in closure.

(12) The Applicant shall ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 9 at any residence on privately-owned land.

Table 9: Airblast Overpressure Impact Assessment Criteria

<table>
<thead>
<tr>
<th>Airblast Overpressure Level (dB(Lin Peak))</th>
<th>Allowable Exceedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>5% of the total number of blasts in a 12 month period</td>
</tr>
<tr>
<td>120</td>
<td>0%</td>
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</table>

Note: The overpressure values in Table 9 apply when the measurements are performed with equipment having a lower cut-off frequency of 2 Hz or less. If the instrumentation has a higher cut-off frequency a correction of 5 dB should be added to the measurement value. Equipment with a lower cut-off frequency exceeding 10 Hz should not be used.

(13) The Applicant shall ensure that the ground vibration level from blasting at the development does not exceed the criteria in Table 10 at any residence on privately owned land.

Table 10: Ground Vibration Impact Assessment Criteria

<table>
<thead>
<tr>
<th>Peak Particle Velocity (mm/s)</th>
<th>Allowable Exceedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5% of the total number of blasts in a 12 month period</td>
</tr>
<tr>
<td>10</td>
<td>0%</td>
</tr>
</tbody>
</table>

(14) The applicant shall only carry out blasting at the development between 9am and 5pm Monday to Saturday. No blasting is allowed on Sundays, public holidays or any other time without the written approval of the EPA.

(15) The applicant shall not carry out more than 1 blast a day at the site without the written approval of the EPA.

(16) Within 6 months of this consent, the Applicant shall prepare and implement a detailed Blasting Monitoring Program for the development in consultation with the EPA, and to the satisfaction of the Secretary.

(17) During the life of the development, the Applicant shall:
(a) operate a blasting notification system agreed to by the Secretary, to provide the public with up-to-date information on blasting operations at the development;
(b) notify the landowner/occupier of any privately-owned land within 4km of the development about the system on an annual basis.

(18) If any landowner within a 2km of the development, or any other landowner nominated by the Secretary, claims his/her property, including infrastructure such as water supply or underground irrigation mains, has been damaged as a result of blasting at the development, the Applicant shall within 3 months of receiving the request:
(a) commission a suitably qualified person whose appointment has been approved by the Secretary to investigate the claim; and
(b) give the landowner a copy of the property investigation report.
If this independent investigation confirms the landowners claim, and both parties agree with these findings, then the Applicant shall repair the damages to the satisfaction of the Secretary.

If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.

If the matter cannot be resolved within 21 days, the Secretary shall refer the matter to an Independent Dispute Resolution Process (See Appendix 2).

3 MONITORING

As a result of blasting no longer being undertaken on site due to its closure, there is no need for blast monitoring to be carried out.

4 COMPLAINT MANAGEMENT PROCEDURE

The following complaints management protocol will be followed:

- A publicly advertised telephone complaints line is in place to receive complaints.
- 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 WHC in relation to the complaint, including any follow-up contact with the complainant;
  - If no action was taken by WHC, the reason why no action was taken.
- The Environmental Officer will be responsible for ensuring that an initial response is provided within 24 hours of receipt of a complaint.
- 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 will sign off on the relevant complaint within the Complaints Register.

A copy of the Complaints Registers will be kept by WHC and made available to the complainant (on request). An annual summary of complaints received will be provided in the Annual Review.
5 DOCUMENT REVIEW AND REPORTING

This document will be reviewed in accordance with the requirements of Schedule 5 Condition 12 of DA 8-1-2005, as modified and any relevant information reported in the AR.