

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure, I modify the development consent referred to in Schedule 1, as set out in Schedule 2.

David Kitto
Director, Mining and Industry Projects

Sydney

2013

SCHEDULE 1

The development consent (DA 376-8-2003) granted by the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration) for the Bulga Coal Continued Underground Operations on 23 February 2004.

SCHEDULE 2

1. In Schedule 2, delete the definitions for AEMR, Applicant, DECCW, Department, Director-General, DII(Minerals), Land, Minister, MOP, Privately owned land, RTA and Site and insert the following definitions in alphabetical order:

Adaptive management	Adaptive management includes monitoring subsidence impacts and subsidence effects and, based on the results, modifying the mining plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and designated ranges and in compliance with the conditions of this consent
Annual Review	The review required by condition 2 of Schedule 6
Applicant	Bulga Coal Management Pty Limited, or its successors
Blakefield North Mine	The underground mine in the Blakefield Seam set out in EA (Mod 5)
Built features	Includes any building or work erected or constructed on land, and includes dwellings and infrastructure such as any formed road, street, path, walk, or driveway and any pipeline, water, sewer, telephone, gas or other service main
Conditions of this consent	Conditions contained in Schedules 3 to 6 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department, or delegate
DRE	Division of Resources and Energy, within the Department of Trade & Investment, Regional Infrastructure & Services
DSC	Dams Safety Committee
EAs	The documents listed in condition 2 of Schedule 3
EA (Mod 4)	The modification application 376-8-2003 MOD 4 and Environmental Assessment prepared by Umwelt (Australia) Pty Limited, dated December 2009, and the response to submissions letter dated 22 April 2010
EA (Mod 5)	The modification application 376-8-2003 MOD 5, Environmental Assessment and Statement of Commitments prepared by GSS Environmental dated November 2012 and the response to submissions letter dated 8 April 2013
Environmental consequences	The environmental consequences of subsidence impacts, including: damage to built features; loss of surface water flows to the subsurface; loss of standing pools; adverse water quality impacts; development of iron bacterial mats; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; and ponding

EPA	Environment Protection Authority
EPL	Environment Protection Licence issued under the POEO Act
Executive Director Mineral Resources	Executive Director Mineral Resources within DRE, or the equivalent role
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
First workings	Development of main headings, longwall gate roads, related cut throughs and the like
Gas drainage well construction	Building, civil works and drilling associated with installing vertical, goaf or surface to in-seam wells
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal object or Aboriginal place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances that: <ul style="list-style-type: none"> causes or threatens to cause material harm to the environment; and/or breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term is used in noise and air quality-related conditions where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office
Mining Operations	Includes all extraction, processing, handling, storage and transportation of coal carried out on the site
Minister	Minister for Planning and Infrastructure, or delegate
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
OEH	Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Reasonable costs	The costs agreed between the Department and the Applicant for obtaining independent experts to review the adequacy of any aspects of the extraction plan, or where such costs cannot be agreed, the costs determined by a dispute resolution process
Rehabilitation	The treatment or management of land disturbed by the development for the purpose of establishing a safe, stable and non-polluting environment
Remediation	Activities associated with partially or fully repairing or rehabilitating the impacts of the development or controlling the environmental consequences of this impact
Safe, serviceable & repairable	Safe means no danger to users who are present, serviceable means available for its intended use, and repairable means damaged components can be repaired economically
Second workings	Extraction of coal from longwall panels, mini-wall panels or pillar extraction
Site	The land listed in Appendix 1
SMP	Subsidence Management Plan
Subsidence	The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts
Subsidence effects	Deformation of the ground mass due to mining, including all mining-induced ground movements, such as vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
Surface infrastructure	Includes ventilation shafts, gas drainage and gas flaring infrastructure, pit top facilities, access roads, offices, car parks, electrical sub-station, and associated services and easements such as powerlines, water supply, fire control, communications and waste water

2. Delete all occurrences of the words "AEMR", "Bulga Complex", "DII(Minerals)" and "RTA" and replace with the words "Annual Review", "Bulga Mining Complex", "DRE" and "RMS", respectively.
3. Except in conditions 34 to 37 of Schedule 3 (inclusive), delete all occurrences of the word "DECCW" and replace with the word "EPA".
4. In conditions 34 to 37 of Schedule 3 (inclusive), delete all occurrences of the word "DECCW" and replace with the word "OEH".
5. In condition 1 of Schedule 3, delete the word "practicable" and replace with the words "reasonable and feasible" and before the word "harm" insert the word "material".
6. In condition 2 of Schedule 3, delete all the words after "July 2007" and insert instead the following:
 - (g) EA (Mod 4);
 - (h) EA (Mod 5); and
 - (i) conditions of this consent.
7. In condition 3 of Schedule 3, delete the word "latter" and insert instead the words "most recent" and delete the words "over all such documents".
8. In condition 4 of Schedule 3, delete paragraphs (a) and (b) and insert instead the following:
 - (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent; and
 - (b) the implementation of any actions or measures contained in these documents.
9. Delete conditions 4A and 5 of Schedule 3, and insert instead the following:

Limits on Approval

5. Mining operations under this consent may take place on the site until 23 February 2031.

Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of either the Director-General or the Executive Director Mineral Resources. Consequently this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

10. In condition 9 of Schedule 3, delete the words "the relevant requirements of the BCA" and insert instead the following:
 - (a) the relevant requirements of the BCA; and
 - (b) any additional requirements of the MSB where the building or structure is located on land within a declared Mine Subsidence District.
11. After condition 11 of Schedule 3, insert the following:

Management Strategies, Plans or Programs

- 11A. With the approval of the Director-General, the Applicant may integrate any strategy, plan, program, report, review or audit required by this consent with any similar strategy, plan, program, report, review or audit for other components of the Bulga Mining Complex.
- 11B. With the approval of the Director-General, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis.

Notes:

- *While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.*
- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

12. Delete the note above condition 4 and conditions 4, 4A, 5, 6 and 7 of Schedule 4 and insert instead the following:

Performance Measures – Natural and Heritage Features

4. The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 1A, to the satisfaction of the Director-General.

Table 1A: Subsidence Impact Performance Measures

Watercourses	
Wollombi Brook	Negligible environmental consequences
Natural drainage lines	No greater subsidence impact or environmental consequences than predicted in the EAs
Biodiversity	
Threatened species, threatened populations, or endangered ecological communities	No greater subsidence impact or environmental consequences than predicted in the EAs
Heritage	
Aboriginal heritage sites	No greater subsidence impact or environmental consequences than approved under a permit issued under section 90 of the <i>National Parks and Wildlife Act 1974</i>

Notes:

- The Applicant will be required to define more detailed performance indicators for each of these performance measures in the various management plans that are required under this consent.
- The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of approval of Modification 5.
- Any breach of this condition is taken to be a breach of this consent, and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation, notwithstanding that offsets may be agreed or implemented under this consent.

5. If the Applicant exceeds the performance measures in Table 1A and the Director-General determines that:

- it is not reasonable or feasible to remediate the impact or environmental consequence; or
- remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence;

then the Applicant shall provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Director-General.

Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.

Performance Measures – Built Features

6. The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 1B, to the satisfaction of the Executive Director Mineral Resources.

Table 1B: Subsidence Impact Performance Measures

Built features	
Charlton Road, Cobcroft Road and Fordwich Road	<p>Always safe.</p> <p>Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated.</p> <p>Damage must be fully repaired or replaced, or else fully compensated.</p>
Other public infrastructure (including dams and voids; roads and tracks; active mining areas and infrastructure; electricity transmission lines; gas pipelines; survey marks; telecommunications networks and fibre optic cables; water supply and irrigation pipelines, etc.)	<p>Always safe.</p> <p>Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated.</p> <p>Damage must be fully repaired or replaced, or else fully compensated.</p>
Houses, industrial premises, swimming pools, farm dams and other built features or	

Built features	
improvements	
Public safety	
Public safety	Negligible additional risk

Notes:

- The Applicant will be required to define more detailed performance indicators for each of these performance measures in the Built Features Management Plan.
- The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of approval of Modification 5.
- Requirements regarding "safe" or "serviceable" do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.
- Any breach of this condition is taken to be breach of this consent, and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.
- Compensation required under this condition includes any compensation payable under the Mine Subsidence Compensation Act 1961 and/or the Mining Act 1992.

7. Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 1B is to be settled by the Executive Director Mineral Resources. The Executive Director Mineral Resources may seek the advice of the MSB on the matter. Any decision by the Executive Director Mineral Resources shall be final and not subject to further dispute resolution under this consent.

First Workings

- 7A. The Applicant may carry out first workings within the site in support of approved second workings, provided that DRE is satisfied that the first workings are designed to remain stable and non-subsiding, except insofar as they may be impacted by approved second workings.

Note: The intent of this condition is not to require an additional approval for first workings, but to ensure that first workings are built to geotechnical and engineering standards sufficient to ensure long term stability, with zero resulting subsidence impacts.

Extraction Plan

- 7B. The Applicant shall prepare and implement an Extraction Plan for any second workings on site, to the satisfaction of the Director-General. The plan must:
- be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
 - take into account any guidelines issued by the Department for the preparation of Extraction Plans;
 - be approved by the Director-General before the Applicant carries out any of the second workings covered by the plan;
 - include detailed plans of existing and proposed first and second workings and any associated surface development;
 - include detailed performance indicators for each of the performance measures shown in Tables 1A and 1B;
 - provide revised predictions of the conventional and non-conventional subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since the approval of Modification 5;
 - describe the measures that would be implemented to:
 - ensure compliance with the performance measures in Tables 1A and 1B; and
 - manage or remediate subsidence impacts and/or environmental consequences;
 - include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 1A and 1B, or where any such exceedance appears likely;
 - include the following to the satisfaction of DRE:
 - a Subsidence Monitoring Program to:
 - provide data to assist with the management of the risks associated with subsidence;
 - validate the subsidence predictions;
 - analyse the relationship between the predicted and resulting subsidence effects and predicted and resulting impacts under the plan and any ensuing environmental consequences; and
 - inform the contingency plan and adaptive management process;
 - a Coal Resource Recovery Plan that demonstrates effective recovery of the available resource;
 - a Built Features Management Plan, which has been prepared in consultation with Council, DSC, RMS and the owners of potentially affected features, and which includes measures

to manage the potential impacts and consequences of subsidence on any built features;
and

- a Public Safety Management Plan to ensure public safety in the mining area.
- (j) include a:
- Water Management Plan, which has been prepared in consultation with the EPA and NOW, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on surface water resources, groundwater resources and flooding, and which includes:
 - surface and groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on water resources or water quality;
 - a program to monitor and report groundwater inflows to underground workings; and
 - a program to predict, manage and monitor impacts on any groundwater bores on privately-owned land;
 - Biodiversity Management Plan, which has been prepared in consultation with OEH and DRE, which:
 - includes a program of works to ensure that overall terrestrial and aquatic biodiversity values are the same or better than existed in the locality prior to longwall mining;
 - provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on aquatic and terrestrial flora and fauna;
 - Land Management Plan, which has been prepared in consultation with any affected public authorities, to manage the potential impacts and/or environmental consequences of the proposed second workings on land in general;
 - Heritage Management Plan, which has been prepared in consultation with OEH and relevant Aboriginal stakeholders, which includes a program/procedures for:
 - minimising disturbance to Aboriginal sites as far as is reasonable and feasible, particularly in relation to the BMU1 site;
 - salvage, excavation and/or management of Aboriginal sites and potential archaeological deposits within the project disturbance area, including the BMU1 site;
 - protection and monitoring of Aboriginal sites outside the project disturbance area;
 - managing the discovery of any new Aboriginal objects or skeletal remains during the development; and
 - ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site; and
- (k) include a program to collect sufficient baseline data for future Extraction Plans.

Note: An SMP approved by DRE prior to 1 January 2014 is taken to satisfy all requirements of this condition.

Payment of Reasonable Costs

- 7C. The Applicant shall pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent experts to review the adequacy of any aspect of an Extraction Plan submitted for approval.

SURFACE INFRASTRUCTURE MANAGEMENT

Gas Drainage

- 7D. The Applicant shall ensure that all gas drainage pipelines (other than connection points, monitoring points, dewatering facilities, regulation or isolation points) between gas drainage plants are buried, unless otherwise agreed with the relevant landowner or unless burial is inappropriate for safety or other reasons, to the satisfaction of the Director-General.
- 7E. The Applicant shall prepare and implement a Gas Drainage Management Plan in respect of construction and use of future gas drainage infrastructure (i.e. gas drainage not subject to any approval at the date of approval of Modification 5) to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval prior to the construction and operation of any future gas drainage infrastructure and must include details of the Applicant's commitments regarding:
- (a) community consultation;
 - (b) landholder agreements;
 - (c) assessment of noise, air quality, traffic, biodiversity, heritage, public safety and other impacts in accordance with approved methods;
 - (d) avoidance of significant impacts and minimisation of impacts generally;
 - (e) beneficial re-use or flaring of drained hydrocarbon gases, wherever practicable;
 - (f) achievement of applicable standards and goals;
 - (g) mitigation and/or compensation for significant noise, air quality and visual impacts (including minimising visibility of infrastructure from public roads); and

- (h) rehabilitation of disturbed sites.

Service Boreholes

- 7F. The Applicant shall prepare and implement a Service Boreholes Management Plan in respect of construction and use of future service boreholes (i.e. any service boreholes not subject to approval at the date of approval of Modification 5) to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval prior to the construction of any future service borehole and must include details of the Applicant's commitments regarding:
- (a) community consultation;
 - (b) landholder agreements;
 - (c) assessment of noise, air quality, traffic, biodiversity, heritage, public safety and other impacts in accordance with approved methods;
 - (d) avoidance of significant impacts and minimisation of impacts generally;
 - (e) achievement of applicable standards and goals;
 - (f) mitigation and/or compensation for significant noise, air quality and visual impacts (including minimising visibility of infrastructure from a public road); and
 - (g) rehabilitation of disturbed sites.
13. In the note before condition 8 of Schedule 3, insert immediately after the word "1912" the words "*, the Water Management Act 2000*"
14. In condition 22 of Schedule 4:
- a) delete the words "the air pollution generated by the development does not exceed" and insert instead "all reasonable and feasible avoidance and mitigation measures are implemented so that particulate matter emissions generated by the development do not cause exceedances of";
 - b) after the words "at any", insert "residence on"; and
 - c) delete the note below Table 5 and insert instead the following:

Notes for Tables 3-5:

- ^a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to other sources);
- ^b Incremental impact (ie incremental increase in concentrations due to the project on its own);
- ^c Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS/NZA 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method; and
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Director-General in consultation with EPA.

15. In condition 23 of Schedule 4:
- (a) after the words "at any" insert "residence on privately-owned land or on more than 25 percent of any";
 - (b) delete the note below Table 8 and insert instead the following:

Notes for tables 6-8:

- ^aTotal impact (ie incremental increase in concentrations due to the project plus background concentrations due to other sources);
- ^b Incremental impact (ie incremental increase in concentrations due to the project on its own);
- ^c Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS/NZS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Director-General in consultation with EPA.

16. Delete conditions 24 and 26 of Schedule 4 and after condition 23 of Schedule 4, insert the following:

Operating Conditions

24. The Applicant shall:
- (a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the development, including those generated by any spontaneous combustion;
 - (b) minimise any visible air pollution generated by the development;
 - (c) regularly assess meteorological forecasting data and relocate, modify and/or suspend operations to ensure compliance with the relevant conditions of this approval; and
 - (d) co-ordinate air quality management on site with the air quality management at nearby mines, including the Bulga Mining Complex to minimise the cumulative air quality impacts of the mines,
- to the satisfaction of the Director-General.

Air Quality & Greenhouse Gas Management Plan

- 24A. The Applicant shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the development to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with the EPA and submitted to the Director-General for approval by the end of March 2014;
 - describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including consideration of applying a real-time air quality management system that employs both reactive and proactive mitigation measures;
 - describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site; and
 - include an air quality monitoring program that uses a combination of high volume samplers and dust deposition gauges to evaluate the performance of the project, and includes a protocol for determining exceedances with the relevant conditions of this approval.
17. In condition 28A of Schedule 4, delete the word “the” where it first occurs and insert instead the word “a”.
18. After condition 28A of Schedule 4, insert the following:
- Gas Drainage Well Construction Hours**
- 28B. The Applicant shall ensure that gas drainage well construction (except drilling of surface to in-seam wells) is conducted only between 7.00am and 6.00pm Monday to Friday and between 8.00am and 1.00pm Saturdays, unless noise impacts comply with the Noise Impact Assessment Criteria in Table 13 of Condition 30 of Schedule 4.
19. In condition 29 of Schedule 4:
- delete the word “If” where it first occurs and insert instead the words “Except for noise generated by gas drainage well construction for the Blakefield North Mine, if”; and
 - delete the first dot point from the notes below Table 12 and insert instead the following:
 - For the purposes of this condition an “exceedence” is considered to have occurred when valid attended noise data from compliance monitoring (collected in accordance with the requirements in Appendix 4) indicates the noise generated by the Bulga Mining Complex has exceeded the criteria set out in Table 12.
 - Appendix 4 sets out the meteorological condition under which these criteria apply and the requirements for evaluating compliance with these criteria.
20. In condition 30 of Schedule 4:
- delete the word “The” where it first occurs and insert instead the words “Except for noise generated by gas drainage well construction for the Blakefield North Mine, the”;
 - amend Table 13 by way of adding the text shown in the table below in bold underline and deleting the text shown in the table below in bold strikethrough:

Residence/Land	Day	Evening	Night	
	<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{A1}(1 min)</i>
249	40	40	40	45
8, 195	39	39	39	45
157, 179, 307	38	38	38	45
<u>237, 239, 261, 262</u>	<u>38</u>	<u>38</u>	<u>37</u>	<u>45</u>
<u>232, 234, 235, 240</u>	<u>38</u>	<u>38</u>	<u>36</u>	<u>45</u>
1, 2s, 154, 237, 239 , 250, 252, 261, 262 , 308	37	37	37	45
<u>232 241, 243, 263, 264, 265, 266, 267, 272, 273, 274, 275, 276, 277, 279, 280, 281, 283, 284, 288</u>	37	37	36	45
<u>229, 230A, 230B, 231, 233, 236, 238, 242</u>	<u>37</u>	<u>37</u>	<u>35</u>	<u>45</u>
97, 153, 163, 169e, 171, 183, 184, 197, 217s, 217m, 217n, 234, 235, 240, 263, 264, 266, 267, 272, 273, 274, 276, 279, 280 282, 285, 311	36	36	36	45

Residence/Land	Day	Evening	Night	
	$L_{Aeq}(15 \text{ min})$	$L_{Aeq}(15 \text{ min})$	$L_{Aeq}(15 \text{ min})$	$L_{A1}(1 \text{ min})$
33, 156w, <u>222, 223, 226, 227, 228, 230, 244, 254, 256, 281, 286, 287, 289, 290, 291, 292, 293, 294, 295, 306</u>	36	36	35	45
All other privately owned land, excluding the land listed in Table 1.	35	35	35	45

(c) delete the second dot point from the Notes below Table 13 and insert instead the following:

- *For the purposes of this condition an “exceedence” is considered to have occurred when valid attended noise data from compliance monitoring (collected in accordance with the requirements in Appendix 4) indicates the noise generated by the Bulga Mining Complex has exceeded the criteria set out in Table 13.*
- *Appendix 4 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.*

21. In condition 31 of Schedule 4:

- in the second dot point insert in numerical order: 232, 234, 235, 237, 239, 240, 261, 262; and
- delete the words “by 31 July 2010”.

22. In condition 32 of Schedule 4, delete the note below Table 14 and insert instead the following:

Notes:

- *For the purposes of this condition an “exceedence” is considered to have occurred when valid attended noise data from compliance monitoring (collected in accordance with the requirements in Appendix 4) indicates the noise generated by the Bulga Mining Complex has exceeded the criteria set out in Table 14.*
- *Appendix 4 sets out the meteorological condition under which these criteria apply and the requirements for evaluating compliance with these criteria.*

23. In condition 32A of Schedule 4, delete the second dot point of the notes below Table 15 and insert instead the following:

- *For the purposes of this condition an “exceedence” is considered to have occurred when valid attended noise data from compliance monitoring (collected in accordance with the requirements in Appendix 4) indicates the noise generated by the Bulga Mining Complex has exceeded the criteria set out in Table 15.*
- *Appendix 4 sets out the meteorological condition under which these criteria apply and the requirements for evaluating compliance with these criteria.*

24. In condition 32B of Schedule 4, insert immediately after paragraph (b) the following:

- investigate methods to statistically analyse (for example, by using regression analysis) real-time noise and meteorological data to improve noise impact forecasting and to facilitate statistically-based compliance reporting; and

25. In condition 32C of Schedule 4:

- delete the word “program” and insert instead the word “plan”;
- delete the words “30 August 2010” and insert instead the words “31 March 2014”; and
- insert after paragraph (b) the following:
 - include a Construction Noise Management Plan for gas drainage well construction for the Blakefield North Mine featuring:
 - the Applicant’s commitments to reasonable and feasible noise mitigation;
 - a work schedule that clearly identifies work that would lead to an exceedance of the Noise Assessment Criteria in Table 13 of condition 30 in Schedule 4;
 - a protocol for notifying affected receivers of the expected severity and duration of such exceedance(s) well in advance of work commencing;
 - a protocol for monitoring and evaluating noise emissions during work;
 - a response protocol that will be immediately followed to reduce noise emissions if the work leads to noise impacts from the Bulga Mining Complex that exceed:
 - L_{Aeq} 15 min 50 dB during the day at any receiver, except receiver 160;
 - L_{Aeq} 15 min 70 dB during the day at receiver 160;
 - L_{Aeq} 15 min 39 dB during the evening or night at any receiver; and
 - L_{Aeq} 1 min 51 dB during the evening or night at any receiver.

26. In condition 36 of Schedule 4, delete the words “will receive” and insert instead the words “shall obtain”.

27. Delete condition 38 of Schedule 4, and insert instead the following:

38. The Applicant shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with OEH, the Aboriginal community, and be submitted to the Director-General for approval by the end of March 2014;
 - include a program/procedures for:
 - minimising disturbance to Aboriginal sites as far as is reasonable and feasible;
 - salvage, excavation and/or management of Aboriginal sites and potential archaeological deposits within the project disturbance area;
 - protection and monitoring of Aboriginal sites outside the project disturbance area;
 - managing the discovery of any new Aboriginal objects or skeletal remains during the development; and
 - ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

28. After condition 43 of Schedule 4, insert the following:

Additional Vegetation Offsets

- 43A. By the end of December 2014, the Applicant shall:
- provide an area that is, in the opinion of the Director-General, suitable in its quantity, quality and vegetation community to offset the clearing of 5 hectares of *Central Hunter Grey Box – Ironbark Woodland* under Modification 5;
 - provide an area that is, in the opinion of the Director-General, suitable in its quantity, quality and vegetation community to offset the disturbance of 23.71 hectares of *Central Hunter Grey Box – Ironbark Derived Native Grassland* under Modification 5; and
 - make suitable arrangements to manage, protect and provide long-term security for these areas, to the satisfaction of the Director-General.

29. Delete conditions 45 and 46 of Schedule 4.

30. After condition 49 of Schedule 4, insert the following:

- 49A. The Applicant shall prepare and implement a Construction Traffic Management Plan for the development to the satisfaction of the Director General. This plan must:
- be prepared in consultation with Council and RMS and submitted to the Director General before the commencement of gas drainage well construction under Modification 5;
 - detail the management of light and heavy vehicle movements associated with gas drainage well construction;
 - identify overlaps with any other mine related construction projects in the area; and
 - employ measures to minimise the impact of gas drainage well construction traffic on the network including measures to restrict the hours of heavy vehicle movements to avoid road use conflicts.

31. After condition 59 of Schedule 4, insert the following:

REHABILITATION

Rehabilitation Objectives

60. The Applicant shall rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. This rehabilitation must comply with the objectives in Table 17.

Table 17: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	Safe, stable & non-polluting
Surface infrastructure	To be decommissioned and removed, unless the Executive Director Mineral Resources agrees otherwise
Portals and vent shafts	To be decommissioned and made safe and stable.
	Retain habitat for threatened species (eg bats), where practicable
Watercourses subject to subsidence impacts	Hydraulically and geomorphologically stable, with riparian vegetation that is the same or better than prior to mining
Land to be restored or maintained for agricultural purposes	Restored and maintained to: <ul style="list-style-type: none"> the same or higher land capability and agricultural suitability than prior to mining; and a landform consistent with the surrounding environment,

Feature	Objective
	including no greater than minor changes to flooding characteristics or ponding.
Other land	Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: <ul style="list-style-type: none"> • local native plant species (unless the Executive Director Mineral Resources agrees otherwise); and • a landform consistent with the surrounding environment, including no greater than minor changes to flooding characteristics or ponding.
Built features damaged by mining operations	Repair to pre-mining condition or equivalent unless: <ul style="list-style-type: none"> • the owner agrees otherwise; or • the damage is fully restored, repaired or compensated for under the <i>Mine Subsidence Compensation Act 1961</i>.
Community	Ensure public safety
	Minimise the adverse socio-economic effects associated with mine closure

Notes:

- *These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by mining taking place after the date of approval of Modification 5; and to all surface infrastructure part of the development, whether constructed prior to or following the date of this approval.*
- *Rehabilitation of subsidence impacts and environmental consequences caused by mining which took place prior to the date of approval of Modification 5 may be subject to the requirements of other approvals (eg under a mining lease or a Subsidence Management Plan approval) or the Applicant's commitments.*

Progressive Rehabilitation

61. The Applicant shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance.
32. In Schedule 5, delete conditions 5 to 8.
33. Delete Schedule 6 and replace with the following:

SCHEDULE 6 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Adaptive Management

1. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the performance measures or associated performance indicators and impact assessment criteria in Schedule 4. Any exceedance of these performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Director-General, to the satisfaction of the Director-General.

Annual Review

2. By the end of April each year, the Applicant shall review the environmental performance of the development to the satisfaction of the Director-General. This review must:
 - (a) describe the works (including any rehabilitation) that were carried out in the previous calendar year, and the works that are proposed to be carried out over the current calendar year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;

- monitoring results of previous years; and
 - relevant predictions in the EAs;
- (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the next year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

3. Within 3 months of:
 - (a) the submission of an annual review under condition 2 above;
 - (b) the submission of an incident report under condition 5 below;
 - (c) the submission of an audit under condition 7 below; and
 - (d) any modification to the conditions of this consent,
 the Applicant shall review the strategies, plans, and programs required under this approval, to the satisfaction of the Director-General. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Director-General.

Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.

Community Consultative Committee

4. The Applicant shall maintain a Community Consultative Committee (CCC) for the development to the satisfaction of the Director-General. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version).

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.*
- *The CCC may be combined with any similar CCC for the Bulga Surface Operation.*

REPORTING

Incident Reporting

5. The Applicant shall notify, at the earliest opportunity, the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Director-General and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

6. The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

Note: This website may be integrated with any similar website established for the Bulga Surface Operations.

INDEPENDENT ENVIRONMENTAL AUDIT

7. By the end of June 2015, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
 - (b) include consultation with the relevant agencies;

- (c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and, if appropriate
- (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.

Notes:

- *This audit team must be led by a suitably qualified auditor and include experts in subsidence and any other field specified by the Director-General.*
- *The audits should be coordinated with similar auditing requirements for the Bulga Surface Operation.*

- 8. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

- 9. From 31 October 2013, the Applicant shall:
 - (a) make copies of the following publicly available on its website:
 - the EAs;
 - all current statutory approvals for the development;
 - all approved strategies, plans and programs required under the conditions of this consent;
 - a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
 - a complaints register, updated on a monthly basis;
 - minutes of CCC meetings;
 - the annual reviews (over the last 5 years);
 - any independent environmental audit, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Director-General; and
 - (b) keep this information up-to-date, to the satisfaction of the Director-General.
- 34. Insert the following after Appendix 3:

APPENDIX 4 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

- 1. The noise criteria in Tables 12, 13, 14 and 15 of the conditions are to apply under all meteorological conditions except the following:
 - a. during periods of rain or hail;
 - b. average wind speed at microphone height exceeds 5 m/s;
 - c. wind speeds greater than 3 m/s measured at 10m above ground level; or
 - d. temperature inversion conditions greater than 3°C/100m.

Determination of Meteorological Conditions

- 2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.

Compliance Monitoring

- 3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.
- 4. Unless otherwise agreed with the Director-General, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy. Monitoring shall have particular regard to the requirements relating to:
 - a. monitoring locations for the collection of representative noise data;
 - b. meteorological conditions during which collection of noise data is not appropriate;
 - c. equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - d. modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for impulsive noise, intermittent noise, or duration.