

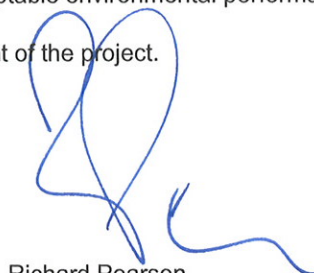
Project Approval

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

As delegate for the Minister for Planning, I approve the project referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:

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



Richard Pearson
Deputy Director-General
Development Assessment and Systems Performance

Sydney

4th May

2011

SCHEDULE 1

Application No:	10_0079
Proponent:	BHP Billiton Illawarra Coal Holdings Pty Ltd
Approval Authority:	Minister for Planning
Land:	see Appendix 1
Project:	Appin Ventilation Shaft No.6

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SCHEDULE 2

DEFINITIONS

DECCW	Department of Environment, Climate Change and Water
DII	Department of Industry & Investment
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
EA	Environmental Assessment titled <i>Ventilation Shaft No.6 Project Environmental Assessment</i> (3 volumes), dated October 2010, including the Response to Submissions
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
Proponent	BHP Billiton Illawarra Coal Holdings Pty Ltd, or its successors
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 the potential improvements
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 reasonable and feasible measures to prevent and/or minimise any material 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;
 - (ii) statement of commitments; and
 - (iii) conditions of this approval

Notes:

- *The general layout of the project is shown in Appendix 2*
- *The statement of commitments is reproduced in Appendix 3*

3. If there is any inconsistency between the above documents, the most 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, strategies, plans, programs, reviews, audits or correspondence that are submitted by the Proponent in accordance with this approval; and
 - (b) the implementation of any actions or measures contained in these documents.

Limits on Approval

5. The Proponent may operate the ventilation shaft for a period of 30 years from the date of completion of construction, unless otherwise agreed by the Director-General.

Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings, to the satisfaction of the Director-General and DII. Consequently, this approval will continue to apply in all other respects other than the right to bore and operate the ventilation shaft until the site has been properly rehabilitated.

Protection of Public Infrastructure

6. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
 - (b) relocate, or pay the full costs of 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*.

Operation of Plant and Equipment

7. 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.

Staged Submission of Strategies Plans and Programs

8. With the approval of the Director-General, the Proponent may:
 - (a) submit any strategy, plan or program required by this approval on a progressive basis; and
 - (b) combine any strategy, plan, review or program required under this approval with any similar strategy, plan, review or program required under any approval granted for the Bulli Seam Operations Project (MP 08_150).

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

BIODIVERSITY

Biodiversity Offsets

1. Within 12 months of this approval, the Proponent shall prepare and implement a biodiversity offset strategy to compensate for the impact of the project on Cumberland Plain Woodland. The offset strategy must:
 - (a) be prepared in consultation with DECCW and to the satisfaction of the Director-General;
 - (b) incorporate at least 8.7 hectares of existing Cumberland Plain Woodland vegetation; and
 - (c) make suitable arrangements to protect and manage this offset area in perpetuity.

Note: The 8.7 hectare size for the Biodiversity Offset Area identified above is based on Cumberland Plain Woodland vegetation on shale (HN529) in good condition. An equivalent minimum offset for Cumberland Plain Woodland on flats vegetation (HN528) in good condition is 9.4 hectares.

Biodiversity Management Plan

2. The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Director-General. The plan must:
 - (a) be prepared in consultation with DECCW, and submitted to the Director General for approval by the end of September 2011;
 - (b) describe how the implementation of the offset would be integrated with the overall rehabilitation of the site;
 - (c) include:
 - (i) a description of the short, medium and long term measures that would be implemented to:
 - implement the offset strategy; and
 - manage the remnant vegetation and habitat on the site and in the offset areas;
 - (ii) detailed performance and completion criteria for the implementation of the offset strategy;
 - (iii) details of location and timing of tree screenings to minimise visual impacts of the project;
 - (iv) a description of the measures that would be implemented over the next 30 years, including the procedures to be implemented for:
 - implementing revegetation and regeneration within the disturbance area;
 - minimise the clearing of native vegetation;
 - controlling weeds and feral pests;
 - managing grazing and agriculture on site; and
 - controlling access;
 - (v) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
 - (vi) a description of the potential risks to successful revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
 - (vii) details of who would be responsible for monitoring, reviewing, and implementing the plan.

Conservation Bond

3. By 31 December 2012, the Proponent shall lodge a conservation and biodiversity bond with the Department to ensure that the offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:
 - (a) calculating the full future cost of implementing the offset strategy; and
 - (b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs;to the satisfaction of the Director-General.

Notes:

- *If capital and other expenditure required by the Biodiversity Management Plan is largely complete, the Director-General may waive the requirement for lodgement of a bond in respect of the remaining expenditure.*
- *If the offset strategy is completed to the satisfaction of the Director-General, the Director-General will release the conservation bond. If the offset strategy is not completed to the satisfaction of the Director-General, the Director-General will call in all or part of the conservation bond, and arrange for the completion of the relevant works.*

NOISE

Hours of Operation

4. The Proponent shall comply with the construction and operating hours listed in Table 1.

Table 1: Construction and operating hours

Activity	Hours (Other than for emergency purposes)
<u>Construction</u> Road and site access*, site preparation, liner construction, spoil management, drilling of boreholes, provision of services, related activities, post construction rehabilitation.	7.00am to 6.00pm, Monday to Saturday No works on Sunday or Public Holidays
Shaft drilling and lining and water management works. Any works that are inaudible at residential premises.	24 hours per day, 7 days per week
<u>Operation of Ventilation Shaft</u> Including commissioning of fans	24 hours per day, 7 days per week
<u>Operation of Service Boreholes</u> Delivery of concrete to the site and associated surface operations	24hrs per day, 7 days per week
Delivery of other materials to the site and associated surface operations	7.00am to 6.00pm, Monday to Saturday
Provision of supplies, consumables or utilities to underground	24hrs per day, 7 days per week

Notes:

- *Some road works potentially requiring traffic management measures, such as cutting in the access road to Menangle Road, line marking the intersection and installation of asphaltic concrete, may be undertaken outside these hours (subject to Council's approval) to take advantage of reduced traffic volumes.
- 'Emergency purposes' refers to instances where the cessation of construction or operating 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 permitted, a report must be provided to the Department within 7 days of the event containing relevant information and/or to demonstrate the specific emergency purposes and circumstances at the time

Noise Impact Assessment Criteria

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

Table 2: Construction noise criteria dB(A)

Location	Day	Evening	Night	
	L _{Aeq} (15 minute)			L _{A1} (1 minute)
All privately owned residences – 7.00am to 6.00pm, Monday to Saturday and 8:00 am to 1.00 pm Saturday	50	45	39	49
All privately owned residences – outside the above hours	45	45	39	49

6. The Proponent shall ensure that the operational noise generated by the project does not exceed the noise impact assessment criteria set out in Table 3 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 3: Operational noise criteria dB(A)

Location	Day/Evening L _{Aeq} (15 minute)	Night	
		L _{Aeq} (15 minute)	L _{A1} (1 minute)
All privately owned residences	45	39	49

Notes to tables 2 and 3:

- Day is defined as the period from 7.00am to 6.00pm (Monday to Saturday) and 8.00am to 6.00pm (Sunday and Public Holidays), Evening is the period from 6.00pm to 10.00pm and Night is the period from 10.00pm to 7.00am (Monday to Saturday) and 10.00pm to 8.00am (Sundays and Public Holidays);
- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.
- The following activities may be carried out at the premises regardless of the limits above:
 - the delivery of materials as requested by police or other authorities for safety reasons; or
 - emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

Noise Management Plan

7. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of July 2011;
 - (b) include all relevant noise impact assessment criteria;
 - (c) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system;
 - (d) include a noise monitoring program that:
 - uses a combination of real-time and supplementary attended noise monitoring to evaluate the performance of the project;
 - include a protocol for noise monitoring;
 - include a protocol for determining exceedances of the relevant conditions of this approval; and
 - include a protocol for noise complaint handling and response.

Note: Noise monitoring should be undertaken at monthly intervals during the first 6 months of a) civil construction, b) vent shaft drilling and c) fan operation. If compliance with the relevant criteria is achieved during any of these 6 monthly periods, then noise monitoring for the remainder of the applicable phase of the project may be reduced to quarterly.

AIR QUALITY AND GREENHOUSE GAS

Odour

8. The Proponent shall ensure no offensive odours as defined under the *Protection of the Environment Operations Act 1997*, are emitted from the site.

Greenhouse Gas Emissions

9. The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.

Note: It is recognised that the primary purpose of the ventilation shaft is to remove mine ventilation air from the Appin underground coal mine.

Air Impact Assessment Criteria

10. The Proponent shall ensure that the all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the project do not exceed the criteria listed in Tables 4, 5 and 6 at any residence on privately-owned land or on more than 25 percent of any privately owned land.

Table 4: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion	Basis
Total suspended particulate (TSP) matter	Annual	90 µg/m ³	Total ¹
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³	Total ¹

Table 5: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion	Basis
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³	Total ¹

Table 6: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase ² in deposited dust level	Maximum total ¹ deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

¹Background concentrations due to all the other sources plus the incremental increase in concentrations due to the project alone.

²Incremental increase in concentrations due to the project alone.

Note: 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 Particulate Matter - Deposited Matter - Gravimetric Method.

Operating Conditions

- The Proponent shall implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site emissions generated by the project to the satisfaction of the Director-General.

Air Quality Monitoring Program

- The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. The program must:
 - be submitted to the Director-General for approval by the end of December 2012;
 - include protocols for monitoring and assessing emissions of odour and greenhouse gases, and
 - include reporting procedures for results of the monitoring program.

SOIL AND WATER

Water Licences

- The Proponent shall obtain all necessary water licences and approvals for the project under the *Water Act 1912* or the *Water Management Act 2000*, including the requirements of any relevant Water Sharing Plan.

Discharge Limits

- The Proponent shall not discharge any water from the site except as may be expressly provided by an EPL, or in accordance with section 120 of the *Protection of the Environment Operations Act 1997*.

Note: Sedimentation ponds must be designed and operation to capture and treat a 1:10 year 72 hour duration storm event.

Water Management Plan

- The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - be prepared in consultation with NOW and DECCW, and be submitted to the Director-General for approval by the end of July 2011;
 - include a:
 - Site Water Balance;
 - Erosion and Sediment Control Plan;

- Surface Water Monitoring Program; and
 - Water Response Plan.
16. The Site Water Balance must:
- (a) include details of:
 - sources and security of water supply;
 - water use on site;
 - water management on site;
 - water discharges;
 - reporting procedures; and
 - (b) investigate and implement all reasonable and feasible measures to minimise water use by the project.
17. The Erosion and Sediment Control Plan must:
- (a) be consistent with the requirements of *Managing Urban Stormwater: Soils and Construction, Volume 2E, Mines and Quarries, 2004* (Landcom);
 - (b) identify activities that could cause soil erosion, generate sediment or affect flooding;
 - (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
 - (d) investigate and implement all reasonable and feasible measures to minimise stormwater overflow;
 - (e) describe the location, function and capacity of erosion and sediment control structures and flood management structures, including sedimentation ponds; and
 - (f) describe what measures would be implemented to maintain the structures over time.
18. The Surface Water Monitoring Program must detail:
- (a) baseline data on surface water quality in creeks and other waterbodies that could potentially be affected by the project;
 - (b) surface water and stream health impact assessment criteria;
 - (c) a program to monitor and assess surface water quality and stream stability; and
 - (d) reporting procedures for results of the monitoring program.
19. The Water Response Plan must describe measures and/or procedures that would be implemented to:
- (a) investigate, notify and mitigate any ground or surface water exceedences;
 - (b) minimise, prevent or offset any adverse impacts to ground or surface water resources; as a result of the project.

TRAFFIC AND TRANSPORT

Traffic Management

20. 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.

HERITAGE

Heritage Management

21. The Proponent shall prepare and implement a Heritage Management Plan to the satisfaction of the Director-General. This plan must be:
- (a) prepared in consultation with DECCW, the Heritage Branch and Council; and
 - (b) submitted to the Director-General for approval by the end of July 2011.
22. The Proponent shall prepare and implement a Conservation Management Plan for the Mountbatten Group (and its constituent elements) to the satisfaction of the Director-General. This plan must be:
- (a) prepared in consultation with the Heritage Branch and Council; and
 - (b) submitted to the Director-General for approval by the end of December 2012.

LIGHTING EMISSIONS

23. The Proponent shall:
- (a) ensure that all external lighting for the project complies with the *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects and Outdoor Lighting*;
 - (b) take all practicable measures to mitigate off-site lighting impacts from the project, to the satisfaction of the Director-General.

WASTE

24. The Proponent shall:
- (a) minimise the waste generated by the Project; and
 - (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; to the satisfaction of the Director-General.

REHABILITATION

25. The Proponent shall carry out rehabilitation of the site progressively, that is as soon as reasonably practicable following disturbance.
26. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project, to the satisfaction of the Director-General of DII. This plan must:
- (a) be prepared in consultation with the Department, DII, DECCW, NOW and Council;
 - (b) be prepared in accordance with any relevant DII guideline;
 - (c) build, so far as reasonable or feasible, on the other management plans required under this approval; and
 - (d) be submitted to the Director-General of DII for approval by end of December 2011.

**SCHEDULE 4
ENVIRONMENTAL MANAGEMENT, MONITORING AND REPORTING**

ENVIRONMENTAL MANAGEMENT STRATEGY

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:
 - (a) be submitted to the Director-General for approval by the end of July 2011;
 - (b) provide the strategic framework for environmental management of the project;
 - (c) identify the statutory approvals that apply to the project;
 - (d) describe the role, responsibility, authority and accountability of key personnel involved in the environmental management of the project;
 - (e) 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
 - (f) include:
 - copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and
 - a clear plan depicting all the monitoring to be carried out in relation to the project.

Management Plan Requirements

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria;
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant approval license or lease conditions);
 - (d) a program to investigate monitor and report on:
 - impacts of the environmental performance of the project;
 - effectiveness of any management measures/criteria;
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;
 - (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints
 - non-compliance with statutory requirements; and
 - (h) a protocol for periodic review of the plan.

Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted.

Annual Review

3. By the end of 2011, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:
 - (a) describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison if these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years;
 - the relevant predictions in the EA;
 - (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 project;
- (e) identify any discrepancies between the predicted and the actual impacts of the project, 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 project.

Revision of Strategies, Plans and Programs

- 4. Within 3 months of the submission of a:
 - (a) annual review under condition 3 above;
 - (b) incident report under condition 5 below; and
 - (c) any modification to the conditions of this approval,the Proponent shall review, and if necessary revise, the strategies, plans and programs required under this approval to the satisfaction of the Director-General.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis and incorporate any recommended measures to improve the environmental performance of the project.

REPORTING

Incident Reporting

- 5. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of becoming aware of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.

Regular Reporting

- 6. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.

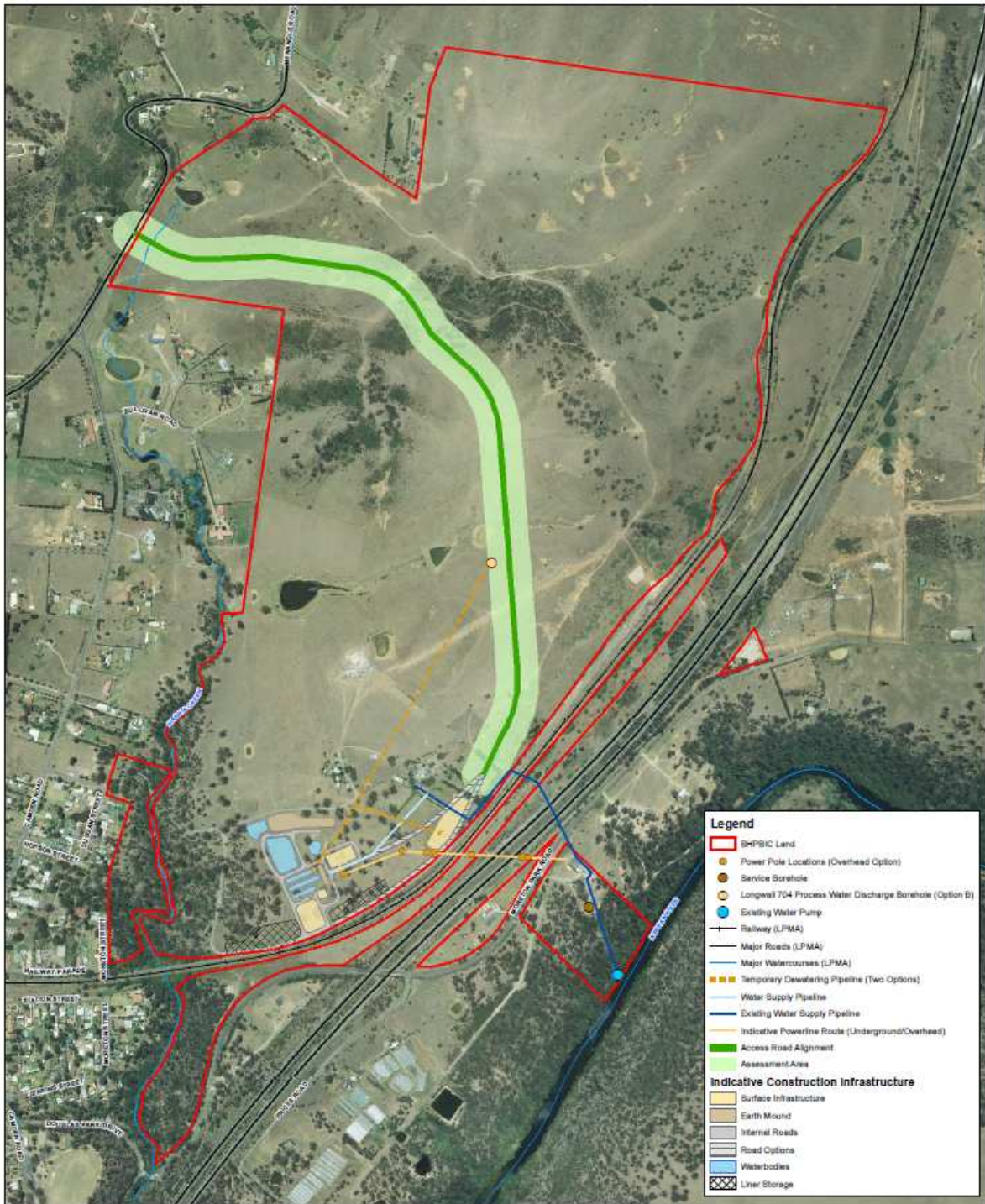
ACCESS TO INFORMATION

- 7. From the end of July 2011, the Proponent shall:
 - (a) make the following information publicly available on its website:
 - a copy of all current statutory approvals for the project;
 - a copy of the current environmental management strategy and associated plans and programs;
 - a comprehensive summary of the monitoring results of the project, which have been recorded in accordance with the various plans and programs approved under this approval;
 - a complaints register, which is to be updated on a monthly basis;
 - a copy of any Annual Reviews (following the first year);
 - any other matter required by the Director-General; and
 - (b) keep this information up to date, to the satisfaction of the Director General.

**APPENDIX 1
SCHEDULE OF LAND**

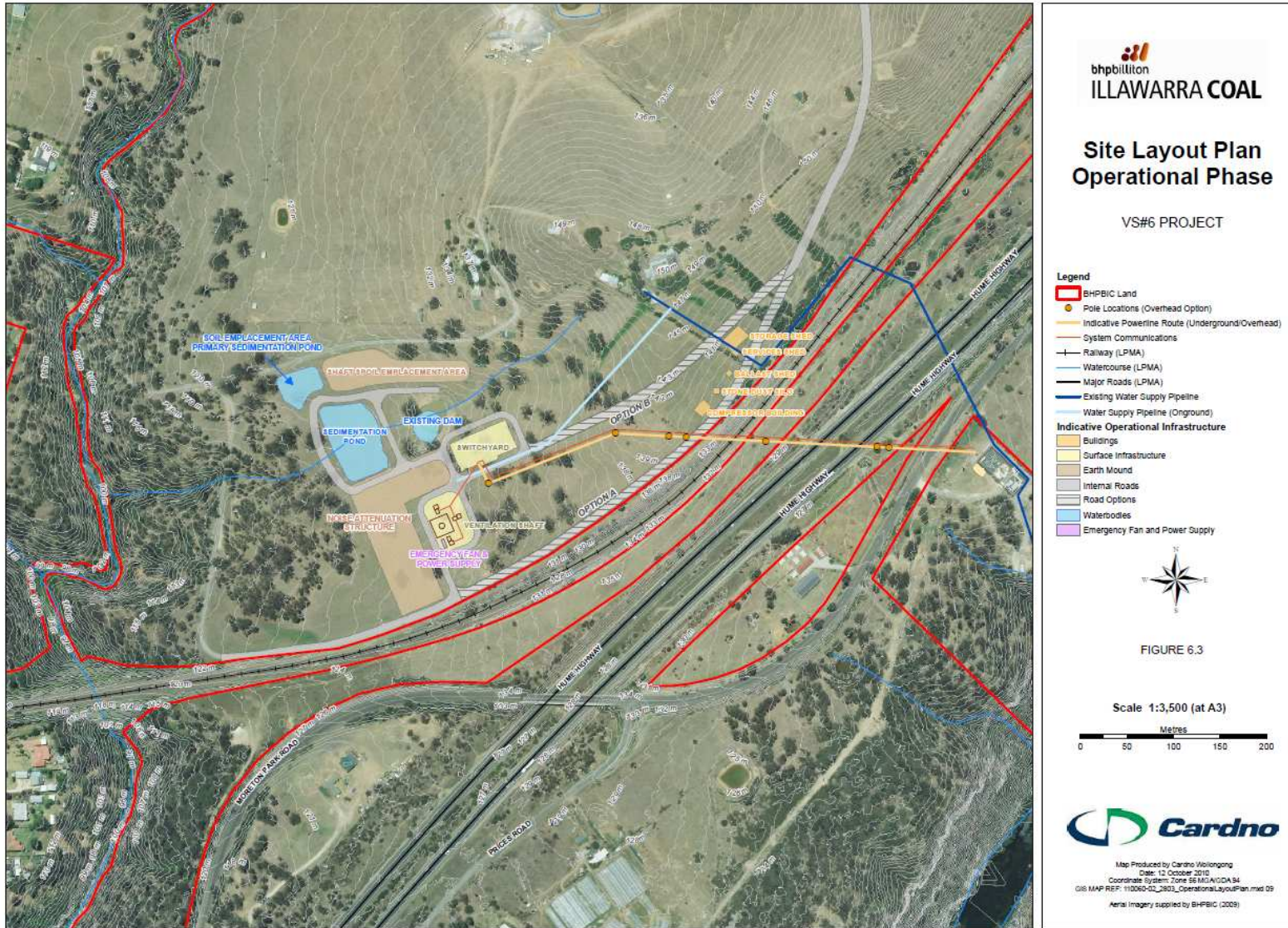
<i>Description</i>	<i>Lot/DP or other</i>	
BHPBIC Land	Lot 37	DP 8738
BHPBIC Land	Lot 35	DP 8999
BHPBIC Land	Lot A	DP 421246
BHPBIC Land	Lot 1	DP 576136
BHPBIC Land	Lot 2	DP 576136
BHPBIC Land	Lot 1	DP 121322
Access Road Intersection	Camden Road Reserve	
Douglas North Substation (DNS)	Lot 1	DP 583323
Powerline from DNS	Lot 11	DP 250231
Powerline from DNS	Lot 4	DP 250231
Powerline from DNS	Lot 1	DP 250231
Powerline from DNS	Hume Highway Road Reserve	
Powerline from DNS	Main Southern Railway Line	
Powerline from DNS	Moreton Park Road Reserve	

**APPENDIX 2
PROJECT LAYOUT PLAN – CONSTRUCTION PHASE**



 <p>ILLAWARRA COAL Scale 1:8,000 (at A3) Metres</p> 	<p>Project Area Layout Plan Construction Phase</p> <p>VS#6 PROJECT FIGURE 6.1</p>	 <p><small>Map Produced by Cardno Wollongong Date: 12 October 2010 Coordinate System: Zone 56 MGA/GDA 94 GIS MAP FILE: 110000-02_2009_ProjectArea.mxd 08 Aerial Imagery supplied by BHPBC (2009)</small></p>
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SITE LAYOUT PLAN – OPERATIONAL PHASE



**APPENDIX 3
STATEMENT OF COMMITMENTS**

Objective	Commitment
Working Hours – Construction	
<ul style="list-style-type: none"> Minimise impact on the local area from construction and site implementation operations 	<ul style="list-style-type: none"> BHPBIC will undertake construction of the access road during daylight hours, 6 days per week (Monday – Saturday) for a period of approximately 6 months. Some works such as cutting in the access road into Menangle Road, line marking of the intersection and installation of the asphaltic concrete may be implemented over a number of weekends and/or involve nightshift work where traffic volumes may be reduced. BHPBIC will carry out the sinking of the ventilation shaft by blind boring 24 hours a day, 7 days a week. It is anticipated that the shaft sinking would be complete after a period of about 18 months, If the ventilation shaft is unable to achieve the required depth using blind bore methodology, BHPBIC will construct the remainder of the ventilation shaft using the conventional sink method. No change to the impacts predicted to occur will result from this contingency, although the construction period may increase. Lining of the shaft will occur on a 24 hours a day, 7 days a week basis. Grouting of the shaft liners will occur during daylight hours.
Working Hours – Operation	
<ul style="list-style-type: none"> Minimise impacts on the local area from operation of the ventilation shaft 	<ul style="list-style-type: none"> The ventilation shaft and associated infrastructure (including fan facilities) will operate 24 hour per day, 7 days per week until such a time as upcast ventilation is no longer required in the mining domains its servicing. The anticipated life of the operational phase is approximately 30 years. BHPBIC will undertake the delivery of materials to the site during daylight hours except in times of emergency. The operation of the service supply boreholes will occur during daylight hours where they may be audible at residential premises.
Public Consultation	
<ul style="list-style-type: none"> Keep local residents informed of BHPBIC operations Provide a public opportunity to comment on ongoing operations 	<ul style="list-style-type: none"> BHPBIC will continue to liaise with and provide information to the local Douglas Park community via the Douglas Park Advisory Panel or other such community reference group that is deemed appropriate. BHPBIC will seek to liaise regularly with community representatives regarding traffic management. This is proposed to be done via the establishment of a traffic management sub-committee of the Douglas Park Advisory Panel which will meet as required. BHPBIC will continue to support the Appin Area Community Working Group (or other such community reference group that are deemed appropriate) and associated liaison activities to ensure the broader community have an opportunity to raise any questions regarding the ventilation shaft Project. BHPBIC will continue to operate the 24-hour telephone line to provide an alternative method for public information.
Noise	
<ul style="list-style-type: none"> Minimise noise impacts from the construction and operational phases of the ventilation shaft project on receivers 	<ul style="list-style-type: none"> BHPBIC has prepared and will implement a Noise Management Plan for both the construction and operational phases of the project. BHPBIC will undertake construction of the ventilation shaft using the blind boring method as the first preference, which will minimise the noise impacts. BHPBIC will orientate the ventilation shaft fans to discharge away from receivers in the Douglas Park Township. BHPBIC will install a noise mitigation barrier between the ventilation shaft fan facilities and Douglas Park Township prior to the commencement of the operational phase of the project. BHPBIC will specify relevant fan noise levels in tender (or contract) documents to achieve compliance with the determined project specific noise criteria BHPBIC will undertake noise monitoring at specified receiver locations in Douglas Park for the first two years of the ventilation shafts operation. Where compliance with the project specific noise criteria is demonstrated, monitoring will continue on an annual basis.
Air Quality	
<ul style="list-style-type: none"> Minimise the impacts from dust on surrounding properties during the construction phase Minimise the impacts from potential emissions of odour and particulate matter during the operational phase 	<ul style="list-style-type: none"> BHPBIC will ensure construction activities are managed to minimise the generation of dust. BHPBIC shall undertake dust suppression activities (such as use of water cart) if and when conditions dictate it to be appropriate. BHPBIC will seal the access road to minimise dust emissions from its use during the construction and operational phases of the ventilation shaft project. BHPBIC will ensure disturbed areas are rehabilitated or treated appropriately to minimise the dust generation. BHPBIC will orientate the ventilation shaft fans to discharge at an angle of approximately 45° to the vertical to minimise the possibility of air quality impacts during the operational phase.

Objective	Commitment
Greenhouse Gas Emissions	
<ul style="list-style-type: none"> Minimise impacts to the environment associated with GHG emissions 	<ul style="list-style-type: none"> BHPBIC will ensure all plant and operating equipment are maintained appropriately to minimise fuel consumption and associated emissions BHPBIC will minimise electrical power consumption during the operational phases of the project where at all practicable
Water Resources	
<ul style="list-style-type: none"> Minimise impacts on: <ul style="list-style-type: none"> Surface Water Quality Surface Water Supply Groundwater 	<ul style="list-style-type: none"> BHPBIC has prepared and will implement a Soil and Water Management Plan for both the construction and operational phases of the project to ensure the appropriate management of water resources during the project. BHPBIC will ensure that the stormwater runoff, soil and erosion control measures will be managed in accordance with guidelines detailed in the Landcom publication, "Soils and Construction" Volume 1, 4th Edition, dated March 2004. BHPBIC will construct surface water management measures to such a standard as will contain and treat the runoff of one in 10 year 72 hour storm for the entire construction phase dirty water catchment. Surface water captured in the sedimentation pond and farm dam will be reused for shaft drilling, other construction purposes, or treated and discharged from site. BHPBIC will source water for the project from the Nepean River in accordance with the requirements of the <i>Water Sharing Plan 2010</i> (DECCW 2009) and the <i>Water Management Act 2000</i>. BHPBIC commit to sourcing water from the Nepean River to an upper limit of 50 ML/year and will do so only by the transfer of existing water access right from another licensed pump within the Menangle Water Management Zone. BHPBIC will ensure additional water required for the project will be sourced from an authorised Sydney Water supply or from the Appin Mine water filtration plant. The ventilation shaft will be lined using a combination of concrete and steel to preclude interaction between the shaft and groundwater resources during the operational phase. BHPBIC will ensure the service supply boreholes are cased and grouted from the ground surface to below the depth of any known regionally significant aquifers. Drilling process pond waste water will be managed in the underground water management system.
Biodiversity	
<ul style="list-style-type: none"> Minimise impacts on native flora, fauna and habitat by appropriate management of: <ul style="list-style-type: none"> Vegetation Clearing Cumberland Plain Woodland (CPW) 	<ul style="list-style-type: none"> BHPBIC has prepared and will implement a Vegetation Management Plan (VMP) for both the construction and operational phases of the project. BHPBIC will set aside and manage an offset area of CPW in accordance with the requirements of the VMP. BHPBIC will minimise the amount of clearing of native vegetation and mature trees at the site where are all possible. BHPBIC will undertake a two-stage clearing process for the felling of any hollow bearing trees. BHPBIC will use vegetation species representative of the CPW in rehabilitation activities where at all practicable.
Heritage (Aboriginal)	
<ul style="list-style-type: none"> Minimise impacts on Aboriginal cultural heritage. 	<ul style="list-style-type: none"> BHPBIC has prepared and will implement a Heritage Management Plan (HMP) for the Project. BHPBIC will ensure that Aboriginal cultural sites will be temporally fenced and avoided during construction where possible. BHPBIC will ensure that any Aboriginal cultural sites which may be impacted during construction will be managed in accordance with the HMP and in consultation with registered Aboriginal Stakeholders.
Heritage (non-Aboriginal)	
<ul style="list-style-type: none"> Minimise impacts on non-Aboriginal cultural heritage. 	<ul style="list-style-type: none"> BHPBIC will manage and conserve the Mountbatten Group in manner consistent with its heritage values. BHPBIC will ensure that any relics which may be discovered during construction will be assessed and documented by an appropriately qualified cultural heritage expert. Where it is relevant to do so, relics will be retrieved and managed in accordance with any recommendations made by the cultural heritage expert. BHPBIC will ensure the sympathetic placement of new buildings and structures on the property will continue to be implemented throughout the construction and operational phases of the -project. BHPBIC will ensure that sympathetic finishes and vegetation screening will be used to screen and separate the new buildings and structures from the heritage items. BHPBIC will ensure that vegetation clearing will be minimised, and should not include historical plantings in the vicinity of the Morton Park: Mountbatten Group. A management plan for the construction phase of the project has been developed to: <ul style="list-style-type: none"> describe procedures for the discovery of suspected archaeological relics during the construction phase of the project; describe procedures for heritage impact assessment in the case of unforeseen contingencies that may impact heritage significance beyond that assessed in

Objective	Commitment
	this report.
Traffic	
<ul style="list-style-type: none"> Reduce the potential for traffic associated with the proposed project to create congestion. Minimise potential traffic impacts to the Douglas Park Township from the Project. Protect road safety. 	<ul style="list-style-type: none"> BHPBIC has prepared and will implement a Traffic Management Plan (TMP) for both the construction and operational phases of the Project to minimise traffic impacts and ensure continued road safety. BHPBIC will construct a site access road and intersection to reduce traffic impacts on Menangle Road as approved by the RTA and/or WSC. BHPBIC will ensure the Contractor/s implement appropriate warning signs and traffic control measures as required by the TMP. BHPBIC will ensure a Journey Management Plan is developed by the Contractor/s and approved by the BHPBIC Project Manager prior to the commencement of any works. This plan will guide appropriate controls for movement of drill rigs and other heavy vehicles. BHPBIC will advise local residents of the commencement of construction works, any related possible disruptions to local traffic through traffic management sub-committee of the Douglas Park Advisory Panel.
Risks and Hazards	
<ul style="list-style-type: none"> Minimise potential risks to public safety form the proposed project. 	<ul style="list-style-type: none"> BHPBIC will ensure the Contractor/s abide by the Company HSEC Policies and EMS. BHPBIC will ensure that the Contractor/s undertake the appropriate investigations with regards to underground service locations prior to the commencement of any excavation works. BHPBIC will ensure that diesel storages and pipelines on the project site are constructed and maintained in accordance with the appropriate Australian Standards (including the installation of bunding and pumps). BHPBIC will ensure that the appropriate risk management equipment (such as fire fighting facilities and spill kits) are present and maintained on the project site and that staff are trained in their use. BHPBIC will install safety fencing around all excavations and high risk areas of the site (e.g. the switchyard) to mitigate the risks associated with unauthorised access. Vehicular accesses will be gated and locked when not in use.
Waste	
<ul style="list-style-type: none"> Minimise impacts on the environment associated with waste generation and disposal. 	<ul style="list-style-type: none"> BHPBIC will minimise waste generation through the emplacement of the shaft spoil material on site for later re-use in shaft rehabilitation. BHPBIC will beneficially re-use borehole drilling spoil and other excavated material at locations that may include: <ul style="list-style-type: none"> On-site for construction purposes On-site in the shaft spoil emplacement area for rehabilitation purposes On-site for construction of the noise barrier At West Cliff Emplacement Area for site capping or rehabilitation. BHPBIC will appropriately capture and transfer waste to suitable re-use, recycling or disposal locations.
Visual Amenity	
<ul style="list-style-type: none"> Minimise the potential visual impact of the project on the surrounding landscape. Minimise the exposure of offsite receivers to night lighting during the construction phase. 	<ul style="list-style-type: none"> BHPBIC will minimise the amount of clearing of native vegetation and mature trees at the site where at all possible. BHPBIC will avoid the use of highly reflective materials and/or colours which are not commensurate with the surrounds in the supply and installation of ventilation shaft infrastructure. BHPBIC will include screening trees in any revegetation works, as and where appropriate. BHPBIC will minimise the use of floodlighting to the construction phase of the project where reasonably practical and safe to do so. BHPBIC will minimise the spill of lighting off-site by directing lighting away from sensitive receivers, ensuring that lights do not shine above the horizontal and ensuring lighting is turned off when not required.
Rehabilitation	
<ul style="list-style-type: none"> Reduce long term effects from the proposed project on the natural and cultural heritage of the site. Ensure public and/or private safety following the completion of operation of the ventilation shaft and boreholes. 	<ul style="list-style-type: none"> BHPBIC will undertake rehabilitation of any areas disturbed by the project to ensure the environment is returned as close as possible to the pre-project condition and/or to meet landowner specific requirements. BHPBIC will ensure that the de-commissioning of the boreholes and the shaft will be undertaken in accordance with the requirements of the relevant government department (currently DII).
Construction Management	
<ul style="list-style-type: none"> Minimise impact on environment from construction work. Ensure employee safety during construction. 	<ul style="list-style-type: none"> BHPBIC will ensure the Contractor/s abide by the Company HSEC Policies and EMS. BHPBIC will ensure the successful Contractor/s conduct a Construction Risk Assessment and prepare safe work method statement/s for approval by BHPBIC at the relevant stages of the site work prior to work commencing. BHPBIC will ensure the Contractor/s will maintain equipment to a safe standard

<i>Objective</i>	<i>Commitment</i>
	<p>and ensure secure storage.</p> <ul style="list-style-type: none"> • BHPBIC will ensure all works conducted in accordance with relevant construction legislation and industry leading practice. • BHPBIC will ensure that the Contractor's work force receives the necessary training as per the relevant construction legislation and industry leading practice prior to commencing work on site.