

# BROULA KING JOINT VENTURE PTY LTD

## POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

### PIRMP - Chronology

<b>DATE</b>	<b>Revision</b>	<b>Brief Description of Review</b>
February 2014	0	Initial Document
May 2014	1	Typo errors corrected

MINING LICENCE # ML 1625

May 2014

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### CRITICAL NOTE

**“Pollution Incident”** – an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, or occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

**“Material Harm to the Environment”** (*Section 147 of the Protection of the Environment Operations Act 1997*)

- 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.

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## 1. INTRODUCTION

This pollution Incident Response Management Plan (the Plan) has been prepared in accordance with Section 153A of the *Protection of the Environment Operations Act 1997* (POEO Act) for the Broula King Mine, owned by Resource Base Limited.

The mine site (ML 1625) covers an area of 76.91 ha located approximately 500m south of the Mid-Western Highway, near the village of Bumbaldry midway between the towns of Grenfell and Cowra within the Shire of Weddin in central NSW.

*Figure 1 – Generalised Mine Site Layout provides an outline of the site.*

*Figure 2 – Provides a map of the neighbourhood.*

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## 2. OBJECTIVES OF MANAGEMENT PLAN

The Pollution Incident Response Management Plan (PIRMP) has been developed in accordance with the requirements of the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012.

The objectives of the plan (as per the EPA's Environmental Guidelines for the preparation of Pollution Incident Response Management Plans) are to:

- Ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local councils, NSW Ministry of Health, Workcover NSW, and Fire and Rescue NSW) and people outside the facility who may be effected by the impacts of the pollution incident
- Minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks; and
- Ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

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## 3. LEGISLATIVE REQUIREMENTS

The specific requirements for pollution incident response management plans are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO(G) Regulation).<sup>2</sup> In summary, this provision requires the following:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).

- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO(G) Regulation (clause 98E).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

### **3.1 Definition of ‘pollution incident’**

The definition of a pollution incident is:

*pollution incident* means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

A pollution incident is required to be notified if there is a risk of ‘material harm to the environment’, which is defined in section 147 of the POEO Act as:

- a) harm to the environment is material if:
  - i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
  - ii. 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
- b) 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.

Industry is now required to report pollution incidents *immediately* to the EPA, NSW Health, Fire and Rescue NSW, WorkCover NSW and the local council. ‘Immediately’ has its ordinary dictionary meaning of promptly and without delay. These strengthened provisions will ensure that pollution incidents are reported directly to the relevant response agencies so they will have direct access to the information they need to manage and deal with the incident in a faster time.

There are new associated offences, for individuals and corporations, for not preparing a plan, not keeping the plan at the premises to which it relates, not testing the plan in accordance with the regulations and not implementing the plan in the case of an incident.

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## **4. RESPONSIBLE MANAGEMENT AND MAIN CONTACT**

### **4.1 Mine site and Personnel responsible for emergency and contacting regulatory authorities**

2713 Mid Western Highway  
Bumbaldry NSW 2794  
Phone: (02) 6345 5824

Peter Kelliher	0419 502 365	Senior Management
Barry Hinde	0418 440 809	Senior Management
Alan Fraser	0412 635 000	Senior Management

### **4.2 Regulatory Authorities to be contacted**

EPA	131 555
Cowra Hospital	(02) 6340 2300
Grenfell Hospital	(02) 6843 1111
Workcover	131 050
Weddin Shire Council	(02) 6343 1212
Police, Fire, Ambulance	000
Department of Primary Industry NSW	(02) 6391 3100

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## **5. HAZARDS AND RISK MANAGEMENT**

### **5.1 Potential pollution incidents identified include**

- Air Pollution Incident: Escape of significant dust or smoke to atmosphere
- Water Pollution incident: Significant sediment, leachate, chemicals, hydrocarbons/fuel off site to a watercourse or groundwater
- Noise pollution: Significant noise impacts on neighbouring residences and exceedance of Noise Criteria as required by the EPA Licence
- Land Pollution incident: Escape of sediment, hydrocarbons, fuels or chemicals released off site to neighbouring land

## 5.2 The potential major hazards identified are

Hazard	Event	Likelihood
Dust	Excessive wind	Possible/Unlikely
Smoke	Onsite fire/Bush fire	Possible/Unlikely
Water pollution sediment discharge	Severe rain event	Possible/Unlikely
Leachate discharge	Escape from TSF	Possible/Unlikely
Chemicals/fuel	Discharge to environment	Possible/Unlikely
Noise	Exceed noise criteria	Possible/Unlikely
Inundation of TSF	Severe rain event	Possible/Unlikely

Events that could increase the possibility of any likelihood noted above could be:

- Natural disaster
- Sabotage
- Vandalism
- Failure of pressure vessel (gas tank)

## 5.3 Hazardous product and chemical re-agents on site and storage in appropriate reagent area or other

Product	Size	Maximum on site	Hazardous or otherwise
Copper Sulphate	Crystals 25kg bags	2 tonnes	Not hazardous
Sodium meta bisulphite	Powder 1 tonne bulk bags	15 tonnes	Not hazardous
Sodium Cyanide	Pellets 1 tonne bulk bags	25 tonnes	Hazardous
Diesel	Liquid	65,000 litres	Not hazardous
Unleaded petrol	Liquid	300 litres	Not hazardous
LPG	Liquefied Gas	7,500 litres	Not hazardous
Paint thinners	Liquid	50 litres	Not hazardous
Oils/Greases New and Used	Liquid	600 litres	Not hazardous
Flocculent	Powder 25 kg bags	2 tonnes	Not hazardous
Caustic	Liquid 1 tonne IBC	2 tonnes	Hazardous
Nitric acid	Liquid 20 litre drum	200 litres	Hazardous
Lime	Bulk powder	25 tonnes	Not hazardous
Sulphuric Acid	Liquid 1 tonne IBC	2 tonnes	Not hazardous
Soda Ash	Powder 25kg bags	100 kgs	Not hazardous
Borax	Powder 25kg bags	100 kgs	Hazardous
Potassium Nitrate	Powder 25kg bags	100 kgs	Not hazardous
Glycol	Liquid 200 litre drum	200 litre	Not hazardous
Activated Carbon	Granules 500 kg bags	20 tonne	Not hazardous
Paint Various	Containers Spray Cans	25 litres 5 litre	Not hazardous
Blasting	Emulsion	10 tonnes	Not hazardous

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## 6. PRE-EMPTIVE MEASURES

The mine site is equipped with the following:

- Containment bunding to reagent area to contain reagents and exclude inundation by storm event.
- Spill response criteria is in place and while not regularly required is well practised by employees and over seen by management.
- Safety showers and eye wash stations are located throughout the plant.
- Appropriately required fire extinguishers are located about the site
- Fire hose reels fed from a fire water tank are located throughout the plant.
- Fire water tank is fitted with standard fittings to satisfy use by rural fire to aid with a fire emergency on the site and in the region.
- First aid kit is available on site.
- Cyanide poisoning kit located on site for use by local doctors if required for an emergency. Cowra Hospital notified of the sites use of cyanide.
- All storm water is diverted from all chemical storage areas including the TSF and reports to two sediment/catchment basins prior to any discharge from site. The site endeavours to operate with a negative water balance at all times with no discharge since processing commenced.
- The visitors car park is the muster point for any evacuation of the site.
- An evacuation alarm is in operation on the site
- PPE equipment includes:
  - Gas monitoring equipment – (records elevated cyanide levels)
  - Safety masks complete with filter canisters for use with elevated chemical levels

### Cautionary Principle

Prior to responding to a pollution occurrence all OH & S risks are to be assessed under the current procedures and currently in place.

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## 7. COMMUNICATING WITH THE LOCAL COMMUNITY

The nearby village of Bumbaldry is sparsely populated. The site has three direct neighbours, a fourth is located to the west and over the highway and we have had reason to contact the fifth party who resides approximately 1 km from the site.

A list of those parties is:

1. Danny and Val Withers (02) 6345 5806
2. John Sutton (02) 6345 5851
3. Craig Day and Cath Sullivan (02) 6345 5818
4. Michael and Fiona Drummond (02) 6345 5873
5. Rod and Margaret Rech (02) 6345 5808

Management is in regular contact with all of the above particularly in respect of blasting notice to persons noted as 1-4 inclusive.

### **7.1 Pollution Incident Plan**

In the event of an incident that could endanger the environment and affect the neighbourhood:

- Assess need to evacuate the site/area/region
- Sound the site alarm
- Take any action to minimise the impact if safe to do so
- Notify employees to muster to the visitors car park or elsewhere if not safe to do so, in which case proceed to front gate on Western Highway.
- Ensure all employees are accounted for
- Prevent all unnecessary traffic from entering site
- If risk to surrounding area, contact all neighbours and advise of incident and any precautions required up to and including evacuation
- Contact all authorities and notify of incident
- Move to prepare a written report of the incident
  - Record date, times and location
  - Take photographs
  - Consider witness statements
  - Note nature and quantity (estimated) or volume of any chemical incident
  - Consider potency of pollutant
  - Note any cause of or circumstance leading to the incident
- Prepare for any clean up and or recovery when safe to do so

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## **8. PUBLICATION**

Maintain copies of this PIRMP on site at all times.

### **8.1 Employee training**

- Ensure all employees are familiar with the PIRMP – conduct training and have employees sign off.

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## **9. PIRMP TESTING**

**9.1** Test PIRMP at least every 12 months to ensure all contents are accurate and update where necessary.

**9.2** Review the plan immediately following any onsite incident to confirm adequacy.

