

DARTBROOK MINE

CARE AND MAINTENANCE POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

Prepared by:

HANSEN BAILEY Suite 6/127-129 John Street SINGLETON NSW 2330

August 2018

For:

AUSTRALIAN PACIFIC COAL Level 4, 10 Felix Street BRISBANE QLD 4000

TABLE OF CONTENTS

1	IN	NTRODUCTION	
	1.1	BACKGROUND	1
	1.2	REGULATORY REQUIREMENTS	1
	1.3	MAJOR HAZARDS	6
	1.4	POTENTIAL POLLUTANTS	6
2	Р	OLLUTION INCIDENT RESPONSE MANAGEMENT	9
	2.1	LEGISLATIVE REQUIREMENTS	9
	2.2	MANAGEMENT RESPONSIBILITIES	10
3	IN	NCIDENT MANAGEMENT & NOTIFICATIONS	
	3.1		
	3.2	INCIDENT NOTIFICATIONS	13
4	R	EPORTING AND REVIEW	
	4.1		
	4.2	PIRMP TESTING & REVIEW	16
	4.3	PIRMP TRAINING	16
	4.4	PIRMP ACCOUNTABILITIES	16

LIST OF TABLES

Table 1	PIRMP Document Requirements	1
Table 2	PIRMP Management Responsibilities	10
Table 3	PIRMP Stakeholders to be Notified	13
Table 4	PIRMP Management Accountabilities	16
	LIST OF FIGURES	
Figure 1	Regional Locality	5
Figure 2	Hazardous Materials Storages	7
Figure 3	Water Management Infrastructure	8
Figure 4	Land Ownership	15
	LIST OF APPENDICES	

Appendix A PIRMP Test and Review History

DARTBROOK MINE POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

for Australian Pacific Coal

1 INTRODUCTION

1.1 BACKGROUND

Dartbrook Mine is owned and managed by Australian Pacific Coal Limited (AQC), who acquired the site in May 2017. Dartbrook Mine is located 10 kilometres (km) north of Muswellbrook and 4.5 km south-west of Aberdeen (see **Figure 1**) in New South Wales (NSW).

Dartbrook Mine's current development consent (DA 231-7-2000) expires in December 2022. Dartbrook Mine has been on Care and Maintenance since December 2006.

1.2 REGULATORY REQUIREMENTS

As the holder of Environment Protection Licence (EPL) 4885, AQC are required to comply with the requirements of the *Protection of the Environment Operations Act 1997* (POEO Act), including the requirement to prepare, implement and regularly test a Pollution Incident Response Management Plan (PIRMP) for the site.

A list of information required for inclusion in a PIRMP is provided under clause 153C of the POEO Act and clause 98C of the *Protection of the Environment Operations (General) Regulation 2009* (POEO Regulation) a summary of which is included in **Table 1**, along with where this information is located in this document.

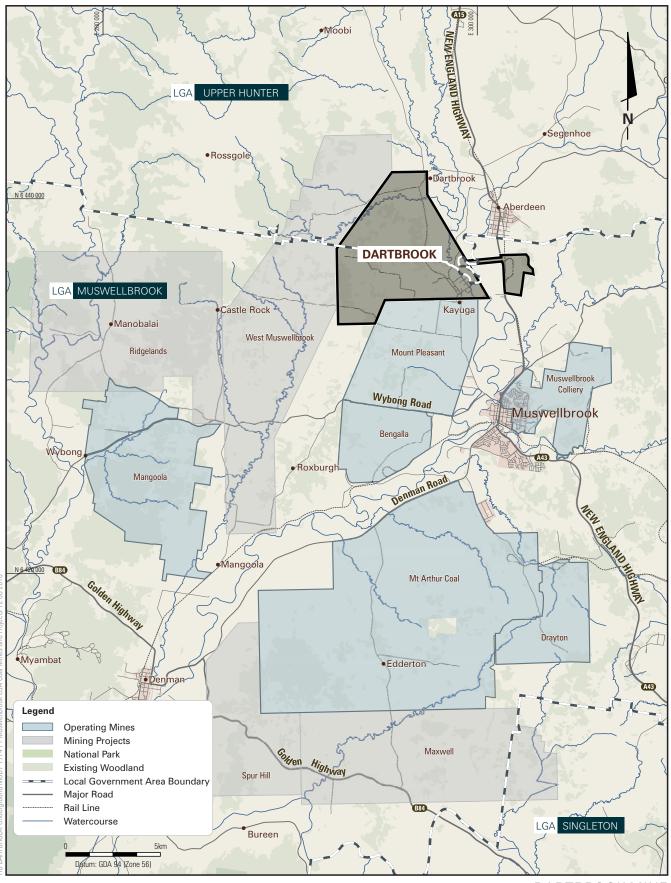
Table 1
PIRMP Document Requirements

Ref	Requirement	Document Section
POEO A	ct	
1.	A pollution incident response management plan must be in the form required by the regulations and must include the following:	This PIRMP
	(a) the procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to:(i) the owners or occupiers of premises in the	Section 3.2

Ref	Requirement	Document Section
	vicinity of the premises to which the environment protection licence or the direction under section 153B relates, and	
	(ii) the local authority for the area in which the premises to which the environment protection licence or the direction under section 153B relates are located and any area affected, or potentially affected, by the pollution, and	Section 3.2
	(iii) any persons or authorities required to be notified by Part 5.7;	Section 3.2
2.	(b) a detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection licence, or the occupier of the relevant premises, to reduce or control any pollution;	Section 3
3.	(c) the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made; and	Section 3
4.	(d) any other matter required by the regulations.	Section 4
POEO R	egulation	
5.	The matters required under section 153C (d) of the Act to be included in a plan are as follows:	Section 1.3, 1.4
	(a) a description of the hazards to human health or the environment associated with the activity to which the licence relates (the <i>relevant activity</i>),	
6.	(b) the likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood,	Section 1.3
7.	(c) details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity,	Section 1.3

Ref	Requirement	Document Section
8.	(d) an inventory of potential pollutants on the premises or used in carrying out the relevant activity,	Section 1.3
9.	(e) the maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates,	Section 1.4
10.	(f) a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident,	Section 3.1
11.	(g) the names, positions and 24-hour contact details of those key individuals who:	Sections 2.2, 4.4
	(i) are responsible for activating the plan, and	
	(ii) are authorised to notify relevant authorities under section 148 of the Act, and	
	(iii) are responsible for managing the response to a pollution incident,	
12.	(h) the contact details of each relevant authority referred to in section 148 of the Act,	Section 3.2
13.	(i) details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on,	Section 3.2
14.	(j) the arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on,	Sections 3.1, 3.2
15.	(k) a detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises,	Section 1.4

Ref	Requirement	Document Section
16.	(I) a detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk,	Section 3.1
17.	(m) the nature and objectives of any staff training program in relation to the plan,	Section 4.3
18.	(n) the dates on which the plan has been tested and the name of the person who carried out the test,	Appendix A
19.	(o) the dates on which the plan is updated,	Appendix A
20.	(p) the manner in which the plan is to be tested and maintained.	Section 4.2







DARTBROOK MINE

Regional Locality

1.3 MAJOR HAZARDS

Major potential hazards related to activities on site during the Care and maintenance activities on site were identified in the *Dartbrook Care and Maintenance Project Broad Brush Risk Assessment* (BBRA). The hazards identified in the BBRA that are relevant to this document include:

- Impacts to land from hydrocarbon or hazardous chemical spills;
- Impacts to water from hydrocarbon, hazardous chemical, sediment laden water or mine water spills;
- Water discharge from site due to dam, storage or infrastructure failure; and
- Fire (from spontaneous combustion from underground workings / REA, hot work, equipment faults, lightning, etc).

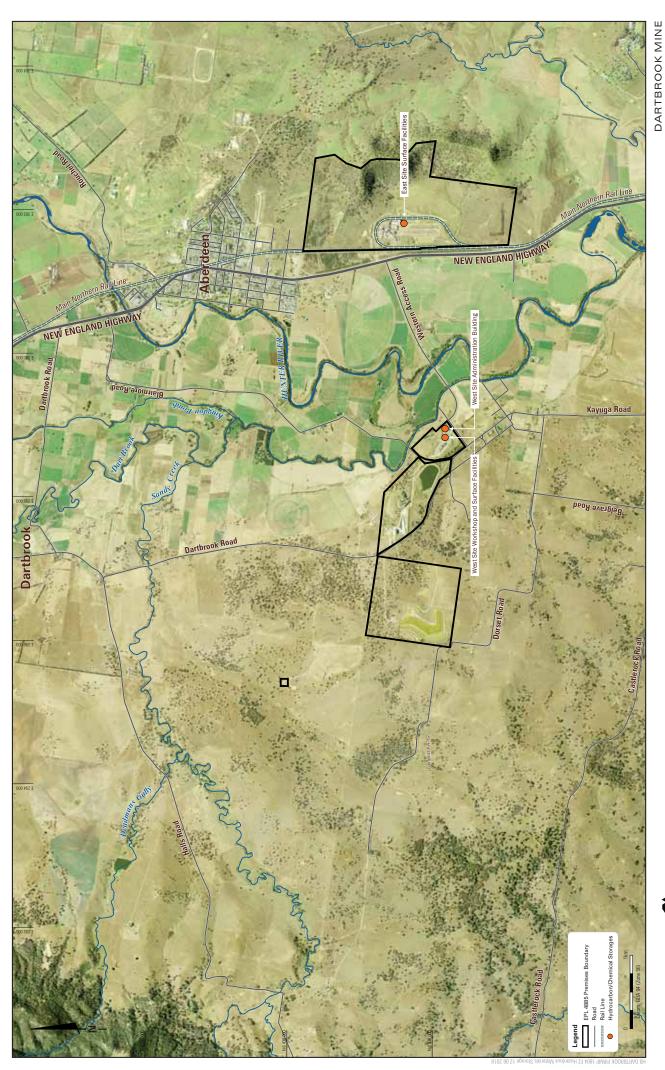
1.4 POTENTIAL POLLUTANTS

All materials required for Care and Maintenance activities at Dartbrook are documented in a site register and managed through a 'Chemical Substance Permit' system. This system is maintained by the contractors appointed as statutory managers for the Care and Maintenance of the site, along with the relevant Safety Data Sheets for each.

Storages for the nominal volumes of oils and hydrocarbons stored on site in accordance with the requirements of AS 1940-2004, The storage and handling of flammable and combustible liquids. These storages are designed with bunds to be able to capture at least 110% of the volume of the hydrocarbons stored within, or drain to collection sumps. The locations where small volumes of hydrocarbons and other potentially hazardous materials are stored on site during Care and Maintenance are shown on **Figure 2**.

Sediment laden water and mine water captured and stored on site also have the potential to create environmental impacts in the event of an incident. The location of water management dams and associated infrastructure on site is shown on **Figure 3**.

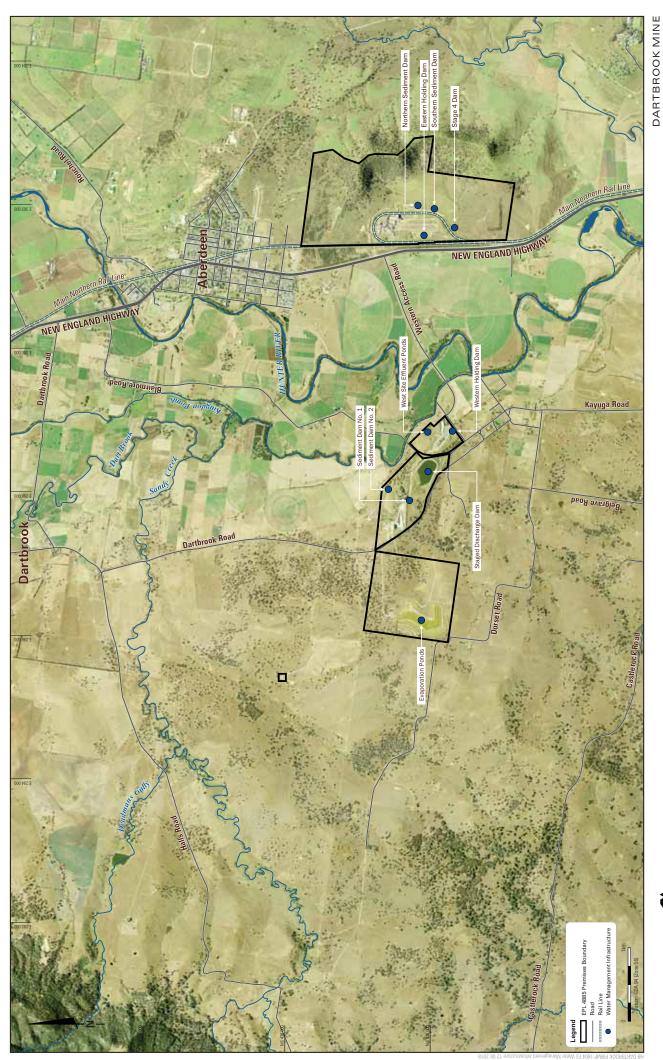
Hazardous Materials Storage





Hansen Bailey ENVIRONMENTAL CONSULTANTS

Water Management Infrastructure





HansenBailey

2 POLLUTION INCIDENT RESPONSE MANAGEMENT

2.1 LEGISLATIVE REQUIREMENTS

All employees and contractors at Dartbrook are responsible for notifying their Work Supervisors and management of any environmental incident or potential environmental incident, regardless of scale. This will ensure that the requirements of Section 148 the POEO Act are met, which states that the NSW Environment Protection Authority (EPA), relevant regulatory agencies and local landholders are notified immediately following identification of a pollution incident which has caused, or is threatening to cause environmental harm.

The POEO Act defines a 'pollution incident' as:

"...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."

Notification of a pollution incident is required if a potential risk of '*material harm to the environment*' is identified, as defined in Section 147 of the POEO Act:

- "(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."

Incident notification and response procedures are described further in Section 4.

2.2 MANAGEMENT RESPONSIBILITIES

The management responsibilities that apply to this PIRMP are summarised in **Table 2**.

Table 2
PIRMP Management Responsibilities

FINIT Management Responsibilities				
Name / Position	Contact Details	Responsibilities		
Statutory Mining Official / Underground Control Room	Control Room Number 950 (internal) (02) 6540 8950 Emergency Number 900 (internal) (02) 6540 8900 (external)	 Provide point of contact and assistance for environmental incident response in statutory mining areas, underground workings. Manage responses to pollution incidents that occur in statutory mining areas; Notify Dartbrook personnel potentially in the vicinity of any environmental incident; Notify Dartbrook Environment Officer of any environmental incident. 		
Dorian Walsh, Environment Officer	(02) 6540 8852	 Notify Dartbrook Statutory Mining Official / Control Room Operator of any environmental incident Notify AQC corporate office Notify EPA and other stakeholders of relevant environmental incidents in accordance with this PIRMP; Provide internal monthly report to AQC corporate office summarising all environmental incidents 		

Name / Position	Contact Details	Responsibilities
		reported and the outcome of any investigations / corrective actions taken; • Assist in managing environmental incident responses; • Co-ordinate testing and updating of this PIRMP; and • Arrange for internal notifications of any changes and training in relation to this PIRMP.
Ron Connolly, Rural Manager	(02) 6540 8805	 Provide point of contact and assistance for environmental incident response in rural (nonstatutory) areas; Notify Dartbrook personnel potentially in the vicinity of any environmental incident in rural areas of the site. Assist in the notification to community stakeholders of an environmental incident, if required.
All personnel	N/A	 Immediately report pollution incidents to Work Supervisor, Statutory Mining Official or directly to the site Environment Officer. Assist with pollution incident containment and response, if required.

3 INCIDENT MANAGEMENT & NOTIFICATIONS

3.1 INCIDENT MANAGEMENT

The following process will be put in place when a pollution incident occurs on site:

- 1. Safely secure and contain the incident site;
- Report the incident and make the required notifications (see Section 3.2). It is the
 responsibility of all Dartbrook personnel and contractors to immediately report an
 environmental incident or hazard to their Work Supervisor or the site Environment
 Officer. In the context of this PIRMP, 'immediately report' in taken to be mean
 'promptly and without delay';
- 3. Commence incident response and documentation;
- 4. Complete incident investigation and review;
- 5. Undertake any identified corrective actions as a result of the incident; and
- 6. Review the PIRMP document (within one month of the incident).

The emergency and environmental incident response procedures for the site are documented in the *Emergency Control Plan, Dartbrook Care and Maintenance Project*. This document includes emergency response and management measures for environmental incidents including:

- Fire:
- Flood:
- Fuel and chemical spills;
- Unplanned discharge of sediment, mine water or effluent;
- Dam failure;
- Slope instability and erosion; and
- Spontaneous combustion.

As with any other incident on site, Fire and Rescue NSW must be contacted on 000 if an environmental or pollution incident presents an immediate threat to human health or property. Fire and Rescue NSW are responsible for controlling and containing emergency incidents once they are mobilised to site.

Where an environmental incident has occurred that does not present an immediate threat to human health or property, the safety of Dartbrook personnel and community stakeholders in proximity to the incident site shall remain the primary consideration, prior to any management action to contain the source and spread of pollution.

All Dartbrook personnel and contractors receive emergency response training during completion of their site induction. Additional training, PPE, chemical handling and environmental management controls required for specific Care and Maintenance tasks are described in the relevant management procedures prepared by the Statutory Mine Manager.

3.2 INCIDENT NOTIFICATIONS

As noted in Section 3.1, it is the responsibility of all Dartbrook personnel and contractors to *immediately report* an environmental incident or hazard to their Work Supervisor or the site Environment Officer. '*Immediately report*' is taken to be mean 'promptly and without delay'.

Once a pollution incident has been identified, internally reported and initial inspection of the incident site has been undertaken, notifications must be immediately provided to the relevant external parties identified in **Table 3**, in accordance with the requirements of the POEO Act. Stakeholders must be contacted in the order provided in **Table 3**.

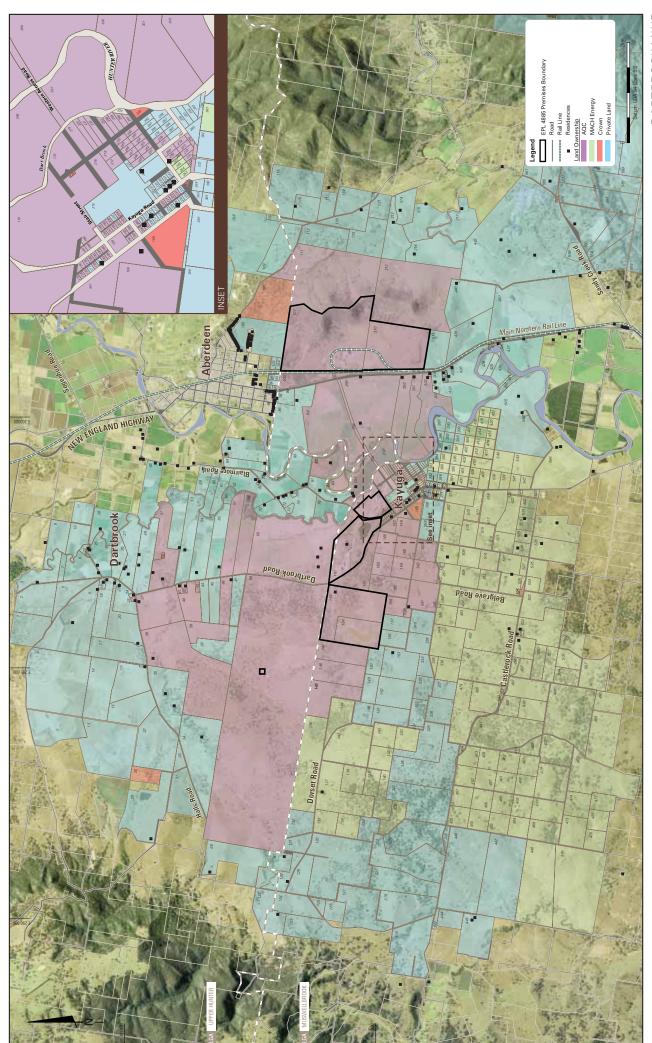
Once initial containment of a pollution incident has occurred and it is safe to do so, an immediate review must also be undertaken to determine if the incident has caused or has the potential to cause 'material harm to the environment' as defined under the POEO Act (see Section 2.1). This review to determine 'material harm to the environment' will be undertaken by the Statutory Mine Manager, in consultation with the site Environment Officer. Following any notification of 'material harm to the environment', it shall be the responsibility of the site Environment Officer to provide an ongoing point of contact to the agencies identified in Table 3.

Table 3
PIRMP Stakeholders to be Notified

Ref	Stakeholder	Phone Contact	Email
1.	Fire and Rescue	000	To be contacted first if a pollution
	NSW		incident presents an immediate threat to
	(emergency only)		human health or property and
			emergency response is required).
2.	AQC Corporate	(07) 3221 0679	info@aqcltd.com
	Office		
3.	EPA	13 15 55	hunter.region@epa.nsw.gov.au
4.	Department of	(02) 6575 3403	compliance@planning.nsw.gov.au
	Planning and		
	Environment		
5.	Department of	(02) 4931 6590	minres.environment@planning.nsw.gov.
	Industry, Division	(Environmental	<u>au</u>
	of Resources and	Sustainability	
	Geoscience	Unit)	
6.	Ministry of Health	(02) 4924 6477	-
7.	WorkCover NSW	13 10 50	-

Ref	Stakeholder	Phone Contact	Email
	(Safe Work		
	Australia)		
8.	Local community	Various, as	Local community stakeholders are to be
	landholders	required	contacted in the event that a pollution
		(see Figure 4)	incident has the potential to threaten
			human health or property on their land
			(to be determined by the Statutory Mine
			Manager and site Environment Officer).
			Contact will be made with all landholders
			by phone (wherever possible) and
			regular updates provided where the
			potential for these impacts are present.
			This initial contact will outline:
			Type of incident;
			Location of incident;
			Potential impacts to community
			health / property;
			Incident responses; and
			Site contact details for follow-up
			enquiries.
			Contact details for community
			stakeholders are maintained on site in the Dartbrook Stakeholder Database.
9.	Muswellbrook	(02) 6549 6790	the Dartbrook Stakeholder Database.
) ð.	Shire Council	(02) 0349 0790	-
10.	Upper Hunter Shire	(02) 6540 1100	_
10.	Council	(02) 00-0 1100	
11.	Fire and Rescue	1300 729 579	-
	NSW	.333 . 23 07 0	
	(non-emergency		
	notifications)		

Land Ownership DARTBROOK MINE





HansenBailey

4 REPORTING AND REVIEW

4.1 PIRMP AVAILABILITY

A copy of this PIRMP will be retained on site in hard copy form and will be made available to all personnel responsible for its implementation. A copy of this PIRMP will also be made available to the EPA, on request.

This PIRP will also be made publicly available on the Dartbrook website. The personal information of community stakeholders in the vicinity of the site will not be included in the public version of this PIRMP.

4.2 PIRMP TESTING & REVIEW

All sections of this PIRMP will be tested on (at least) an annual basis to confirm that it remains appropriate to the activities on site and it is able to be implemented effectively in response to an environmental incident. Testing will be undertaken through a desktop review or as part of environmental emergency drill training on site, with results of the test recorded (including any changes required to the PIRMP which were identified).

A review of the PIRMP will also be triggered following any environmental pollution incident that occurs on site in relation to activities scheduled under EPL 4885. This review will be undertaken within one month from the date of the incident and consider if any additions or changes to the PIRMP are required to ensure its ongoing efficacy.

4.3 PIRMP TRAINING

All Dartbrook personnel and contractors working on site are required to complete a site induction. As part of the induction, all personnel will be provided with relevant details on emergency and environmental incident response, in accordance with this PIRMP.

As noted in **Section 4.2**, the PIRMP will be regularly tested and updated. PIRMP testing which uses simulated incident response may also involve other Dartbrook personnel, if required.

4.4 PIRMP ACCOUNTABILITIES

Accountabilities for the ongoing management and maintenance of this PIRMP are summarised below in **Table 4**.

Table 4
PIRMP Management Accountabilities

Role	Accountabilities
AQC Management	Approve the PIRMP for use on site and subsequent revisions.
	Ensure adequate resources are made available for implementation of the PIRMP.

Role	Accountabilities
	Liaison with regulatory and community stakeholders as required.
Statutory Mine Manager	Undertake notifications of pollution incidents in statutory mining areas on site, in accordance with this PIRMP.
	Manage and record responses to pollution incidents on site.
	Ensure notification and training on the relevant parts of the PIRMP is provided to mining personnel and contractors.
	Liaison with regulatory and community stakeholders as required.
Environmental Officer	Undertake notifications of pollution incidents in statutory mining areas on site, in accordance with this PIRMP.
	Co-ordinate response to pollution incidents.
	Ensure notification and training on the relevant parts of the PIRMP is provided to environmental contractors.
	Arrange for regular testing and review of the PIRMP.
	Assist in the training of Dartbrook personnel and contractors on the relevant sections of the PIRMP.
	Liaison with regulatory and community stakeholders as required.
Rural Manager	Undertake notifications of pollution incidents in rural areas on site, in accordance with this PIRMP.
	Assist in notifications of pollution incidents to community stakeholders as required.

APPENDIX A

PIRMP Test and Review Summary

A summary of the test and revision history for this PIRMP is provided in **Table A1**.

Table A1 PIRMP Test and Revision Summary

Version	Date	Reviewer(s)	Description
1.	16/08/18	J. Bailey	Preparation of Care and Maintenance PIRMP.
2.			
3.			
4.			
5.			