

MINING OPERATIONS (BLOOMFIELD)

Environmental Management Strategy

Ver	Date	Description	By	Chk	App
1	24/02/10	Final Draft	KH	SD	SD
2	09/06/11	Revised Final Draft - incorporating Project Area as approved by Section 75W Modification	KH	SG	SG
3	17/07/17	Revised Final – Revised and Updated	GL		BC
4	06/11/17	Revised Final – incorporating DPE consultation	GL		BC
5	26/9/18	Revised Final – Modification 4	GL		CK
6	16/03/20	Final – Reviewed	GL		CK
7	15/05/20	Revised Final – incorporating DPI&E consultation	GL		CK

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INTRODUCTION

This environmental management strategy (EMS) has been prepared in response to Project Approval, 07_0087, (Approval) granted under section 75J of the Environmental Planning and Assessment Act (EP&A) and modifications (MOD 4) to the Approval was granted in accordance with section 75W of the Environmental Planning and Assessment Act 1979.

The environmental management strategy takes into consideration the commitments stated in the Part 3A Environmental Assessment, various conditions outlined in schedules 2 to 5 of the Approval granted under Section 75 J of the Environmental Planning and Assessment Act 1979 and any Modifications. In addition, commitments outlined in Bloomfield Group Environment Management Policy are also taken into account.

PURPOSE AND OBJECTIVES

The purpose and objectives of the Environmental Management Strategy (EMS) is to:

- provide an overall framework for environmental management;
- identify key environmental aspects to be addressed in the strategy and supporting plans and procedures;
- establish procedures for reviewing progress and implementing corrective actions; and
- provide a framework for review and continual improvement.

Strategic Framework

The EMS establishes an environmental management framework for all mining and related activities. It includes the development and management of environmental management plans, procedures and reporting requirements. The subordinate programs, plans and policies have been developed in consultation with relevant government agencies and departments.

Management of environmental aspects and issues of the mine are documented, regulated, controlled and measured through this document in addition to the various environmental management and monitoring plans, Mining Operations Plan (MOP) and Annual Review.

Environmental Policy

Bloomfield Colliery (Colliery) is committed to sustainable operations throughout all components of the business. The company's environmental policy states the intentions and principles for environmental performance across the operation and is reproduced in full in Appendix A.

The policy incorporates regular review and improvement to ensure that EMS remains relevant to the operation and the various environmental requirements as they change over time.

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PROJECT DESCRIPTION

Bloomfield Colliery is an open cut mining operation located to the north of John Renshaw Drive, Buttai and east of Buchanan Road, Buchanan, approximately 20 km north-west of Newcastle (refer Figure 1).

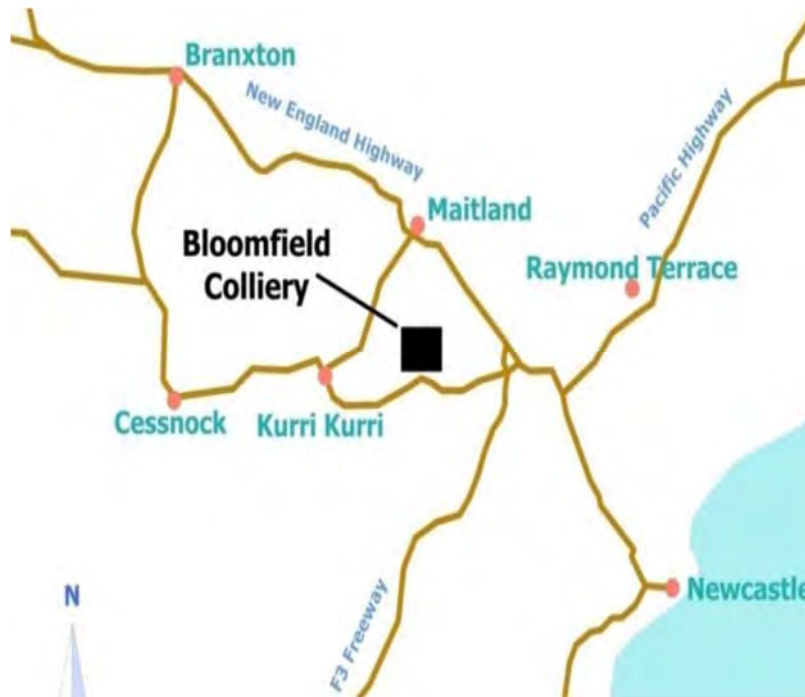


Figure 1 LOCALITY PLAN

Mining has occurred on the site for approximately 175 years. It is located within the Cessnock Local Government Area, and zoned 1(a) Rural 'A' under the Cessnock Local Environmental Plan 1989.

Mining is currently a multi-seam truck and excavator or face shovel operation, conducted in sequential mining blocks. It is proposed to continue this existing method using the same or similar equipment.

ROM coal is trucked to the ROM coal stockpile at the Bloomfield washery for processing, which occurs under the Abel Project Approval (05_0136). The colliery is approved to operate 7 days per week, 24 hours per day.

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RELATIONSHIP WITH OTHER PLANS

The Environmental Management Plans detail the measures required to monitor and manage environmental impacts and include:

- Water Management Plan;
- Noise Monitoring Plan;
- Blast Monitoring Plan;
- Air Quality Monitoring Plan;
- Landscape Management Plan;
- Aboriginal Cultural Heritage Management Plan;
- Energy Savings Action Plan;
- Biodiversity Offset Management Plan; and
- Historic Heritage Conservation Management Plan.

While the individual operating plans have been prepared to cover the life of the mine, the effectiveness and relevance of each of the plans will be reviewed at least every three years during the management review process or as required to accommodate changes.

STATUTORY OBLIGATIONS

Project Approval was granted by the Minister for Planning on 3 September 2009 under Section 75J of the Environmental Planning and Assessment Act, 1979. Four modifications to the Approval have been granted in accordance with section 75W of the Environmental Planning and Assessment Act 1979.

In addition to the approval under the Environmental Planning and Assessment Act, 1979 there is a range of other relevant legislation. These include various Mining Leases and requirements of the Environment Protection Licence (EPL) that must be satisfied. The individual Environmental Management Plans reference the relevant sections and approvals where appropriate.

The individual management and monitoring plans reference the relevant sections of legislation and approvals where appropriate. A list of other key relevant legislation is provided in Appendix B.

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APPROVED DEVELOPMENT

The approval allows for continued mining, operation of mine infrastructure and related activities a subject to a range of conditions. Relevant conditions are reproduced below:

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

1. *The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.*
2. *The Proponent shall carry out the project generally in accordance with the:*
 - (a) *EA, EA (MOD1), EA (MOD2), EA (MOD3), EA (MOD3);*
 - (b) *Biodiversity Offset Strategy; and*
 - (c) *Statement of Commitments.*

Notes:

- *The general layout of the project is shown in Appendix 2; and*
 - *The Statement of Commitments is reproduced in Appendix 3.*
- 2A. *The proponent must carry out the project in accordance with the conditions of this approval.*
 3. *If there is any inconsistency between the above documents, 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 must comply with any reasonable requirements of the Secretary arising from the Department's assessment of:*
 - (a) *any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with the conditions of this approval;*
 - (b) *any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with the conditions of this approval; and*
 - (c) *the implementation of any actions or measures contained in these documents.*

The Approval allows for the use of:

- current and proposed open cut mine areas;
- workshop;
- the road between the open cut pit areas and the ROM coal stockpile at the washery; and
- the road that links the workshop, open cut pits and washery.

Figure 2 shows the approved project area and location of monitoring sites.

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PROJECT APPROVAL CONDITIONS The relevant conditions from the Approval that directly relate to the EMS for the site are reproduced in Table 1. Other relevant conditions are listed in Table 2.

Table 1 – Schedule 5 Condition 1

Requirement	EMS Reference
The Proponent must prepare an Environmental Management Strategy for the project, to the satisfaction of the Secretary. The strategy must:	
(a) be submitted to the Secretary for approval within 6 months of the date of this approval;	
(b) provide the strategic framework for environmental management of the project;	Purpose & Objectives
(c) identify the statutory approvals that apply to the project;	Statutory Obligations
(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;	Roles and Responsibilities
(e) describe the procedures that would be implemented to:	
<ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the project; 	Public Awareness
<ul style="list-style-type: none"> receive, handle, respond to, and record complaints; 	Public Awareness
<ul style="list-style-type: none"> resolve any disputes that may arise during the course of the project; 	Public Awareness
<ul style="list-style-type: none"> respond to any non-compliance; and 	Non Compliance
<ul style="list-style-type: none"> respond to emergencies; 	Emergency Procedure & Incident Response
(f) include:	
<ul style="list-style-type: none"> references to the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and 	Public Awareness
<ul style="list-style-type: none"> a clear plan depicting all the monitoring to be carried out in relation to the project. 	Figure 2
The Proponent must implement the Environmental Management Strategy as approved by the Secretary.	Appendix C

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Table 2 Other relevant consent conditions

		SCHEDULE 5 – ENVIRONMENTAL MONITORING, REPORTING AND AUDITING
2	Management plan requirements	<p>The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, license 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; <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> • impacts and environmental performance of the project; • effectiveness of any management measures (see (c) above); <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to continually improve the environmental performance of the project over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and <p>(h) a protocol for periodic review of the plan.</p>
3	Annual Review	<p>Each year, the Proponent must review the environmental performance of the project to the satisfaction of the Secretary. This review must:</p> <p>(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;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the mine complex over the past year, which includes a comparison of these results against the</p> <ul style="list-style-type: none"> • the relevant statutory requirements, limits or performance measures/criteria; • the monitoring results of previous years; and • the relevant predictions in the documents listed in condition 2 of schedule 2; <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the project;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measure will be implemented over the next year to improve the environmental performance of the project.</p>
4	Revision of strategies, plans and programs	<p>Within 3 months of:</p> <p>(a) the submission of an annual review under Condition 3;</p> <p>(b) the submission of an incident report under Condition 6;</p> <p>(c) the submission of an audit report under Condition 7;</p> <p>(d) any modifications of the conditions of this approval (unless the conditions require otherwise), the Proponent must review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.</p>

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7	Independent Environmental Audit	Every 3 years, unless the Secretary directs otherwise, the Proponent must commission and pay the full cost of an Independent Environmental Audit of the project. This audit must: (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies and the CCC; (c) assess the environmental performance of the project and assess whether it is complying with the requirements in relevant project approvals 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 these approvals; and (e) recommend appropriate measures or actions to improve the environmental performance of the mine complex, and/or any assessment, plan or program required under these approvals. <i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</i>
8	Independent Environmental Audit	Within three months of commencing an Independent Environmental Audit, or within another timeframe agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary.
8A	Monitoring and Environmental Audits	Any condition of this approval that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit. <i>Note: For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the project to provide data on compliance with the approval or on the environmental impact of the project, and an “environmental audit” is a periodic or particular documented evaluation of the project to provide information on compliance with the approval or the environmental management or impact of the project.</i>

ROLES AND RESPONSIBILITIES

The company directors are responsible for the overall environmental performance of Bloomfield Colliery. Senior Operational managers have direct responsibility for the areas that they control. The Environmental Officer provides direction and advice to ensure site environmental compliance is maintained. The key management positions are shown in Table 3.

Table 3 MANAGEMENT TEAM

Position	Name
CEO	Brett Lewis
Manager of Mining Development	Geoff Moore
Mine Manager	Brad Donoghoe
General Manager Technical Services	Simon Grassby
Environmental Advisor	Greg Lamb

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PUBLIC AWARENESS

The community will be kept informed through a range of mechanisms including:

- provision of relevant plans, and reports on the corporate website;
- 24 hour telephone contact line;
- informal discussions with local residents as required; and
- a Community Consultative Committee.
- all relevant plans, minutes and monitoring results are available online at www.bloomcoll.com.au

Complaints

All complaints that are raised by the community and/or government agencies are recorded. The following details for each are kept:

- date and time of complaint;
 - method by which the complaint was made;
 - personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - nature of the complaint;
 - the action(s) taken in relation to the complaint, including any follow up contact with the complainant; and
 - if no action was taken, the reason why no action was taken.
-

Disputes

In the event of a complaint that leads to a dispute where a mutually acceptable resolution is unable to be achieved the DPE will be consulted to assist in reaching an amicable outcome.

MONITORING

Environmental monitoring is used to check the performance of the operation against regulatory standards. Records of all environmental monitoring and results are kept on site and available if required.

Regular environmental monitoring is integral to the successful implementation of the environmental strategy. The measurement and evaluation of criteria allows for the assessment of performance against quantitative and qualitative standards and assists in the identification of any non-conformances or areas that may require additional attention.

Checks will be made to ensure compliance with all statutory, legislative and approval requirements including the consent conditions and various licence and approval requirements (EPL, mining approvals).

An integrated environmental monitoring plan has been developed in consultation with YanCoal to reflect the requirements of the Approval for this project and the Abel Project Approval (05_0136). The integrated monitoring plan is designed to meet the requirements of relevant approvals and the various monitoring requirements.

EMERGENCY PROCEDURES AND INCIDENT RESPONSE

Incidents and emergencies are managed in accordance with the Bloomfield Incident Management System, the Bloomfield Mining Operations Incident Notification Procedure and the relevant Hazard Management System.

Internal procedures have not been reviewed or endorsed by DPE. Bloomfield Colliery takes responsibility for ensuring these procedures are in accordance with this Strategy and generally in accordance with the project approval.

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NON COMPLIANCE

If the results of monitoring show the relevant criteria or threshold has been exceeded, an investigation into the potential sources and/or causes will be undertaken. If the company is found to be responsible for the exceedance further actions will be taken to address the matter.

The investigation will consider any plant operation or other factors that may have resulted in the non compliance. A report will be prepared and provided to Department of Planning or other relevant agency.

The report will:

- (a) describe the date, time and nature of the exceedance/ incident;
- (b) identify the cause (or likely cause) of the exceedance/ incident;
- (c) describe what action has been taken to date; and
- (d) describe the proposed measures to address the exceedance/incident.

Actions will be taken to implement recommendations that are made during the investigation.

Corrective Actions

Corrective and preventative actions will be implemented through the development of an action plan. The plan will provide details on the action required, time frame and responsibilities for completing the action. The implementation of the corrective and preventative actions will be reviewed internally and specific procedures developed for addressing non-conformances with the EMS or subordinate plans and strategies.

Systems Review and Improvement

The ongoing effectiveness and efficiency of the Environment Management Strategy is monitored as part of the day-to-day operations management. Feedback from this and other more formal reviews and/ or following special occurrences and audits, form the basis for system improvement. Ongoing review of the strategy is as per the relevant Systems Review Management System.

General Conditions of Review

In general, Bloomfield's management systems are reviewed and updated under the following conditions:

- Every three years; or
- Whenever there is a significant change to relevant legislation; or
- Whenever there is a significant change to the operations; or
- Whenever control measures are found to be ineffective either through:
 - ◆ changes to the working environment or
 - ◆ changes to operating systems; or
 - ◆ subsequent risk assessments; or
 - ◆ the findings of an audit; or
 - ◆ following a significant accident/ incident; or
 - ◆ following an assessment of a related safety alert.

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CONTINUAL IMPROVEMENT

Operational activities will be subject to regular review to ensure conformance with commitment made in the EMS and subordinate plans and strategies. The EMS will be reviewed every three years or more frequently if required to address areas that may require improvement. New activities or changes to the operation that may result in environmental problems will be assessed to determine if changes are required to manage the impacts.

The review process may include formalised procedures such as internal and external audits or feedback from consultation.



LEGEND



- Bloomfield Project Area
- Abel Mine Project Area
- Bloomfield Mining Lease
- ▲ Blast Monitor
- ▲ High Volume Air Sampler
- Noise Monitor
- ◆ Peizometers
- Water Monitoring
- ▲ Dust Monitor

	<p>Bloomfield Colliery</p> <p>Environmental Management Strategy</p>
<p>Figure 2 Environmental Monitoring Sites</p>	
<p>Scale: 1:33,333</p>	<p>Date: September 2018 Photo: January 2018</p>
<p>Drawing: A3</p>	

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APPENDIX A

ENVIRONMENTAL POLICY

THE BLOOMFIELD GROUP ENVIRONMENT POLICY



It is the policy of the Bloomfield Group, and its subsidiary and associated companies, to strive to achieve a high standard of care for the natural environment in all of the activities in which we engage during the production of quality coal and the provision of engineering related services.

We aim to conduct our operations in an ecologically sustainable manner by:

- Identifying, monitoring and managing risks arising from our operations in accordance with the structure
- Minimising our impact on the environment through the:
 - prevention of air, ground and water pollution;
 - reduction of noise associated with our activities to as low as reasonably practicable;
 - control of waste associated with our activities;
 - rehabilitation of disturbed areas; and
 - management of energy consumption and greenhouse gas production.
- Identifying, monitoring and managing risks arising from our operations in accordance with the structure of our Environment Management System, which establishes the appropriate objectives and targets related to the environmental aspects relevant to the scope of the Operation;
- Reviewing our environmental management activities and seeking to continually improve our production processes, waste management and the use of resources;
- Conducting our operations in compliance with all relevant environmental regulations, licences and legislation;
- Communicating with employees about our aim and about their individual responsibilities;
- Informing our contractors, customers and suppliers of our aim and of their environmental responsibilities in relation to our business;
- Communicating with the community and relevant government bodies with regard to our environmental performance, obligations and issues, as appropriate to their interests.

Signature 
 Name Brett Lewis
Managing Director
 Date 25th May 2017

Signature 
 Name Brendon Clements
Mine Manager, Bloomfield Mine
 Date 25th May 2017

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APPENDIX B

RELEVANT LEGISLATION

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Commonwealth Legislation

- National Greenhouse and Energy Reporting Act, 2007*
- Environment Protection and Biodiversity Conservation Act 1999*

NSW Legislation

- National Parks and Wildlife Act 1974;*
 - Environmentally Hazardous Chemicals Act 1985;;*
 - Work Health and Safety Act 2011*
 - Work Health and Safety (Mines and Petroleum Sites) Act 2013*
 - Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*
 - Local Government Act 1993;*
 - Roads Act 1993;*
 - Water Management Act 2000;*
 - Water Act 1912;;*
 - Local Land Services Act 2013*
 - Biodiversity Conservation Act 2016*
 - Protection of the Environment Operations Act 1997;*
 - Protection of the Environment Operations Amendment (Scheduled Activities and Waste) Regulation 2008;*
 - Mining Act 1992;*
 - Mining Regulation 2016*
 - Heritage Act 1977*
 - Explosives Act 2003*
 - Explosives Regulation 2013*
 - Dams Safety Act 2015*
 - Environmental Planning and Assessment Act 1979.*
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APPENDIX C

APPROVAL CORRESPONDENCE



Greg Lamb
Environmental Advisor
The Bloomfield Group
PO Box 4
EAST MAITLAND NSW 2323

13/07/2020

Dear Greg

**Bloomfield Coal Project (PA07_0087)
Environmental Management Strategy**

I refer to the Environmental Management Strategy submitted in accordance with Condition 1 of Schedule 5 of the Project Approval for the Bloomfield Coal Project (PA07_0087).

The Department has carefully reviewed the document and is generally satisfied it meets the requirements of the relevant Conditions of Consent.

Accordingly, the Planning Secretary has approved the Environmental Management Strategy (Version 7, dated 15 May 2020). Please ensure that the approved plan is placed on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Wayne Jones on 6575 3406.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Spratt'.

Matthew Spratt
Director
Resource Assessments (Coal & Quarries)

As nominee of the Planning Secretary