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Document Title:	ENVIRONMENTAL EMERGENCY RESPONSE MANAGEMENT SYSTEM BLOOMFIELD MINE		Document Owner:	Greg Lamb
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INTRODUCTION

It is the policy of The Bloomfield Group (Bloomfield) to strive to achieve a high standard of care for the natural environment and local community in all of the activities in which we engage during the production of quality coal and the provision of engineering related services (refer to *Environment Management Policy*).

Bloomfield is committed to the prevention, in so far as is reasonably practicable, of harm to the natural environment and local community through the identification and control of environmental hazards. In the course of operations, incidents and other events may occur that require a response in order to either prevent the incident from reoccurring or to minimise negative and/ or maximise positive impacts of the incident.

Section 148 of the *Protection of the Environment Operations Act 1997 (POEO Act)* requires that the "Relevant Authority" is notified "where a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened" see also the Section *Notification to the Authority* later in the document.

This Management System document provides information and the Procedures to guide the response to managing, including reporting to authorities, and the community environmental incidents at Bloomfield Group Mining Operations; particularly those Operations that operate under an Environmental Protection Licence (EPL).

It demonstrates compliance with Part 5.7A of the *POEO Act* and Part 3A of the *Protection of the Environment Operations (General) Regulation 2009 (POEO (G) Regulation)* related to establishing Pollution Incident Response Management Plans.

SCOPE

This document relates to incidents that cause or threaten "material harm" to the environment (refer to Section *Definitions* below).

Potential environmental incidents related to Bloomfield Mining Operations have been identified through an Environmental Risk Assessment conducted as per the *Group Risk Management System* (refer to *Environmental Emergencies Risk Assessment Report 300712*). A summary of the environmental hazards identified through that process, as being of significance to the Operations and therefore as requiring a response under Environmental Protection Authority (EPA) required Pollution Incident Response Management Plans, is presented in Table 1 below.

The *Environmental Emergencies Risk Assessment Report 300712* and this document are aimed at demonstrating compliance with the requirements of Section 153C of the *POEO Act 1997* "Information to be included in Plan" and of Clauses 98C (1), "Additional matters to be included in the Plan"; 98D "Availability of Plan"; & 98E "Testing of Plan" of the *POEO (G) Regulation 2009*.

Meets requirements of CL. 98C (1)(j)

The document should also be read in conjunction with the *Emergency Response Principle Control Plan* and the *Incident Notification Procedure*.

Other related information can be accessed through the *Group Hazardous Materials Management System* in the relevant Material Safety Data Sheet (MSDS).

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DEFINITIONS

Material Harm to the Environment (Section 147 of the POEO Act 1997)

Section 147 of the *POEO Act 1997* holds that:

- Harm to the environment is "material" if:
 - ◆ it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
 - ◆ it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations); and
- Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Note: It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

NOTIFICATION TO THE AUTHORITY

With regards to activities that cause, or threaten, a significant environmental incident, Section 148 of the *POEO Act 1997* requires (in summary) that:

- A person carrying on the activity must immediately notify each relevant authority of the incident and all relevant information about it.
- An employee carrying on an activity must immediately notify the employer of the incident and all relevant information about it. If the employer cannot be contacted, the person is required to notify each relevant authority.
- An employer who is notified of an incident or who otherwise becomes aware of a pollution incident, must, immediately notify each relevant authority of the incident.

Refer to the Sections *Contact Information* and *Reporting and Notification Protocol* for contact details and protocols related to reporting to the "Authorities".

HIGH OR EXTREME RISK ENVIRONMENTAL HAZARDS

The *MinOp Environmental Emergencies Risk Assessment Report 300712* identified no Extreme rated environmental hazards at Bloomfield Mining Operations.

The following hazards were identified as having the greatest potential to cause "material harm" to the environment and therefore as being required to be addressed in the Mining Operation Pollution Incident Response Management Plan included in this document.

Hazard	Operation	Risk Ranking (Consequence/ Likelihood)
Unlicensed release of mine-water (pit-water storage)	Open Cut Mining	High (Major/ Possible)
Unlicensed release of mine-water (separators, drains & lines)	Open Cut Mining/ Coal Processing/ Maintenance	High (Major/ Possible)
Unlicensed release of process water (dams)	Coal Processing	High (Major/ Possible)
Noise pollution	Open Cut Mining/ Coal Processing/ Maintenance	Significant (Major/ Remote)
Hydrocarbon Spill (Bulk Storage/ Service Truck/ Delivery to site)	Exploration & Construction/ Open Cut Mining/ Coal Processing/ Maintenance	Significant (Major/ Remote)

Meets requirements of Cl. 98C (1)(a), (b) & (c)

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Blasting (noise, vibration, dust, NOx)	Open Cut Mining	Significant (Major/Remote)
Spontaneous Combustion (Spon Com)	Open Cut Mining/ Coal Processing	Significant (Major/Remote)
Night lighting impact	Open Cut Mining/ Coal Processing/Maintenance	Significant (Major/Remote)

Table 1: Potential Environmental Incidents

CONTACT INFORMATION

Meets requirements of Cl. 98C (1)(g)(i),(ii) &(iii)

Table 2 below contains the contact details (as per Section 153C (c) of the *POEO Act 1997* and Cl. 98C of the *POEO (G) Regulation 2009*) who are authorised to:

- Activate the Pollution Incident Response Management Plan (in accordance with the *Reporting and Notification Protocol* below);
- Notify the relevant authorities (in accordance with the *Reporting and Notification Protocol* below);
- Manage (relevant to their area of expertise) the incident.

Table 3 below contains the contact details for the relevant Regulatory Authorities. See Attachment A for contact details for neighbouring landowners.

REFER TO *Reporting and Notification Protocol* (see below) BEFORE CALLING ANY EXTERNAL PERSONS OR ORGANISATIONS.

INTERNAL (BLOOMFIELD GROUP) REPORTING		
Name	Position	Phone Number
John Richards	Chairman of the Board	0419 236 002
Brett Lewis	Managing Director / CEO	0409 494 366
Geoff Moore	General Manager Mining Development	0407 490 944
Brad Donoghue	Mine Manager, Bloomfield	0418 923 058
Chris Knight	Environmental Manager	0403 058 777
Greg Lamb	Environmental Officer, Bloomfield	0457 819 211
Carlo Zoppo Paul Cutrone	Sparke Helmore Lawyers – Environmental Legal Advisors	0410 451 736 0404 828 276

Table 2: Bloomfield Authorised Persons

Meets requirements of Cl. 98C (1)(h)

EXTERNAL (REGULATORY AUTHORITY) REPORTING	
Organisation	Contact Details
EPA – Pollution line	131 555
Dept Planning & Environment	6575 3400 or compliance@planning.nsw.gov.au
DPE - Div of Resources and Geosciences	4931 6590 or minres.environment@industry.nsw.gov.au
NSW Health (Public Health Unit – Newcastle)	Office (02) 4924 6477 (ask for Public Health Officer) Fax 02 4924 6490
SafeWork NSW	131050
Local Govt – Maitland	(02) 4934 9700 - 24 hrs, 7 days/wk
State Emergency Services	(02) 6572 4669
Fire & Rescue NSW	000

Table 3: Regulatory Contacts

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REPORTING AND NOTIFICATION PROTOCOL

The following protocol is to be applied following (or during) an environmental incident to ensure the appropriate persons and organisations are informed. This protocol should be read in conjunction with the authorisation and notification protocols contained in the document *Incident Notification Procedure*. Response actions are outlined later in this document in the Section *Response to Environmental Incidents*.

Workers

All workers (employees and contractors working on site) are required to **immediately** report all environmental incidents/ potential environmental incidents to their Supervisor.

Supervisor

The Supervisor will **immediately** report the incident to the Mine Manager/ General Manager Mining (or alternate) and the Site Environmental Officer or Senior Environmental Officer, and complete a copy of the *Group Incident Reporting Form*.

Mine Manager / Environmental Officer

The Mine Manager (or alternate) and Environmental Officer will make an **immediate** initial assessment of the incident and determine whether the incident represents/ threatens material harm (refer to Section *Definitions*) to the environment. If so, the incident will be reported to the CEO and the Directors.

If not, the incident will be managed internally utilising group resources, without reporting a Pollution Incident. *Note: this may still involve notification of relevant authorities if the incident is a non-compliance with EPL, Development Consent, or Mining Lease conditions, but not environmental harm (i.e. blast overpressure exceedance reporting).*

External Reporting to EPA (and other Authorities)

The Directors will decide if the incident warrants external reporting. If external reporting is authorised:

- A verbal incident report is to be made "**immediately**" to the NSW EPA Pollution Line (taking note of incident number) by the Environmental Officer or Mine Manager (refer also to Section *Legal Professional Privilege* below).
- If the environmental incident causes or **threatens injury to human health** or safety, the incident is also to be reported to NSW Health and NSW Emergency Services, commensurate with the scale of the incident and potential impacts.
- If **actual injury or human health** impacts have occurred, the incident is to be reported to SafeWork NSW and The Inspectorate, as required in the *Incident Notification Procedure*.
- The incident will be reported to the relevant Local Government office.

Meets requirements of S 153C (a)(ii)(iii)

Ongoing Communication with Authorities

If required, the Mine Manager or (alternatively) the Environmental Officer will be the point of contact for all continuing communications with the authorities for the duration of the incident (and incident clean up) in accordance with the authority's instructions/ requirements until the emergency situation is resolved and/ or the authority is satisfied. For more information on the roles and responsibilities during emergency situations, see the *Emergency Response Principle Control Plan*.

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Notification of Neighbouring Property Owners / Occupiers

The Directors will determine whether the incident threatens offsite human health. If offsite environmental impacts and/ or human health is threatened, the potentially impacted landowners will be notified by the Environmental Officer via phone call (see Appendix A for contact details of neighbouring landowners).

Meets requirements of S 153C (a)(i) & Cl. 98C (1) (i) & (l)

Consultation will take place with those people and adequate instructions will be provided to landowners to ensure the protection of human health, livestock and property. Timely updates will continue to be provided for the duration of the incident and cleanup work. A follow up report on the incident and outcomes will be presented to the community at subsequent Community Consultation Committee meetings.

Investigation

Any "Notifiable Incident" as defined in this document is reported using the *Group Incident Reporting Form* and is considered to be a Significant Incident and will trigger a Significant Incident Investigation as per the *Group Incident Investigation Procedures*.

Follow-up Reporting

The NSW EPA will specify requirements for the provision of further information relating to the incident, but (at a minimum) will generally require a written report within 7 days of the incident.

LEGAL PROFESSIONAL PRIVILEGE

There may be a need to establish Legal Professional Privilege in relation to the incident and a decision to establish it is determined by the appropriate Director after suitable consultation with legal counsel and other appropriate people and before an investigation is commenced.

IT IS CRITICAL THAT THIS DECISION IS MADE WITHOUT DELAY SO THAT THE APPROPRIATE CONDITIONS ARE ESTABLISHED.

The investigation conducted under these circumstances is called a Legal Advisor's Incident Investigation (refer to the *Group Incident Investigation Procedures*).

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INVENTORY OF POTENTIAL POLLUTANTS

Table 4 below presents the type, maximum volume and location of potential pollutants stored at the licenced premises.

See Appendix B for a site map, including the location of potential pollutants.

Meets requirements of Cl. 98C (1)(d) & (e)

Potential Pollutant	Maximum Volume	Location
Distillate – C1	140,000 litres	Open Cut Workshop
Distillate – C1	15,000 litres	CHPP
Gas – O2, Acetylene	1,000 m ³	CHPP
Nalfote – Flammable - 3 III	10,000 litres	CHPP
Caustic soda	18,000 litres	CHPP
Explosives	5,000 kg	Magazine
Coal tailings	1,400 Kt/ year	Open Cut
Mine water/ process water	225 M litres	Storage Dams
Sewerage effluent	4,000 litres	Minor storage adjacent to administration buildings and bath houses.

Table 4: Potential Pollutants Stored at the Site

INCIDENT RESPONSE EQUIPMENT REGISTER

Table 5 below summarises the equipment and resources available to assist with the management of an environmental incident (refer also to *Emergency Response Principle Control Plan*).

Meets requirements of Cl. 98C (1)(f)

Equipment or Resource	Location	Maintenance Responsibility
Spill kits	Workshops and hydrocarbon storage facilities	EO
Earthmoving plant (e.g. grader, backhoe)	Open cut	Mine Manager
Camera and sampling equipment	Environmental Store Room	EO
Spare (or hire) pumps and polypipe line	Approx 1,000m spare polypipe line in open cut lay down area. Pumps hired as needed.	Pump Supervisor
Vacuum truck (hire via waste contractor)	Offsite	EO
MSDS Register	Online	Group Procurement Manager
Fire fighting equipment	Workshops, CHPP, fuel storage facilities and on vehicles/ plant.	Area Supervisors

Table 5: Register of Environmental Response Equipment

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RESPONSE TO ENVIRONMENTAL INCIDENTS

The following Sections outline the resources and actions required to respond to environmental incidents. A response action plan is presented for each of the significant potential pollution incidents outlined in Table 1. A summary of the management measures in place to minimise the likelihood of the incidents, and the relevant management system documents, are also presented.

GENERAL

AS WELL AS FOLLOWING THE SPECIFIC ACTIONS DETAILED FOR EACH ENVIRONMENTAL INCIDENT BELOW, THE FOLLOWING GENERAL ACTIONS SHOULD BE FOLLOWED FOR ALL ENVIRONMENTAL INCIDENTS:

Meets requirements of S 153C (b) & Cl. 98C (1) (i) & (j)

- Report** the incident to Supervisor, Mine Manager and Environmental Officer (as detailed in the reporting and *Notification Protocol* section). At a minimum, the reported information should include:
 - ◆ Nature of the Incident;
 - ◆ Location of the Incident;
 - ◆ Assistance required (e.g. spill kit, machinery).
 - Assess** the scale of the incident and incident site, identifying potential hazards to human safety, and take appropriate actions to maintain human safety.
 - Where possible, and safe, implement the **3 Cs Incident Response – Control, Contain, Clean-up:**
 - ◆ **Control** the source of the pollution incident, and control access to the impacted area;
 - ◆ **Contain** the released pollutant from spreading any further; and
 - ◆ **Clean up** the already released pollutant (and dispose of legally)
- Depending on the scale of the incident, the 3Cs response may be achievable locally with site based spill kits, but may also require the use of specialised contractors.

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**UNLICENCED
RELEASE OF MINE
WATER (PIT WATER,
DAMS, DRAINS AND
LINES)**

Mine-water (typically saline and turbid) is stored in non-operational open cut pits and storage dams onsite. This mine-water is also transferred between storages using open drains and polypipe lines.

If pits, dams, drains or lines fail, mine-water has the potential to discharge into natural creeks and drainage lines that lead offsite and into natural watercourses, eventually reporting to the Hunter River.

Incident Management	Responsible Person
Preventative Actions	
Measures outlined in the <i>Site Water Management Plan</i> implemented, including: <input type="checkbox"/> Mine planning to reduce unnecessary capture of clean water. <input type="checkbox"/> Regular review of site water balance and pit water inventory to determine storage capacity. <input type="checkbox"/> Monthly water quality testing to assess quality of stored waters.	Tech Services Manager EO, Pump Supervisor EO
Regular inspection and, if required, maintenance of water management structures and equipment, such as pumps, polypipe lines, drains and dam walls.	EO, Pump Supervisor
Release of mine water as allowed under EPL, in accordance with <i>Environmental Water Management System</i> .	EO
Fully welded and/ or flange-jointed polypipe lines High risk pipelines are fitted with flow monitoring equipment.	Mine Manager, Pump Supervisor
Response Actions	
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
Take action to stem flow of mine water: <input type="checkbox"/> Failed polypipe line - shutdown pump and engage contractors to repair line. <input type="checkbox"/> Drain failure – shutdown pump, close valve or reduce water level on overflowing storage. Use earthmoving plant to install temporary bypass or reinstate drain. <input type="checkbox"/> Dam failure or overtop - increase pumping capacity to reduce water levels.	Mine Manager, Pump Supervisor
Where possible, prevent mine water from leaving site – divert water to alternative storage or install check dam or sump, and pump water back to alternative storage (taking into account possible damage to natural drainage lines).	Mine Manager, Pump Supervisor
Evacuate any downstream work areas that may be impacted by released mine water.	Mine Manager, Pump Supervisor
Implement water sampling program to characterise discharge water quality for the duration of the discharge, and assess potential downstream impacts.	EO
Inspect integrity of other mine water management structures that may have also been impacted.	EO, Pump Supervisor
<i>Group Incident Investigation Procedures</i>	Mine Manager

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Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
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Table 5: Register of Environmental Response Equipment

**UNLICENCED
RELEASE OF
PROCESS WATER**
(Dams, Drains and
Lines)

Fine coal rejects consisting mainly of clay particles (tailings) are disposed of onsite in non-operational open cut voids, and transferred from the CHPP via polypipe lines.

Tailings emplacement volume at Bloomfield Mine is increased through constructed dam walls (note: Approved Tailings Dam designed to Dam Safety Committee Specifications). If the tailings dam fails (non-catastrophic failure) or lines fail, tailings may be released to natural creeks and drainage lines. Depending on water flow in the creeks, the fine tailings may be transported downstream.

Incident Management	Responsible Person
Preventative Actions	
Measures outlined in the <i>Emplacement Area Management Plan</i> implemented, including: <input type="checkbox"/> Annual inspection of dam integrity by qualified civil engineer. <input type="checkbox"/> Long-term mine planning to ensure adequate tailings storage volume for life of mine. <input type="checkbox"/> Approved tailings dam designed to Dam Safety Committee Specifications <input type="checkbox"/> Surveyor's Monitoring Plan of tailings and decant water levels	Tech Services Manager
Regular inspection and, if required, maintenance of tailings emplacement and transfer infrastructure, such as polypipe lines.	CHPP Manager
Protective intercept drains adjacent to tailings line.	CHPP Manager
Fully welded and/ or flange-jointed polypipe lines High risk pipelines are fitted with flow monitoring equipment.	CHPP Manager
Response Actions	
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
Take action to stem flow of tailings/decant water: <input type="checkbox"/> Failed polypipe line – shutdown pump and engage contractors to repair line. <input type="checkbox"/> Dam failure or overtop – stop pumping tailings. Increase decant water pumping capacity to reduce water levels. <input type="checkbox"/> Use earthmoving plant to temporarily reinstate or raise emplacement wall.	CHPP Manager
Where possible, prevent tailings from leaving site. Excavate sump or drain to intercept and pump tailings/ water back to alternative storage. (taking into account possible damage to natural drainage lines).	CHPP Manager
Implement downstream water sampling and visual inspection program to characterise impact on water quality and delineate migration of tailings particulate matter.	EO

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Inspect integrity of the remainder of the emplacement and transfer line.	CHPP Manager
<i>Group Incident Investigation Procedures</i>	Mine Manager

Table 6: Register of Environmental Response Equipment

HYDROCARBON SPILL
(Bulk Storage,
Service Truck /
Delivery to Site)

A significant release of hydrocarbons is possible from a vehicle accident involving a diesel delivery truck or an open cut field service truck, or failure of a bulk hydrocarbon storage facility.

Incident Management	Responsible Person
Preventative Actions	
The <i>Mine Transport Management Plan (Roads or Other Vehicle Operating Areas)</i> has been implemented to ensure safe traffic movement across operational mining areas.	Mining Supervisors
Design of hydrocarbon transfer and storage infrastructure in accordance with relevant Australian Standards and industry guidelines.	Group Engineering Manager
Regular inspection and, if required, maintenance of hydrocarbon storage facilities.	Maintenance Engineer, EO
Maintenance of spill kits at high risk sites, such as workshops and hydrocarbon stores. Portable spill kits kept on service trucks and delivery trucks.	Maintenance Engineer, EO
Response Actions	
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
Employ the 3 Cs spill response actions to contain, contain and clean up released hydrocarbons: <input type="checkbox"/> Contain released hydrocarbons with spill containment booms, mats, etc, or cutting a sump/ pushing up bunding. Where possible, prevent hydrocarbons entering drainage lines or from leaving site. Recover liquid waste (vacuum truck to be hired via waste contractors) and ensure disposal via licenced waste contractor. <input type="checkbox"/> Implement soil and water sampling program to delineate hydrocarbon impacted area. Recover all hydrocarbon impacted material.	CHPP Manager
Ensure all contaminated waste products are disposed of in accordance with <i>Site Waste Management Procedures</i> , and spill kits are replenished, as required.	EO
Inspect integrity of the remainder of the hydrocarbon storage facility.	Maintenance Engineer, EO
<i>Group Incident Investigation Procedures</i>	Mine Manager

BLASTING
(Noise, Vibration,
Dust, NO_x)

Blasting, which is an integral part of open cut coal mining, can result in excessive offsite overpressure, ground vibration and dust impacts. Blasting can also cause clouds of visible oxides of Nitrogen (NO_x) fumes, which may cause health impacts.

Impacts are mainly preventatively managed through careful blast planning (refer also to *Airborne Dust Management Plan*).

Incident Management	Responsible Person
Preventative Actions	
Blast design in accordance with <i>Explosives Principle Control Plan</i> to minimise offsite impacts.	Blasting Supervisor
Monitoring of meteorological conditions, including participation in the Hunter Valley Meteorological Sounding Group (JV), to plan blasting schedules, and model potential fume impacts.	Blasting Supervisor
Blast monitoring to record offsite ground vibration and airblast overpressure impacts.	EO
Response Actions	
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
<input type="checkbox"/> <i>Complaints Management Protocol</i>	EO
<input type="checkbox"/> <i>Group Incident Investigation Procedures</i>	Mine Manager

NOISE POLLUTION

24 hour open cut operations generate offsite noise. Operations are managed and monitored to meet noise limits contained in the site Environmental Protection Licence (EPL). However, noise complaints are still received. Noise impacts can be enhanced by atmospheric conditions, such as temperature inversions or wind direction.

Incident Management	Responsible Person
PREVENTATIVE ACTIONS	
Planning and management of night time operations to meet development consent/ EPL noise limits.	Mine Manager, Mining Supervisors
Noise and meteorological monitoring programs	EO
Installation of noise mitigation measures on permanent infrastructure such as CHPP and conveyors.	CHPP Manager, EO
Community Consultative Committee meetings to obtain community feedback about offsite mine impacts, and modification of site operations in response to that feedback.	EO
RESPONSE ACTIONS	
If complaint is received, Mining Supervisors will inspect noise levels and possible noise sources, and modify open cut operations, if required.	Mining Supervisors
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section

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<input type="checkbox"/> <i>Complaints Management Protocol</i>	EO
<input type="checkbox"/> <i>Group Incident Investigation Procedures</i>	Mine Manager

SPONTANEOUS COMBUSTION

Spontaneous combustion (Spon Com) results from self-heating which is caused mainly by the oxidation of coal and coal rejects. If the heat generated by this reaction is trapped, such as in a spoil pile, the temperature of the material will begin to rise and if unchecked may ultimately ignite (i.e. spontaneously combust).

Incident Management	Responsible Person
PREVENTATIVE ACTIONS	
Identification of high potential Spon Com coal ahead of mining (during resource definition investigations).	Mine Manager
Dump design and scheduling to ensure Spon Com prone material is not concentrated during dumping.	Mine Manager
Procedures for handling and stockpiling of Spon Com prone materials.	Mine Manager/ CHPP Manager
RESPONSE ACTIONS	
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
Separation, isolation and irrigation of Spon Com material to extinguish combusted material, and prevent spreading of combustion.	Mine Manager/ Mining Supervisors
<i>Group Incident Investigation Procedures</i>	Mine Manager

NIGHT LIGHTING IMPACT

Night lighting is required to ensure adequate illumination for night time vehicle/ mobile plant operations. Procedures are in place to ensure lighting plant are located so as not to cause offsite impact. However, complaints are occasionally received regarding night lighting.

A 24 hour complaints line is maintained to ensure timely response to night lighting incidents.

Incident Management	Responsible Person
PREVENTATIVE ACTIONS	
Design and maintenance of permanent flood lighting in accordance with development consent conditions to minimise light spillage.	Mine Electrical Engineer, EO
Inspection of mobile lighting tower positioning to minimise offsite impacts of obtrusive lighting with specific regard to minimising the impact for residents in neighbouring suburbs.	Mining Supervisors
Community Consultative Committee meetings to obtain community feedback about offsite mine impacts, and modification of site operations in response to that feedback.	EO

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RESPONSE ACTIONS	
If complaint is received, Mining Supervisors will inspect positioning of lighting towers. Offsite inspection may also be required, if offending lighting plant is not immediately obvious.	Mining Supervisors
Report incident (as detailed in the <i>Reporting and Notification Protocol</i> section)	See <i>Reporting and Notification Protocol</i> section
<input type="checkbox"/> <i>Complaints Management Protocol</i>	EO
<input type="checkbox"/> <i>Group Incident Investigation Procedures</i>	Mine Manager

TESTING OF PROCEDURES

The information and actions contained in this document are tested annually to ensure the document remains accurate, relevant and practicable. Testing will alternate between desktop simulation and practical response exercise in alternate years.

Meets requirements of Cl. 98C (1)(m), (n) & (p)

Testing will also take place within one month of an actual Environmental Incident occurring, to ensure the procedures are adequate and up-to-date.

Testing, whether desktop simulation or practical exercise, will assess all aspects of the procedures contained in this document.

Following completion of testing, whether annual or incident related, observations and outcomes of the testing will be recorded and used to update this document, as required.

The Site Environmental Officer coordinates the annual test, and maintains any records generated during testing. At a minimum, records must include date of testing, and the names of the person conducting the testing

TRAINING

Training in the procedures contained in this document will be implemented as per the schedule presented here in Table 6.

Meets requirements of Cl. 98C (1)(m)

Coordination of the training program is the responsibility of the Site Environmental Officer and recorded through the *Group Training and Competency Management System*.

Role	Format	Frequency
Mine Managers	Formal training & assessment/ participation in annual testing	Annual
Supervisors	Formal training & assessment	Annual
Operators/ Drivers	Toolbox Talk/ periodic participation in annual testing	Two Yearly
Maintenance Workers	Toolbox Talk/ periodic participation in annual testing	Two Yearly
Contractors	Site Induction	Two Yearly

Table 6: Training Schedule

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AUDIT AND REVIEW The ongoing effectiveness and efficiency of this Management System is monitored as part of the operation's day-to-day management. Feedback from this and other more formal reviews and/ or following special occurrences, form the basis for System improvement and re-design.

Internal auditing of this document is carried out as per the *Internal Audit Management System*.

Ongoing review of this document is as per the *Systems Review Management System*.

DOCUMENT MANAGEMENT Copies of this document are managed under the *Document Management System*. This document and other relevant documents are kept on site and are available to all employees and contractors (as appropriate).

Meets requirements of Cl. 98C (1)(o) In accordance with Clause 98D of the *POEO (G) Regulation* the following information is available on The Bloomfield Group WEB Site on the Bloomfield Mine page:

- The procedures for contacting the relevant authorities including the EPA, local council, the NSW Ministry of Health, SafeWork NSW, and Fire and Rescue NSW; and
- The procedures for communicating with the community as described in Sub-section *Notification of Neighbouring Property Owners/ Occupiers* above.

A hardcopy of this document is maintained onsite, and made available to authorised EPA Officers, if requested. The hardcopy of this document will be found at the Bloomfield Mine Tech Services Office.

CONSULTATION This Management System has been developed/ reviewed in consultation with relevant members of the workforce as appropriate to the impact and influence of the intent of the Management System.

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- SUPPORT DOCUMENTS**
- Protection of the Environment Operations Act 1997*
 - Protection of the Environment Operations (General) Regulation 2009*
 - Environment Management Policy*
 - Environmental Emergencies Risk Assessment Report 300712*
 - Emergency Response Principal Control Plan Bloomfield*
 - Incident Notification Procedure*
 - Incident Reporting Form*
 - Incident Investigation Procedures*
 - Environmental Water Management Procedure*
 - Washery Reject and Emplacement Area Management System*
 - Mine Transport Management Plan (Roads or Other Vehicle Operating Areas)*
 - Waste Management System*
 - Airborne Dust Management Plan*
 - Explosives Principle Control Plan*
 - Training and Competency Management System*
 - Internal Audit Management System*
 - Systems Review Management System*
 - Document Management System*
 - Consultation, Representation and Participation Management System*

- ATTACHMENTS**
- Appendix A: Contact Details for Neighbouring Landowners*
 - Appendix B: Map of Site, Location of Potential Pollutants and Surrounding Area*

REVISION HISTORY

7	Periodic Review conducted by Mine Manager and Environmental Officer	12/12/18	Greg Lamb	Brad Donoghue
6	Incident Related Review conducted by Mine Manager and Environmental Officer	10/11/2017	Greg Lamb	Brendon Clements
5	Update to format, document reference names and contacts	22/02/2017	Amy Cameron	Brendon Clements
4	Incident Related Review conducted by Mine Manager and Environmental Officer	28/01/2016	Greg Lamb	Brendon Clements
3	Incident Related Review conducted by Mine Manager and Environmental Officer	19/05/2015	Greg Lamb	Brendon Clements
2	Incident Related Review conducted by Mine Manager and Environmental Officer	04/06/2014	Greg Lamb	Brendon Clements
1	Periodic Review conducted by Mine Manager and Environmental Officer	28/11/2013	Greg Lamb	Brendon Clements
0	Original Issue	03/10/2012	Max Geyer	Garry Bailey
Rev.	Description	Date	Drawn	Approved

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APPENDIX A

Name	Address	Phone Number
Phil Keppie	619 John Renshaw Drive, Buttai	0417 194 637
Rodney Lodge	843 John Renshaw Drive, Black Hill	(02) 4930 3000
Donaldson Coal	1132 John Renshaw Drive, Black Hill	(02) 4931 0550
Doug Dickey	311 Mt Vincent Rd, East Maitland	(02) 4933 7467
Beatrice McNaughton	786 John Renshaw Drive, Black Hill	(02) 4930 3271
Tony Gavin	Valley View Lane, Louth Park	(02) 4937 5026
Helen Jeffress	325 Mt Vincent Road, East Maitland	0429 451 878

APPENDIX B

Map of Site, Location of Potential Pollutants and Surrounding Area

*Meets requirements
 of CL. 98C (1)(k)*

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