

Project Approval

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

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance; and
- provide for the ongoing environmental management of the project.

The Hon Kristina Keneally MP
Minister for Planning

Sydney

Signed 8 December 2008

File No: 9041467

SCHEDULE 1

Application No:	07_0073
Proponent:	BHP Billiton Illawarra Coal Holdings Pty Ltd.
Approval Authority:	Minister for Planning.
Land:	Land adjacent to Appin Road, Appin, NSW (see Map of Project Site in Appendix 1).
Project:	West Cliff Coal Mine – Surface Goaf Gas Drainage Project.

Blue type represents December 2009 modification

Pink type represents April 2011 modification

Green type represents August 2011 modification

SCHEDULE 2

DEFINITIONS

DECCW	Department of Environment, Climate Change and Water
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
EA	Environmental Assessment
Proponent	BHP Billiton Illawarra Coal Holdings Pty Ltd, or its successors
Site	Land to which the Project Application applies (see Appendix 1)

ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the Project.

Terms of Approval

2. The Proponent shall carry out the Project generally in accordance with the:
 - (i) EA titled West Cliff Mine Surface Goaf Gas Drainage Project, dated April 2008 and prepared by Olsen Environmental Consulting Pty Limited;
 - (ii) Proponent's Response to Submissions, dated 15 September 2008 and prepared by BHP Billiton Illawarra Coal Holdings Pty Ltd;
 - (iii) Proponent's Statement of Commitments (see Appendix 2);
 - (iv) the modification application MP 07_0073 MOD 1 and Environmental Assessment prepared by BHP Billiton – Illawarra Coal, dated November 2009;
 - (v) the document titled *West Cliff Colliery Goaf Gas Drainage Project: Environmental Assessment, Proposed changes to surface goaf gas extraction associated with Longwall 34*, dated December 2010;
 - (vi) the document titled *West Cliff Area 5 Goaf Gas Drainage Project: Environmental Assessment for Longwall 35*, dated May 2011; and
 - (vii) conditions of this approval.
3. If there is any inconsistency between the above, the **more recent** document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - (a) any reports, plans or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Operation of Plant and Equipment

5. The Proponent shall ensure all plant and equipment used at the site is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

Hours of Operation

6. The Proponent is only permitted to undertake construction activities, including drilling, clearing, site preparation and installation of the gas extraction and flaring plant, between the hours of 7 am to 6 pm, Monday to Friday, except for emergency purposes.

However, if the Proponent has a written negotiated noise agreement with all affected landholders and a copy of this agreement has been forwarded to the Department and DECCW, then the Proponent may undertake construction activities outside of the permitted hours.

Note: 'Emergency purposes' refers to instances where the cessation of construction activities would have the potential to generate serious harm to the environment or serious safety issues. Should these activities be conducted outside of the hours above, a report must be provided to the Department within two weeks of the event containing relevant information and/or data to demonstrate the specific emergency purposes and circumstances at the time.

7. The Proponent is permitted to undertake gas extraction, flaring and venting, site and equipment maintenance, and rehabilitation activities 24 hours a day, 7 days a week.

Protection of Public Infrastructure

8. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
 - (a) repair, or pay the full cost associated with repairing, any public infrastructure that is damaged by the project; and
 - (b) relocate, or pay the full cost associated with relocating, any public infrastructure that needs to be relocated as a result of the project,except where such works have been compensated through the *Mining Act 1992*.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

BIODIVERSITY AND REHABILITATION

Vegetation Clearing and Rehabilitation Protocol

1. The Proponent shall prepare and implement a Vegetation Clearing and Rehabilitation Protocol for the Project to the satisfaction of the Director-General. The protocol shall:
 - (a) be submitted to the Director-General for approval prior to construction;
 - (b) delineate the areas of vegetation to be cleared;
 - (c) describe the procedures that would be implemented for;
 - protection of *Shale Sandstone Transition Forest* and *Cumberland Plain Woodland*, as far as is practicable; and
 - conserving, stockpiling, and reusing disturbed material;
 - (d) describe the procedures for revegetating and rehabilitating the areas of disturbance; and
 - (e) provide completion criteria, including a monitoring timetable, and measures that would be implemented to ensure the criteria are achieved.

NOISE

Impact Assessment Criteria

2. The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria set out in Table 1 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 1: Impact assessment criteria dB(A)

Location	Day/Evening	Night	
	$L_{Aeq}(15 \text{ minute})$	$L_{Aeq}(15 \text{ minute})$	$L_{A1}(1 \text{ minute})$
All privately owned residences	36	36	46

However, the noise limits in Table 1 may be exceeded:

- (a) if the Proponent has a written negotiated noise agreement with any landowner and a copy of this agreement has been forwarded to the Department and DECCW. Any exceedence must be in accordance with the negotiated noise agreement; or
- (b) during drilling activities, in accordance with the noise management strategies outlined in the Environmental Management Strategy for the project required under Condition 1 of Schedule 4 of this approval.

Notes:

- To determine compliance with the $L_{Aeq}(15 \text{ minute})$ noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the Department and DECCW may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- These limits apply under the relevant meteorological conditions outlined in the assessment procedures in Chapter 5 of the NSW Industrial Noise Policy.
- To determine compliance with the $L_{A1}(1 \text{ minute})$ noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the Department and DECCW may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).

3. At the request of the landowner of any occupied privately-owned residence located within 500 metres of any exhaustor site, the Proponent shall install noise mitigation measures (such as double glazing, insulation, and/or air conditioning), in consultation with the landowner.

Note: An 'exhaustor site' is the location of the gas drainage plant and flare units, which may be co-located with or at some distance from the borehole site.

Monitoring

4. The Proponent shall prepare and implement a Noise Monitoring Program for the project. This program must:
 - (a) be submitted to the Director-General for approval prior to commencing construction activities;
 - (b) use attended noise monitoring measures to monitor the performance of the project; and
 - (c) describe how compliance with the noise impact assessment criteria in Table 1 would be established.

AIR QUALITY

Impact Assessment Criteria

5. The Proponent shall ensure that the dust and particulate emissions generated by the development do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 2, 3 and 4 at any residence on, or on more than 25 percent of, any privately owned land.

Table 2: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³

Table 3: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³

Table 4: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

SOIL AND WATER

Pollution of Waters

6. Except as may be expressly provided by a [DECCW](#) Environment Protection Licence, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the Project.

Water Management Plan

7. The Proponent shall prepare and implement a Water Management Plan for the Project to the satisfaction of the Director-General. This plan must:
 - (a) be submitted to the Director-General prior to commencing construction; and
 - (b) include a Sediment and Erosion Control Plan.

Sediment and Erosion Control Plan

9. The Sediment and Erosion Control Plan must:
 - (a) be consistent with the requirements of *Managing Urban Stormwater: Soils and Construction* manual (Landcom 2004, or its latest version);
 - (b) identify activities that could cause soil erosion and generate sediment;
 - (c) describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters;
 - (d) describe the location, function, and capacity of erosion and sediment control structures; and
 - (e) describe what measures would be implemented to monitor and maintain the structures over time.

TRAFFIC AND TRANSPORT

Traffic Management

10. The Proponent shall ensure that:
- (a) safe access to the site is provided from public roads; and
 - (b) traffic movements are restricted to existing or specifically constructed tracks.

WASTE MINIMISATION

11. The Proponent shall:
- (a) ensure no waste is disposed of on site;
 - (b) implement reasonable and feasible measures to minimise waste generated by the Project; and
 - (c) ensure disposal of wastes occurs at appropriately approved waste disposal facilities.

BUSHFIRE MANAGEMENT

12. The Proponent shall take all reasonable measures to prevent the ignition and/or spread of bushfires.

SCHEDULE 4
ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

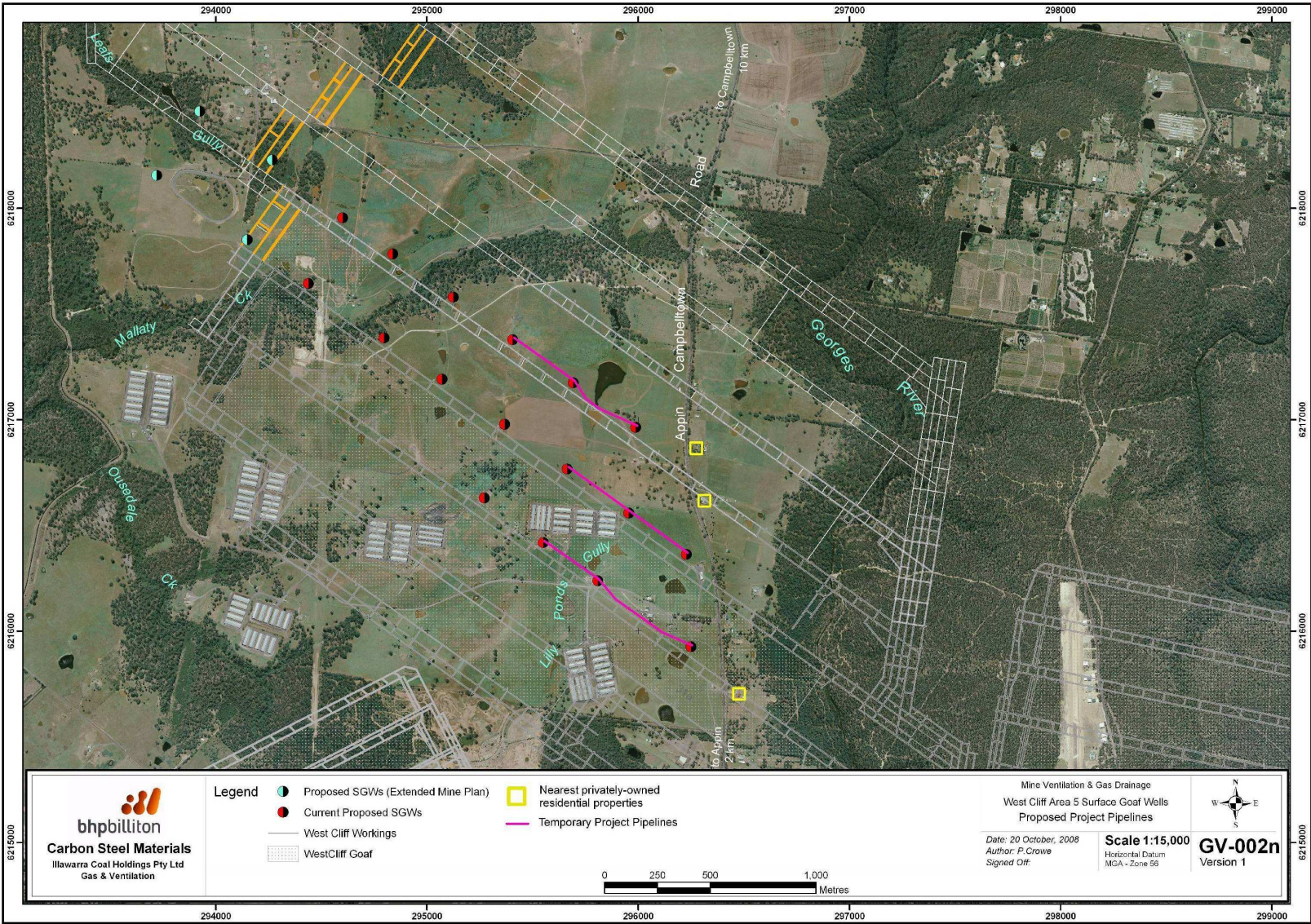
ENVIRONMENTAL MANAGEMENT STRATEGY

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General prior to the commencement of construction activities, and:
 - (a) identify the statutory requirements that apply to the project;
 - (b) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.

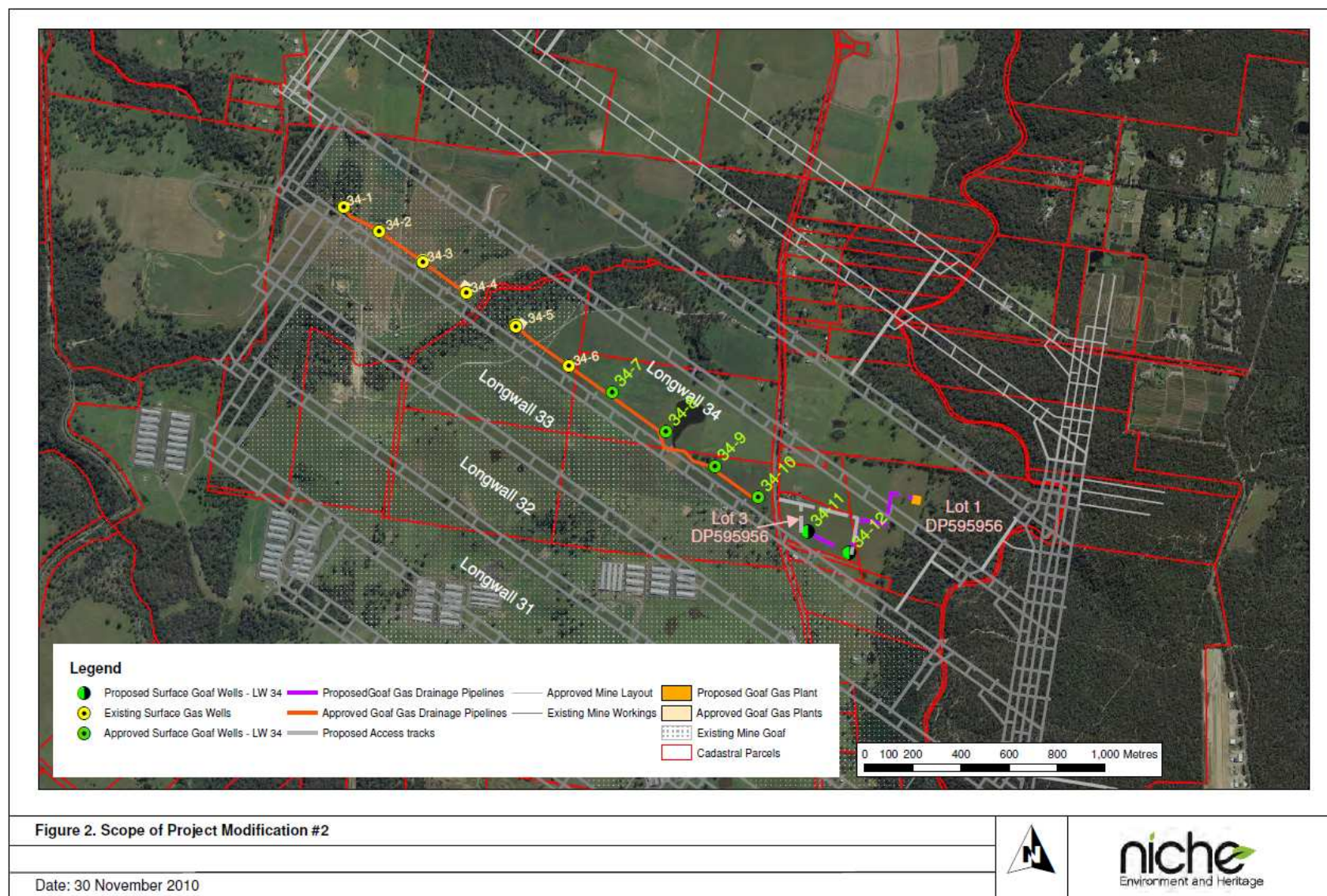
INCIDENT REPORTING

2. Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval, or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.
3. Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report that:
 - (a) describes the date, time, and nature of the exceedance/incident;
 - (b) identifies the cause (or likely cause) of the exceedance/incident;
 - (c) describes what action has been taken to date; and
 - (d) describes the proposed measures to address the exceedance/incident.

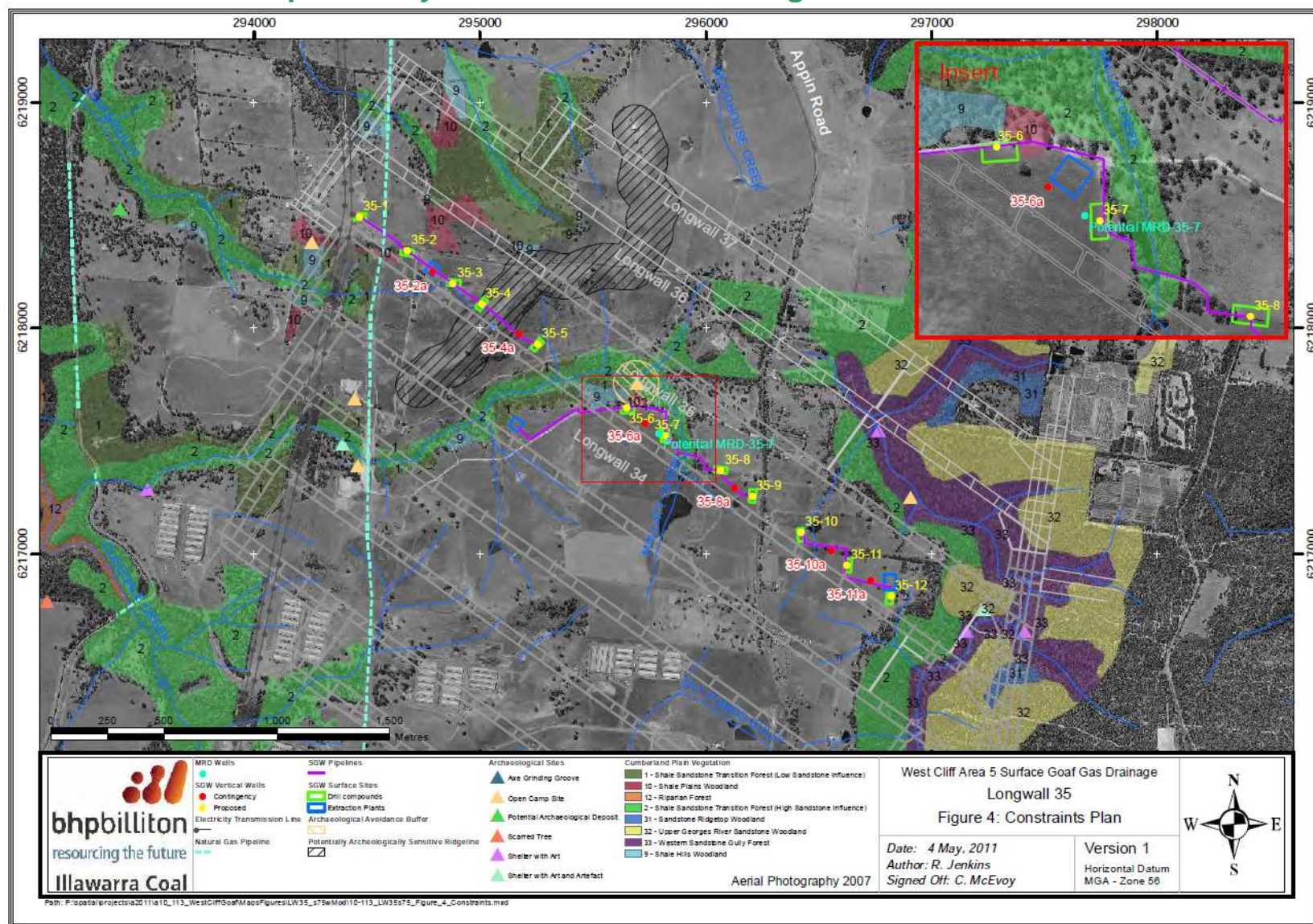
APPENDIX 1 - Map of Project Site



APPENDIX 1A – Proposed layout of boreholes for Longwall 34



APPENDIX 1B – Proposed Layout of Boreholes for Longwall 35



APPENDIX 2 - Statement of Commitments

The Statement of Commitments contains all measures BHPBIC has made and will undertake to minimise impacts on the environment, and has been sourced from the Environmental Assessment and Response to Submissions.

General

- BHPBIC will continue to operate its office in the Appin Business and Shopping Precinct during the operation of the project.
- BHPBIC will continue to operate a 24-hour contact telephone line.
- BHPBIC will continue to support the operation of the Appin Area Community Working Group and associated community liaison activities.
- There will not be any on-site worker accommodation.
- The successful drilling contractor will prepare a safe working method statement, which will include details of environmental controls for the worksite.
- All of the Contractor's workforce will undertake West Cliff Colliery Safety and Environmental Training prior to commencing work on site.
- The Contractor will ensure all equipment is maintained in a safe and secure condition during the Project period.
- The Contractor will prepare an Environmental Management Plan (EMP) which addresses the physical barriers, standard procedures and emergency response planned to be established on the site during the construction period. This EMP is to be in place prior to work commencing and will be approved by BHPBIC.
- Using gas extraction data collected during the life of the project, BHPBIC will provide a report on future opportunities for beneficial utilization of goaf seam methane gas. The report will be provided to the DECC and any other Government Agencies who request a copy. The report is to be provided three months following completion of the project.

Operating conditions

- Drilling will only occur during daylight hours.
- The Drill Rig will normally operate in the daytime hours of 7 am to 6 pm, however there may be occasions when for operational reasons drilling is conducted outside these hours, in consultation with the landowner. The Gas Extraction and Flaring equipment will operate continuously around the clock.
- When appropriate and possible, gas will be flared utilising two flaring units.

Water Management

- Stormwater runoff will be managed in accordance with guidelines detailed in the Landcom Publication, "Soils and Construction" Volume 1, 4th Edition, dated March 2004.
- The Contractor will be required to ensure that appropriate protection, in the form of silt fencing and diversion drains, are in place to control contaminated stormwater and waste water run-off from their works.
- Appropriate sediment/erosion and drainage control devices will be utilised during and after drilling works.
- Sediment controls will be implemented and management controls implemented to minimise the likelihood of contamination by pollutants.

Flora and Fauna

- BHPBIC proposes to minimise the disturbance of native vegetation. The proposed location of boreholes have been modified to achieve this objective.
- To minimise the likelihood of weed spread or the introduction of disease, vehicles will be cleaned prior to use in the works area.
- The proposed drilling sites will generally be contained within existing disturbed areas. Where possible, direct disturbances to native vegetation will be avoided.
- Disturbance to native vegetation will be minimised, or, where disturbance is unavoidable, borehole sites will be rehabilitated using locally sourced tubestock and brush-matting.
- Where clearing of native vegetation is unavoidable, native shrubs, logs and bush rock will be stockpiled on the side of the proposed boreholes and access routes replaced following completion of the works.
- If required, bush regeneration and weed control will be undertaken to ensure flora and fauna of the local area is protected throughout the construction and operation phases of the proposal.

Air Quality

- Exposed areas will be watered to prevent dust emissions.
- Disturbed areas will be stabilised or revegetated as soon as practicable to prevent or minimise wind-blown dust.
- If necessary, dust-generating activities will be stopped or modified during periods of high wind.
- When appropriate and possible, gas will be flared utilising flaring units, hired from Landfill Management Systems Pty Ltd (LMS). If additional gas is available, additional flare units may be utilised to maximise the abatement of greenhouse gas.

Noise

- To overcome potential effects, BHPBIC will pipe the gas from the two eastern-most bore sites within each longwall back to the west where the gas drainage plant and flare units will be located as per Plan GV-002n Version 1.¹ The temporary pipework will be constructed of 12 inch polyethylene pipe. The temporary pipework will be placed in agreement with the landowner, laid on the surface and fenced, or buried at the landowner's direction.
- For gas wells 34-11 and 34-12, temporary noise barriers will be erected around the drilling compounds to reduce noise and visual impacts.
- For gas wells 35-1, 35-8, 35-9, 35-10 and potential MRD 35-7, temporary noise barriers will be erected around the drilling compounds during drilling to reduce noise and visual impacts.

Waste/Hazardous Materials Management

- Wastes will not be disposed on site. Port-a-loo facilities will be used on site. Packaging wastes will be recycled or sent to appropriate existing landfill sites.
- Metals will be recycled in the current system. Potential for timber to be recycled will be investigated, otherwise this material, which is classified as builders waste, will be sent to an appropriate landfill. Any protective packing materials will be recycled.
- Any chemicals used on site will be taken off site after use and disposed of appropriately.
- The Contractor will also ensure that trucks and machinery leaving the site do not spill any waste materials on public roads. If this occurs it will be the Contractor's responsibility to clean up the spillage.

¹ See Appendix 1.

Traffic Management

- Appropriate safety measures will be implemented to ensure workforce and public safety during the times when heavy equipment is moved on public roads.
- The Contractor will ensure that employees, delivery trucks and sub-contractors do not park on public roads when working on the Project.

Aboriginal Heritage

- To avoid impacting Archaeological Site Leaf's Gully 1 further, access of all heavy machinery to borehole site PA04 will be via the existing track network within the paddock to the east, rather than along the track on which the artefact site is located.

- All contractors should be notified on the importance of avoiding areas of archaeological sensitivity and remaining within existing tracks when accessing borehole sites PA01 and PA04.

- To avoid impacting upon unidentified Archaeological sites, all vehicles and work movements will stay in previously cleared and disturbed areas where safe and practicable. The construction methods of infrastructure installation will be kept to a minimum and above ground alternatives will be considered where possible.

- Should any Aboriginal relics be encountered during work, the work will cease within the vicinity of the find and the DEC and Aboriginal stakeholders notified. A qualified archaeologist may also be required to assess the find.

Non-Aboriginal Heritage

- Should any historical relics be uncovered during works associated with the proposed pipeline, works will cease in the immediate vicinity of the find and the NSW Heritage Office will be notified. A qualified archaeologist may also be required to assess the find.

Visual Amenity

- To minimise visual effects the red storage shipping container to be repainted grey green similar to Wattyl "Autumn Bushland" or "Espadrille" or similar.

- The cyclone security fence will be covered with hessian or sand/beige (not green) coloured shade cloth at least on sides facing a public road.

- The flare stacks will be repainted in a suitable high temperature paint from silver to a neutral colour for example Wattyl "Seagrass" or similar.

- Any disturbed surface area (other than necessary vehicle access tracks) external to the compound will be spray-grassed or seeded to reduce the amount of exposed soil.

- Any unnecessary lights will be extinguished and essential service lights will be shielded at night.

- The compound will be kept clean and tidy.

- BHPBIC will ensure that the night-time flaring of gas does not burn at a rate which would make it visible.

Rehabilitation/Site Closure

- After the compounds are dismantled BHPBIC will remediate and revegetate the sites.

- Each borehole will be plugged and abandoned in accordance with requirements of the Department of Primary Industries (Mineral Resources) for exploration boreholes, EDG01 Borehole Sealing requirements on Land: Coal Exploration.

- When the Project is complete the drilling and flaring equipment and all rubbish, damaged vegetation and construction debris will be removed from all areas disturbed by the works and the surface graded to smooth contours. The cleanup shall be to the satisfaction of BHPBIC's Site Engineer.