METROPOLITAN COAL

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN




METROPOLITAN COAL

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

Revision Status Register

Section/Page/ Annexure	Revision Number	Amendment/Addition	Distribution	EPA Approval Date
All	PIRMP-R01-A	Original	EPA	
3.3, 8.3, 12		PIRMP 2020		

JUNE 2020

TABLE OF CONTENTS

TABLE OF CONTENTS CONTINUED

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1 INTRODUCTION

Metropolitan Collieries Pty Ltd (**Metropolitan Coal**) is a wholly owned subsidiary of Peabody Energy Australia Pty Ltd. Metropolitan Coal was granted Project Approval for the Metropolitan Coal Project (**the Project**) under Section 75J of the New South Wales (NSW) *Environmental Planning and Assessment Act, 1979* (EP&A Act) on 22 June 2009 (the Project Approval). A copy of the Project Approval is available on the Peabody website (http:/www.peabodyenergy.com.au).

The Project comprises continuation, upgrade and extension of underground coal mining operations and surface facilities at Metropolitan Coal. The Approved underground mining Project layout and areas of potential impact are shown in **Figure 1**. The Major Surface Facilities Area is shown in **Figure 2**. Relevant drainage pathways are shown in **Figure 2a**.

1.1 PURPOSE AND SCOPE OF PLAN

This Pollution Incident Response Management Plan (**PIRMP**) has been prepared by Metropolitan Collieries, as holder of Environment Protection License No.767 (**EPL 767**) in accordance with Part 5.7A of the *Protection of the Environment Operations Act 1997* (**POEO Act**) and Part 3A of the *Protection of the Environment Operations (General) Regulation 2009* (**Regulation**). EPL 767 covers the following scheduled activities:

1. Coal Works; and
2. Mining for Coal.

The PIRMP is to be implemented by Metropolitan Collieries, including its employees and contractors, in the event of a pollution incident. In particular the PIRMP provides information regarding procedures for:

- the identification of a pollution incident;
- notification of pollution incidents in certain circumstances; and
- responses to pollution incidents by Metropolitan Collieries including its employees and contractors.

The relationship of this PIRMP to the Metropolitan Mine Environmental Management Structure is shown on **Figure 3**.

Figure 1

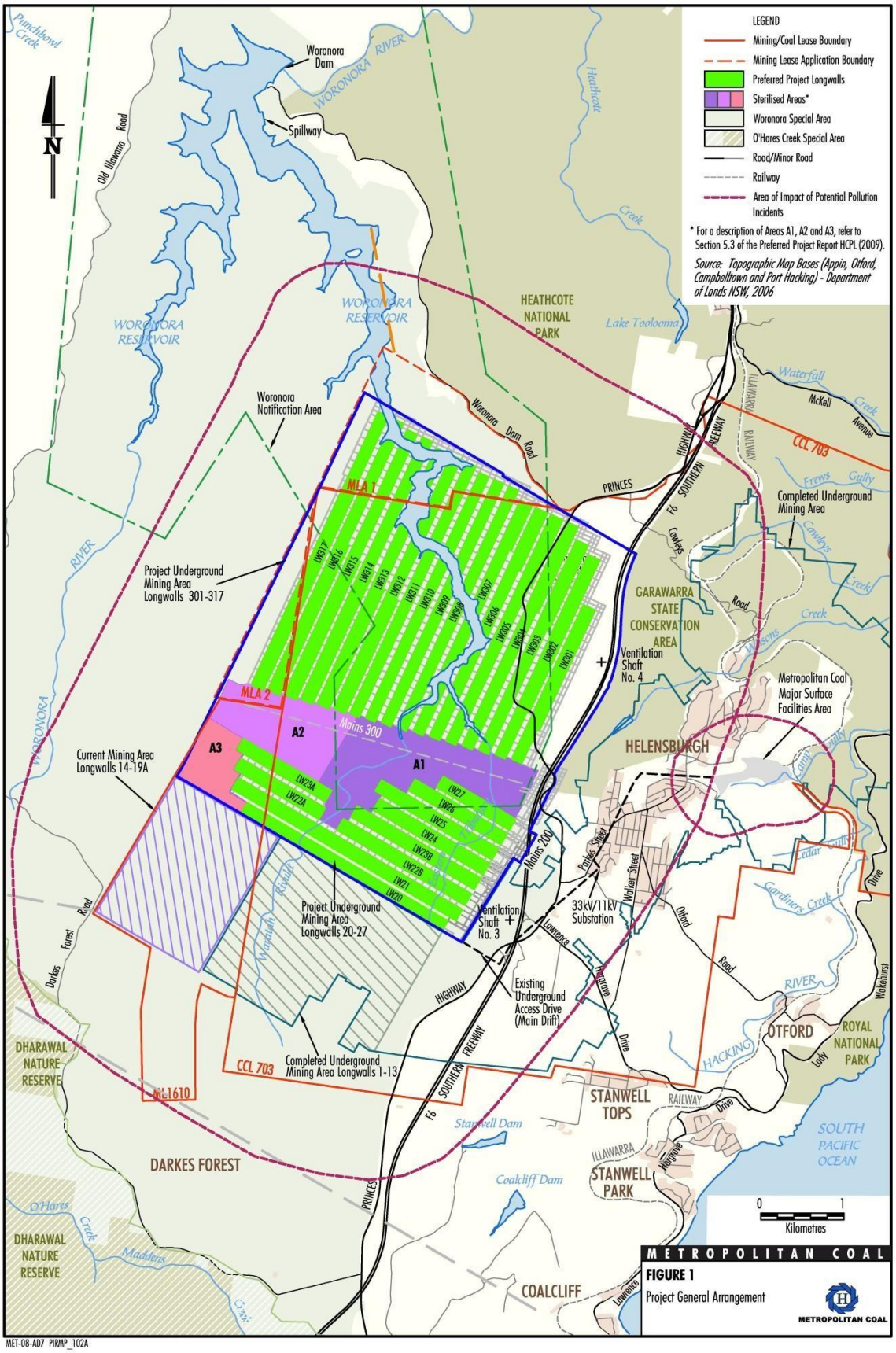

LEGEND
Mining/Coal Lease Boundary
Mining Lease Application Boundary
Preferred Project Longwalls
Sterilised Areas*
Woronora Special Area
O'Hares Creek Special Area
Road/Minor Road
Railway
Area of Impact of Potential Pollution Incidents
* For a description of Areas A1, A2 and A3, refer to Section 5.3 of the Preferred Project Report HCPL (2009).
Source: Topographic Map Bases (Appin, Otford, Campbelltown and Port Hacking) - Department of Lands NSW, 2006
Woronora Dam
Spillway
WORONORA RIVER
WORONORA RESERVOIR
Woronora Notification Area
Woronora Dam Road
HEATHCOTE NATIONAL PARK
Lake Toolooma
Heathcote Creek
Old Illawarra Road
Punchbowl Creek
MLA 1
MLA 2
A1
A2
A3
Mains 300
Mains 200
Project Underground Mining Area Longwalls 301-317
Current Mining Area Longwalls 14-19A
Project Underground Mining Area Longwalls 20-27
Completed Underground Mining Area Longwalls 1-13
Completed Underground Mining Area
Ventilation Shaft No. 4
Ventilation Shaft No. 3
33kV/11kV Substation
Existing Underground Access Drive (Main Drift)
Metropolitan Coal Major Surface Facilities Area
HELENSBURGH
GARAWARRA STATE CONSERVATION AREA
OTFORD
ROYAL NATIONAL PARK
STANWELL TOPS
STANWELL PARK
DARKES FOREST
DHARAWAL NATURE RESERVE
COALCLIFF
SOUTH PACIFIC OCEAN
Stanwell Dam
Coalcliff Dam
CCL 703
ML1610
HIGHWAY
SOUTHERN FREEWAY
PRINCES
ILLAWARRA RAILWAY
Parkes Street
Walker Street
Otford Road
Lawrence Hargrave Drive
Darkes Forest Road
Wongawilli Escarpment
Gardiners Creek
Cedar Gully
Camp Gully
Lady Wakehurst Drive
Hacking River
O'Hares Creek
Maddens Creek
Kilometres
METROPOLITAN COAL
FIGURE 1
Project General Arrangement
METROPOLITAN COAL
MET-08-AD7 PIRMP_102A

Figure 2

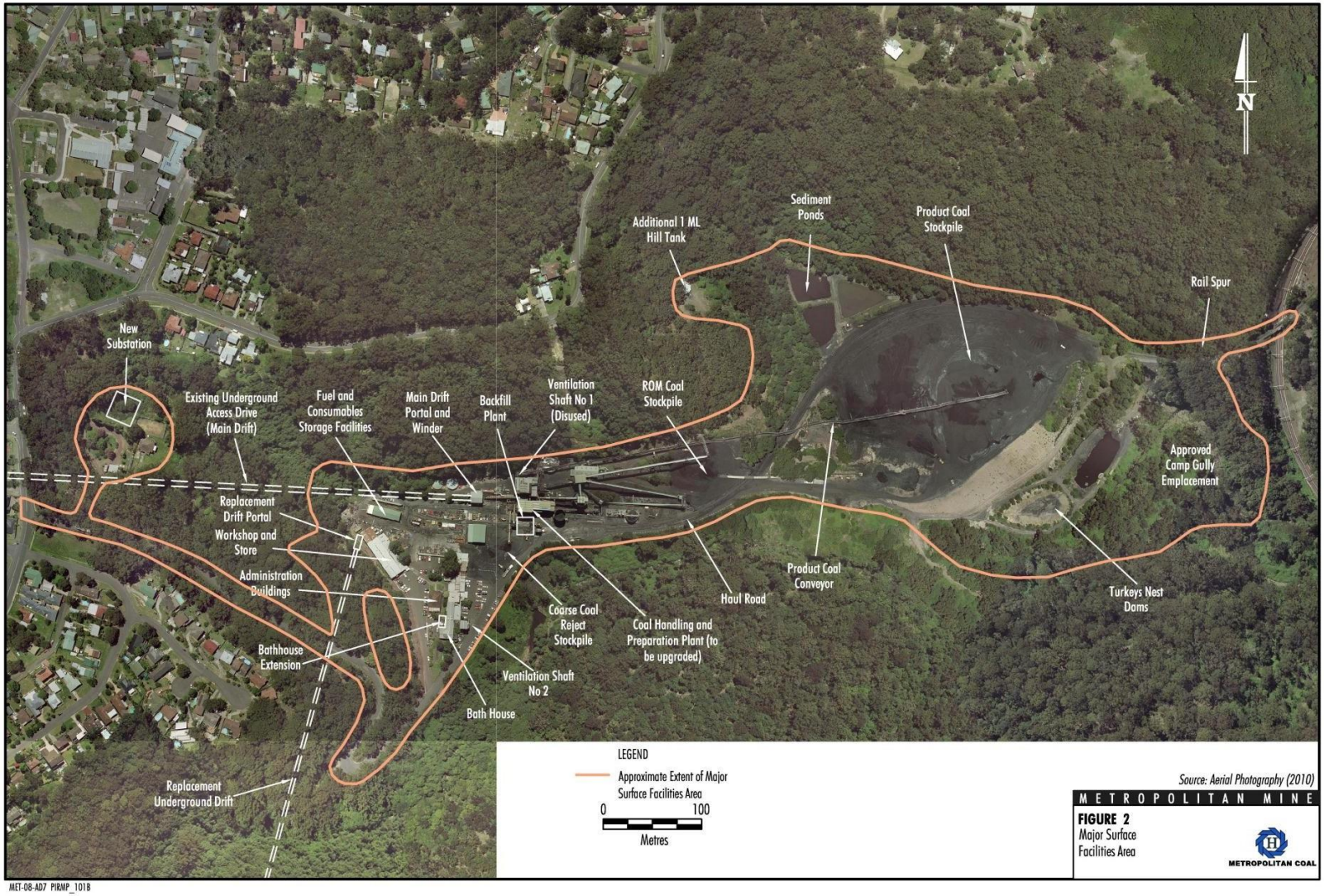

N
Additional 1 ML Hill Tank
Sediment Ponds
Product Coal Stockpile
Rail Spur
New Substation
Existing Underground Access Drive (Main Drift)
Fuel and Consumables Storage Facilities
Main Drift Portal and Winder
Backfill Plant
Ventilation Shaft No 1 (Disused)
ROM Coal Stockpile
Approved Camp Gully Emplacement
Replacement Drift Portal
Workshop and Store
Administration Buildings
Product Coal Conveyor
Haul Road
Turkeys Nest Dams
Coarse Coal Reject Stockpile
Coal Handling and Preparation Plant (to be upgraded)
Bathhouse Extension
Ventilation Shaft No 2
Bath House
Replacement Underground Drift
LEGEND
Approximate Extent of Major Surface Facilities Area
0
100
Metres
Source: Aerial Photography (2010)
METROPOLITAN MINE
FIGURE 2
Major Surface Facilities Area
METROPOLITAN COAL
MET-08-AD7 PIRMP_101B

Figure 2 a

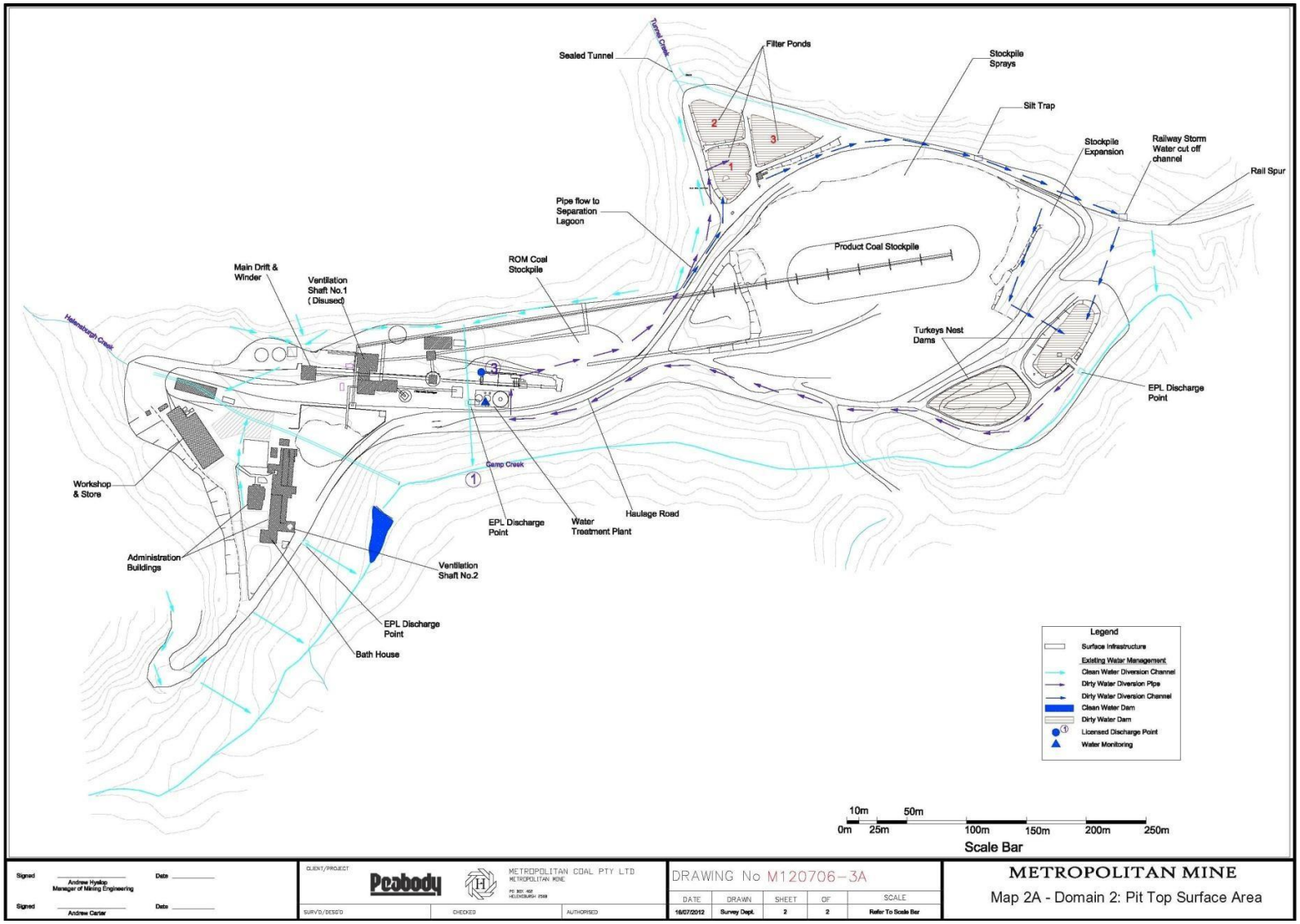
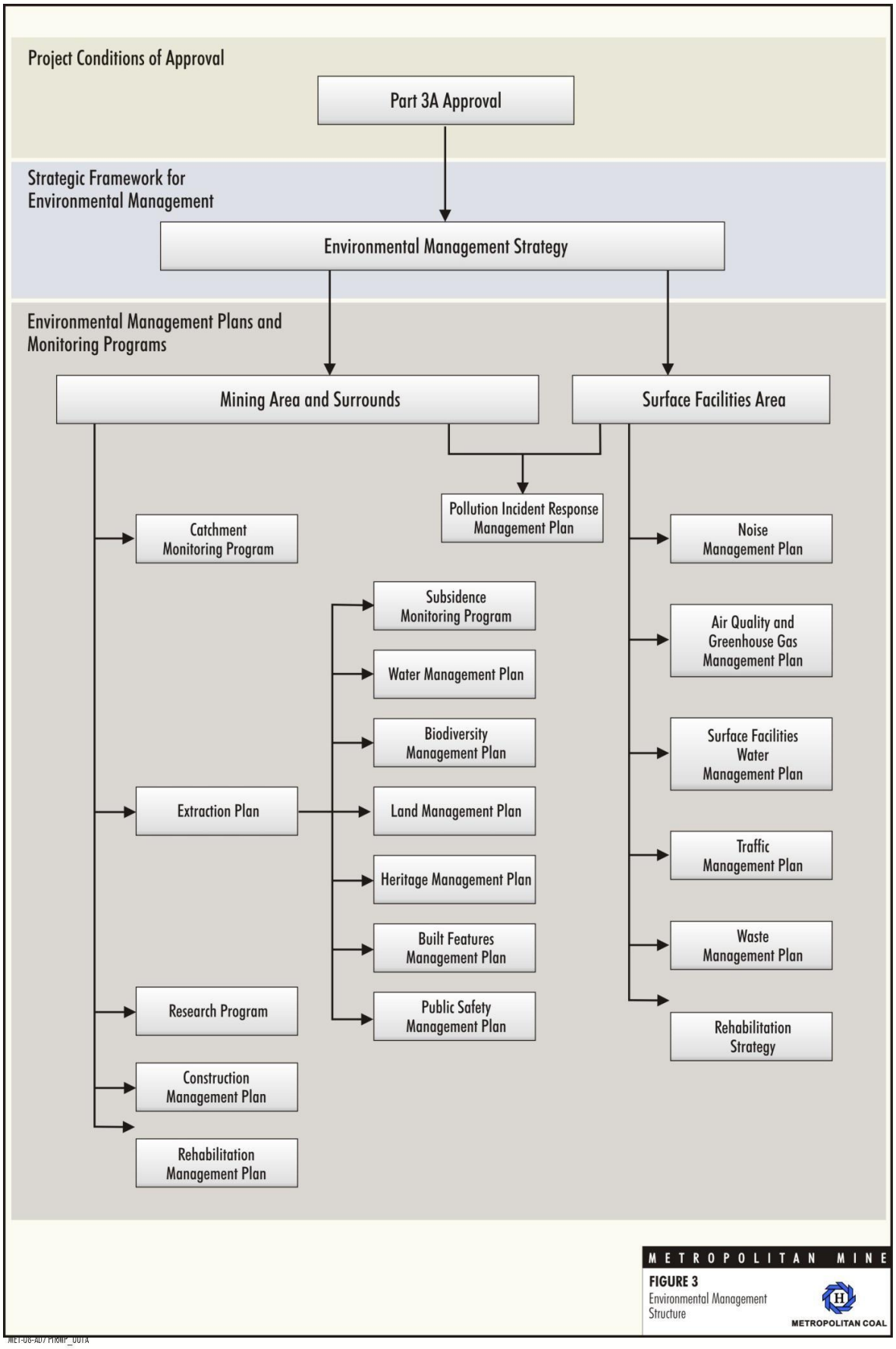

Sealed Tunnel
Tunnel Creek
Filter Ponds
Stockpile Sprays
Silt Trap
Stockpile Expansion
Railway Storm Water cut off channel
Rail Spur
Pipe flow to Separation Lagoon
Product Coal Stockpile
ROM Coal Stockpile
Main Drift & Winder
Ventilation Shaft No.1 (Disused)
Helensburgh Creek
Turkeys Nest Dams
EPL Discharge Point
Camp Creek
Workshop & Store
EPL Discharge Point
Water Treatment Plant
Haulage Road
Administration Buildings
Ventilation Shaft No.2
EPL Discharge Point
Bath House
Legend
Surface Infrastructure
Existing Water Management
Clean Water Diversion Channel
Dirty Water Diversion Pipe
Dirty Water Diversion Channel
Clean Water Dam
Dirty Water Dam
Licensed Discharge Point
Water Monitoring
10m 50m
0m 25m 100m 150m 200m 250m
Scale Bar
Signed Andrew Hyslop Manager of Mining Engineering Date
Signed Andrew Carter Date
CLIENT/PROJECT
Peabody
METROPOLITAN COAL PTY LTD
METROPOLITAN MINE
SURVD/DESG'D CHECKED AUTHORISED
DRAWING No M120706-3A
DATE DRAWN SHEET OF SCALE
16/07/2012 Survey Dept. 2 2 Refer To Scale Bar
METROPOLITAN MINE
Map 2A - Domain 2: Pit Top Surface Area

Figure 3


Project Conditions of Approval
Part 3A Approval
Strategic Framework for Environmental Management
Environmental Management Strategy
Environmental Management Plans and Monitoring Programs
Mining Area and Surrounds
Surface Facilities Area
Pollution Incident Response Management Plan
Catchment Monitoring Program
Subsidence Monitoring Program
Water Management Plan
Biodiversity Management Plan
Extraction Plan
Land Management Plan
Heritage Management Plan
Built Features Management Plan
Public Safety Management Plan
Research Program
Construction Management Plan
Rehabilitation Management Plan
Noise Management Plan
Air Quality and Greenhouse Gas Management Plan
Surface Facilities Water Management Plan
Traffic Management Plan
Waste Management Plan
Rehabilitation Strategy
METROPOLITAN MINE
FIGURE 3
Environmental Management Structure
METROPOLITAN COAL

2 STRUCTURE OF PLAN

The table below identifies the relevant statutory requirements for inclusion in the PIRMP and where each section is located in the plan:

Requirement	**PIRMP Section**
Notification Procedures - *POEO Act Section 148, 149*	***Section 3.3***
Action to be taken following a pollution incident - *POEO Act Section 153C (b) and POEO Reg 98C (1)(l)*	***Section 4*** *and Risk Assessment in* ***Appendix A***
Procedures for coordinating with the EPA, Local Council, Ministry of Health, SafeWorkNSW and Fire and Rescue NSW - *POEO Act Section 153C (c)*	*Flow chart in* ***Section 3.3,*** *Pollution Incident Notification Form and Authorities Notification Form in* ***Appendix B***
Description of hazards to human health or environment associated with the relevant activity - *POEO Act Section 153C (d)* and *POEO Reg 98C(1)(a) and (b)*	***Section 6*** *and Risk Assessment in* ***Appendix A***
Likelihood of hazards occurring - *POEO Act Section 153C (d)*	***Section 8*** *and Risk Assessment in* ***Appendix A***
Pre-emptive actions to minimise or prevent risk of harm to human health or environment - *POEO Act Section153C (d)* and *POEO Reg Section 98C(1)(c)*	***Section 8*** *and Risk Assessment in* ***Appendix A***
Inventory of potential pollutants - *POEO Act Section 153C (d)* and *POEO Reg 98C(1)(d) and (e)*	***Section 7*** *and Risk Assessment in* ***Appendix A***
Maximum quantity of pollutant to which the license relates - *POEO Act Section 153C (d)*	*Risk Assessment in* ***Appendix A***
Safety equipment to minimise the risks to human health or environment - *POEO Act Section 153C (d)* and *POEO Reg 98C(1)(f)*	***Section 8.3***
Names, positions and contact details - *POEO Act Section 153C (d)*	***Section 3.3***
Contact details of each relevant authority - *POEO Act Section 148* and *POEO Reg 98C(1)(g) and (h)*	*Flow chart in* ***Section 3.3***
Early warning mechanisms for people off-site - *POEO Act Section 153C(a)(d)* and *POEO Reg 98C(1)(i)*	***Section 5***
Arrangements for minimising risk of harm to persons on the premises - *POEO Act Section 153C (d)* and *POEO Reg 98C(1)(j)*	***Section 8.1*** *and Risk Assessment in* ***Appendix A***
Training - *POEO Act Section 153C (d)* and *POEO Reg 98C(1)(m)*	***Section 9***
Testing of plan - *POEO Act Section 153C (d),* and *Section 153E POEO(G) Reg (Cl 98E)*	***Section 10*** *and PIRMP Testing Procedure in* ***Appendix B***
Updating of plan - *POEO Act Section 153F* and *POEO(G) Reg 98E*	***Sections 10.1 and 10.2***
Manner in which plan is tested and maintained - *POEO Act Section 153C (d)*	***Section 10*** *and PIRMP Testing Procedure in* ***Appendix B***
Detailed maps - *POEO Reg 98C (1)(k)*	***Figures 1 and 2***

3 NOTIFICATION OF A POLLUTION INCIDENT

3.1 RESPONSIBILITIES AND DUTIES

If a pollution incident occurs in the course of an activity at the premises so that *material harm to the environment* (within the meaning outlined in **section 3.2** below) is caused or threatened, Metropolitan Coal must immediately implement this PIRMP. All pollution incidents causing or threatening material harm to the environment are to be immediately notified in accordance with the flowchart in **section 3.3** below. Immediate incident notification will be conducted in accordance with the flowchart in **section 3.3** if there is any ambiguity as to whether material harm to the environment has been caused or threatened.

3.2 DEFINITION OF A POLLUTION INCIDENT

The POEO Act defines a *'pollution incident'* as being:

> *"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."*

The POEO Act defines '*pollution'* in the following terms:

> ***'pollution*** means:
>
> (a) water pollution, or
> (b) air pollution, or
> (c) noise pollution, or
> (d) land pollution.'

3.3 PROCESS FOR REPORTING A POLLUTION INCIDENT AND RELEVANT CONTACT DETAILS OF KEY INDIVIDUALS RESPONSIBLE FOR ACTIVATING PLAN, NOTIFYING AUTHORITIES AND MANAGING THE RESPONSE TO A POLLUTION INCIDENT

The key activities under this plan and the nature of these activities are as follows:

1. **Activating the plan Notification of the relevant authorities if a pollution incident occurs, and material harm is caused or threatened**
2. **Notifying the relevant authorities**
3. **Managing the response to a pollution incident**

The following individuals have responsibility for implementation of the activities:

1. Stephen Love, Environment and Community Superintendent, who can be contacted 24 hours a day, 7 days a week on 4294 7384 or 0417 584 121
2. Jon Degotardi, Manager for Technical Services, who can be contacted 24 hours a day, 7 days a week on 4294 7233 or 0407 241 761
3. Rae O'Brien, General Manager, who can be contacted 24 hours a day, 7 days a week on 4294 7201 or 0403 095 101.

The following procedures are to be followed by **Metropolitan Coal as employer and occupier of the site and all employees and contractors** in the event that a pollution incident occurs on site:

If <u>you</u> become aware of a <u>pollution incident</u>

- i.e. any incident or set of circumstances during or 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 water, air, noise or land pollution has occurred, is occurring or is likely to occur (**pollution incident**)
- and the incident involves **material harm to the environment** – 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 the actual or potential loss or property damage of an amount, or amounts in aggregate, **exceeding $10,000** (where '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). **IF YOU ARE UNSURE CONTINUE WITH NOTIFICATION PROCESS**.

Metropolitan Collieries (Employer and Occupier)
Employees & Contractors

Must notify following persons <u>immediately</u>

- Call **Control Room on 4294 7333** to complete the INCIDENT NOTIFICATION FORM (to include matters 1-5 information listed below); **AND**
- **Call Stephen Love**, Environment and Community Superintendent on 4294 7384 or 0417 584 121

if above people cannot be contacted

Must notify the Environment Protection Authority (EPA) <u>immediately</u>

- Call EPA immediately on 131 555
- Then must call immediately:
  - Wollongong City Council (4227 7111),
  - the Ministry of Health (9391 9000),
  - SafeWorkNSW (13 10 50), and
  - Fire and Rescue NSW (000).

INCIDENT NOTIFICATION FORM to be completed if not completed by Control Room/Ryan Pascoe. AUTHORITIES NOTIFICATION FORM to be completed.

Information that must be notified

1. Time, date, nature, duration and location of incident,
2. Location of the place where pollution is occurring or is likely to occur,

If known:

3. Nature, estimated quantity or volume and concentration of any pollutants involved,
4. Circumstances in which the incident occurred (including the cause of the incident), and
5. Action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution.

If not known at the time of initial notification, above information must be notified <u>immediately</u> after it becomes known.

<u>NOTES</u>

A detailed record should be maintained at each step of the process, including the date and time actions are taken.

Any decision to notify or not to notify must be recorded in writing with reasons. Do not report an opinion to the authorities – only facts.

4 INCIDENT RESPONSE AND POST-NOTIFICATION PROCEDURES

Once all authorities listed above have been notified of the pollution incident, the response for the hazard in the Risk Assessment in **Appendix A** is to be implemented immediately. Should the incident not be described in **Appendix A**, the following procedures are to be followed:

(a) Assess best clean up procedures for each incident based on the pollutant and site issues. Remove contaminated soil, wastewater and used spill equipment to an appropriate place within the licensed premises for licensed waste disposal and/or remediation.

(b) Following an incident, the following must be undertaken:

- Undertake further monitoring/ testing if required.
- Complete incident report.
- Organise restocking of spill equipment.
- Complete Government reports, as necessary.
- Implement corrective actions to avoid reoccurrence.

(c) Follow any advice / requirements from the Authorities notified.

The licensee must provide written details of the notification to the EPA within **7 days** of the date on which the incident occurred.

If any of the information identified in the flowchart above was not known at the time of initial reporting of the pollution incident to any of the authorities, that information must be notified to the authorities immediately after it becomes known.

All communications with any of the authorities following the incident are to be made through Stephen Love. Following the initial notification of the incident, these personnel will ensure that regular contact is made with all authorities and persons who have been notified of the incident in relation to ongoing actions taken to combat the pollution caused by the incident. In particular these personnel will:

(a) liaise with the EPA regarding appropriate actions to be taken to control, manage and mitigate the pollution;
(b) work co-operatively with the EPA and any other relevant authorities to clean-up any pollution on site;
(c) notify the community of the results of ongoing monitoring of the pollution; and
(d) consult any owners or occupiers in the vicinity of the site regarding any off-site actions to be taken which may impact on their properties.

5 COMMUNICATING WITH THE COMMUNITY AND MECHANISMS FOR PROVIDING EARLY WARNINGS AND REGULAR UPDATES TO PERSONS IN THE VICINITY OF THE SITE

The Metropolitan Coal Mine is located adjacent to the town of Helensburgh. The Colliery is also located adjacent to Camp Creek, a tributary of the Hacking River which flows through the Royal National Park. In this context, effective management of pollution incidents is integral to helping to prevent and/ or mitigate community and environmental impacts. Any pollution incident causing or threatening material harm to the environment will be communicated to all potentially impacted stakeholders as soon as practicable. Specifically, Metropolitan Coal will put the following community notification procedures in place if a pollution incident occurs on the site to provide early warnings and regular updates to the residents of premises who may be affected by a pollution incident:

- Notification in conjunction with emergency services.
- Notification via '*Our Helensburgh*' community website (www.ourhelensburgh.com.au).
- Personnel will directly contact the owners or occupiers of all residences that have the potential to be impacted by a pollution incident, as well as all sensitive receptors located in the town (including, but not necessarily limited to the following: local schools, pre-schools, churches etc.) via telephone, letterbox drop and/ or door knocking.

Communication with the community will be made as soon as practicable following a pollution incident as well as on an ongoing basis until the incident has been fully controlled and any harm caused as a result of the incident has been rectified.

Where necessary, notification to the community will include instructions for mitigation of the pollution incident. For example, instruction would be provided to close windows and doors and remain inside for incidents involving the emission of air pollutants and to avoid the use of water in creeks or rivers affected by the discharge of a pollutant to a waterway.

6 GENERAL HAZARDS TO HUMAN HEALTH OR THE ENVIRONMENT ASSOCIATED WITH THE ACTIVITY

As an operating underground coal mining operation, with surface support facilities located in the township of Helensburgh, the following hazards to human health and the environment are potentially associated with Metropolitan Coal Mine:

(a) pollution of waters as a result of failure of water management structures;
(b) pollution of waters as a result of failure of sediment and erosion control structures;
(c) pollution of land and/ or waters as a result of runoff from the coal handling and preparation plant;
(d) pollution of land and/ or waters as a result of spills and leaks of chemicals stored on site, including for example cracking in pipelines or hydrocarbon spills outside of bunded areas;
(e) potential pollution of land or waters resulting from failure of containment structures; and
(f) noise pollution arising from the carrying out of mining activities and materials handling.

Generally, the risk of the above hazards occurring is increased during periods of extreme weather events and particularly heavy rainfall. The likelihood of control structures failing would also be increased if regular monitoring and maintenance does not occur and / or if there is a change in personnel on the site who are unaware of site procedures. The pre-emptive actions to be taken by Metropolitan Collieries to minimise the risks of these hazards occurring is provided in **section 8.2** below.

Specific hazards, including the likelihood of such hazards occurring, are identified in the Risk Assessment in **Appendix A**.

7 INVENTORY OF POTENTIAL POLLUTANTS

Almost any substance has the potential to become a pollutant if it is of a sufficient quantity and/ or is impacting a sensitive environmental or community receptor. Metropolitan Coal has employed a risk-based approach in the development of the PIRMP to ensure that appropriate emphasis is given to substances that have the potential to cause material harm (within the meaning outlined in **section 3.2**).

A range of chemicals are utilised at Metropolitan Coal. They are used for a number of purposes including, but not limited to, cleaning, machinery maintenance, coal beneficiation and water treatment.

Majority of the chemicals stored on site are in small quantities. Chemicals are stored appropriately and in accordance with statutory requirements and relevant Australian Standards.
Chemicals (including fuels) stored at the surface facility area (see Figure 2) are contained within a bunded area on a concrete sealed surface. Any spills report to the Waste Water Treatment Plant (WWTP) on site. Metropolitan Coal's surface facilities area has been designed such that all water from the surface of the mine is captured on site and treated at the WWTP before being discharged from a licensed discharge point.

Chemicals on the site (see **Figure 2** for relevant storage locations) are listed in the Risk Assessment located in **Appendix A** and are listed on the Metropolitan ChemAlert system which includes material safety data information.

8 RISK ASSESSMENT – LIKELIHOOD OF HAZARDS OCCURRING & THE SEVERITY OF HARM

Metropolitan Coal has a procedure for introducing new chemicals to site using the Chemical Approval Form. The Chemical Approval Form is administered in accordance with the Metropolitan Coal Health and Safety, and Environment and Community Management System. It results in a high-level review of the potential risks associated with the introduction to site of the chemical being assessed. Where this high-level assessment indicates that it is warranted, the Risk Assessment will be updated (i.e. where the chemical approval process identified that the chemical is potentially harmful enough to be officially risk assessed).

The Risk Assessment has evaluated the likelihood of the pollutant causing harm and the severity of that harm. It has been undertaken in conjunction with those who have the potential to be affected by the pollutant.

In preparing the Risk Assessment, the following activities were undertaken:

1. Evaluate the likelihood of a spill occurring and the likely severity of that spill, using the risk assessment matrix to assign a risk rating (see Peabody Metropolitan Coal Risk Assessment Template).
2. Identify the factors that may be contributing to the risk.
3. Where available, review health and safety information that is relevant to the particular hazard (such as Codes of Practice, SafeWorkNSW guidelines and Material Safety Data Sheets).

The Risk Assessment and methodology used to undertake the risk assessment is outlined in the Peabody - Metropolitan Coal Risk Assessment Template.

If an identified risk has been classified as '*high*' or '*extreme*', the management measures for a possible pollution incident must be included and approved.

8.1 HOW IDENTIFIED RISKS TO HUMAN HEALTH CAN BE REDUCED

Once risks have been assessed, action must be taken by Metropolitan Coal personnel (in consultation with other staff, Contractors/Subcontractors, and in some cases, clients) to eliminate or control risks. The Emergency Management Plan (EMP), developed in accordance with the Metropolitan Coal Health and Safety Management System, outlines the Procedures and Controls for the occupational, health and safety risks associated with an emergency on site. In conjunction with the PIRMP, the EMP will be followed in the event of a pollution incident to reduce the impacts on human health. Controlled copies of the EMP are readily available at the colliery.

8.2 PREMEMPTIVE ACTIONS TO MINIMISE OR PREVENT ANY RISK OF HARM TO HUMAN HEALTH OR THE ENVIRONMENT

The Risk Assessment contained in **Appendix A** describes how specific pre-emptive actions can reduce the risk of harm in the event of a particular incident occurring. In addition, Metropolitan Coal implements the following general pre-emptive actions to reduce the risk of harm occurring as a result of a pollution incident:

(a) All Metropolitan Coal personnel receive extensive and regular training as outlined in **section 9**;
(b) All Metropolitan Coal personnel are trained in the appropriate use of safety equipment and devices to minimise possible incidents;
(c) Risk assessments are completed prior to all work to identify and mitigate all health, safety and environmental hazards;
(d) Regular monitoring of noise, dust and water impacts is undertaken in accordance with the site's EPL;
(e) Regular checks and maintenance of equipment is carried out by site personnel;
(f) All new equipment is inspected thoroughly prior to its use on site to ensure that it meets safety and environmental standards;
(g) Regular site meetings are held to ensure site personnel are aware of all activities currently underway on the site;
(h) Environmental management at the colliery is audited on a weekly basis;
(i) All incidents are investigated, and corrective actions are developed and implemented to prevent a reoccurrence;
(j) Incidents are communicated to ensure personnel are aware of the hazards and take appropriate steps to prevent a reoccurrence; and
(k) Regular reviews are conducted of all management plans applying to the site.

8.3 SAFETY EQUIPEMENT / DEVICES USED TO MINIMISE RISK TO HUMAN HEALTH OR THE ENVIRONMENT AND TO CONTAIN OR CONTROL A POLLUTION INCIDENT

Activities must be carried out in a competent and responsible manner. This includes the processing, handling, movement and storage of material and substances used to carry out the activity and the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity. All plant equipment installed at the site or used in connection with the activity is maintained in a proper and efficient condition and operated in a proper and efficient manner. All equipment is checked weekly and restocked when required.

Table 1 Pollution Prevention Equipment Inventory

Type	Amount	Location	Staff Contact
Universal Spill Kit (suitable for water-based and oil-based liquid spills)	8 x 120L Labelled Wheelie Bin Spill Kits	See Figure 4	Kane Organ
Hydrocarbon Spill Kit (suitable for oils and fuels)	4 x 120L Labelled Wheelie Bin	See Figure 4	Kane Organ
Major Spill Response Cache	1 x storage shed bulk spill response cache	Beside Water Treatment Plant	Kane Organ

Figure 4 shows the locations of the pollution response equipment and devices for the site and Stormwater drain locations. Material safety data information is stored at the facility in hard copy and the operation also uses the ChemAlert system with regard to material safety data information.

Figure 4


N
Washery
SADA Oil Storage Area
Workshop/Yard
Paste Plant
Water Treatment Plant
Koepe Tower
LEGEND
Approximate Extent of Major Surface Facilities Area
0
50
Metres
Source: Aerial Photography (2010)
METROPOLITAN MINE
FIGURE 4
Stormwater Drain
METROPOLITAN COAL
MET-08-AD7 PIRMP_1038

9 NATURE AND OBJECTIVES OF STAFF TRAINING PROGRAMS

Employees, contractors and visitors will be trained in these conditions and the implementation of the PIRMP:

- Initially, as part of induction training;
- Then, by periodic refresher training; and
- If there are amendments to the PIRMP.

Training in the content of the PIRMP and assessment competency will be conducted in accordance with the Metropolitan Coal Training and Competence Management Plan. Training must be suitable for the level of risk and likelihood of incidents.

The principal objective of the training is to create an understanding by staff of the requirements of the PIRMP including specifically the following matters:

- Awareness of the potential for harm to people and the environment from the materials held on-site;
- Information on the sensitivity of the environment surrounding the site;
- The environmental responsibilities of Metropolitan Coal;
- Use of the correct personal protective equipment and any appropriate and/or necessary health and safety training;
- Reporting procedures if there's a risk of surface water, groundwater, air or land contamination;
- Reporting to the environmental manager if a discharge to the sewer or stormwater is involved;
- Safe and correct use of all spill clean-up equipment or pollution prevention structures and/or devices on site;
- Safe handling and legal disposal of contaminated materials and wastes resulting from an incident, including:
- Arrangements for using specialist contractors and services; and
- Appropriate and safe decontamination.

Records of training will be kept in accordance with the Metropolitan Coal Training Management Plan. Training records are retained in accordance with the Pegasus record management system.

10 MANNER IN WHICH THE PIRMP IS TO BE TESTED AND MAINTAINED

10.1 PIRMP REVIEW AND UPDATE

The PIRMP must be kept at Metropolitan Coal and implemented in the case of an incident. It must be tested every twelve (12) months, and within one (1) month of any pollution incident to ensure the plan is accurate and up-to-date and capable of being implemented in a workable and effective manner.

The PIRMP must be tested in accordance with the PIRMP Testing Procedure (see **Appendix B**) and results of the test communicated to relevant staff identifying any non-compliances during the testing procedure. Non-compliances are to be followed up immediately and rectified.

Testing should also be carried out within one (1) month of any pollution incident occurring in the course of an activity to which the license relates. In light of the incident it should be assessed whether the information included in the plan is accurate and up to date and that the PIRMP plan is capable of being implemented in a workable and effective manner.

The PIRMP will be subject to continual review and will be updated progressively with contemporary practices and procedures.

The results of the testing are to be kept in a PIRMP Performance Register including any requirements for changes to the PIRMP.

The revision status of this PIRMP is indicated on the title page of each copy. The distribution register for controlled copies of the PIRMP is described in **section 10.2**.

10.2 AVAILABILITY OF PIRMP

Metropolitan Coal will make the PIRMP publicly available on the Peabody website. A hard copy of the PIRMP will also be maintained at the Metropolitan Mine site and will be provided to all personnel responsible for implementing the plan.

Metropolitan Coal recognises that various agencies have different distribution requirements, both in relation to whom documents should be provided to and in what format. An Environmental Management Plan and Monitoring Program Distribution Register have been established in consultation with the relevant agencies and infrastructure owners that indicates:

- To whom the Metropolitan Coal Mine plans and programs, such as the PIRMP, will be distributed;
- The format (i.e. electronic or hard copy) of distribution; and
- The format of revision notification.

Metropolitan Coal will make the Distribution Register publicly available on the Peabody website.

Metropolitan Coal is responsible for maintaining the Distribution Register and for ensuring that the notification of revisions is sent by email or post as appropriate.

In addition, Metropolitan Coal employees with local computer network access will be able to view the controlled electronic version of this PIRMP on the Metropolitan Coal local area network. Metropolitan Coal will not be responsible for maintaining uncontrolled copies beyond ensuring the most recent version is maintained on Metropolitan Coal's computer system and the Peabody website.

11 POTENTIAL CONTINGENCY MEASURES

If monitoring of the PIRMP indicates that a non-compliance or issue with implementation of the PIRMP has been identified, Metropolitan Coal will conduct an investigation, and identify and assess potential rectification measures. Potential rectification measures could include:

- An audit of the PIRMP, including existing management measures;
- Identification of potential system improvements such as staff training; and
- The conduct of additional monitoring or review (e.g. increase in frequency) to inform the proposed contingency measures.

12 FAILURE TO COMPLY

Metropolitan Coal takes its responsibilities under the POEO Act seriously. All employees and contractors will be made aware of the following maximum penalties prescribed under the POEO Act relating to pollution incidents:

Table 2 Penalties for Failing to Comply

Offence	Maximum penalty (corporation)	Maximum penalty (individual)
Polluting water/air/land/ noise	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues
Failure to report pollution incident immediately (where material harm to the environment caused or threatened) and provide all relevant information and to all authorities provided in the Act	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues
Failure to maintain control equipment in an efficient condition and operate control equipment in a proper and efficient manner	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues
Failure to comply with condition of Environment Protection License	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues
Failure to prepare pollution incident response management plan	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues
Failure to implement a pollution incident response management plan following a pollution incident where material harm to the environment caused or threatened	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues
Failure to keep a pollution incident management plan on the licensed premises and make plan available when required by authorities	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues.
Failure to test a pollution incident response plan every 12 months and within 1 month of a pollution incident	$2,000,000 plus $240,000 for each day the offence continues	$500,000 plus $120,000 for each day the offence continues

APPENDIX A

RISK ASSESSMENT TABLE

RANKING MATRIX

Potential Pollutant	Maximum Amount Stored on Site	Potential Release Pathway (Media)	Potential Receptor Pollution Risk	Inherent Risk			Management Actions	Managed Risk			Pollution Incident Response
				L	C	Risk		L	C	Risk	
Explosives (TNT, lead chromate, PETN, lead azide)		Air (in case of explosion)	Onsite workers	C	5	Extreme	Stored in small quantities underground	E	5	Medium	Explosion risks are managed under the Metropolitan Coal's Health and Safety Management System and in particular under the Explosive Management Plan. Training is undertaken to ensure personnel are aware competent with respect to the requirements of the Health and Safety Management System. Critical controls from the Health and Safety Management System Management Plans are audited to ensure that they are integral. In the event an explosion human health and safety is to take priority. Metropolitan Coal will undertake the procedures for notification in the PIRMP and any requirements for environmental monitoring to be undertaken after further explosion risk is considered to be low.
			Nearby residents	C	5	Extreme	Stored in small quantities underground	E	5	Medium	Explosion risks are managed under the Metropolitan Coal's Health and Safety Management System and in particular under the Explosive Management Plan. Training is undertaken to ensure personnel are aware competent with respect to the requirements of the Health and Safety Management System. Critical controls from the Health and Safety Management System Management Plans are audited to ensure that they are integral. In the event an explosion human health and safety is to take priority. Metropolitan Coal will undertake the procedures for notification in the PIRMP and any requirements for environmental monitoring to be undertaken after further explosion risk is considered to be low.
		Surface water (in case of explosion)	Local creek	C	3	Medium	Stored in small quantities underground	E	3	Low	Not required - see TARP procedure
			Nearby residents	C	3	Medium	Stored in small quantities underground	E	3	Low	Not required - see TARP procedure
		Groundwater (in case of explosion)	Local creek	C	3	Medium	Stored in small quantities underground	E	3	Low	Not required - see TARP procedure
			Groundwater aquifer	C	3	Medium	Stored in small quantities underground	E	3	Low	Not required - see TARP procedure
		Fire water (in case of explosion)	Onsite workers	C	2	Medium	Stored in small quantities underground	E	2	Low	Explosion risks are managed under the Metropolitan Coal's Health and Safety Management System and in particular under the Explosive Management Plan. Training is undertaken to ensure personnel are aware competent with respect to the requirements of the Health and Safety Management System. Critical controls from the Health and Safety Management System Management Plans are audited to ensure that they are integral. In the event an explosion human health and safety is to take priority. Metropolitan Coal will undertake the procedures for notification in the PIRMP and any requirements for environmental monitoring to be undertaken after further explosion risk is considered to be low.
			Local creek	C	5	Extreme	Stored in small quantities underground	E	5	Medium	Explosion risks are managed under the Metropolitan Coal's Safety Management Sytem. There are a number of management plans that outline preventative actions for the risk of explosion on site. See the Fire and Explosion Control Management Plan for details and references to other fire management procedures. All personnel are trained in these procedures and audits are undertaken regularly. In the event an explosion human health and safety is to take priority. Metropolitan Coal will undertake the procedures for notification in the PIRMP and any requirements for environmental monitoring to be undertaken after further explosion risk is considered to be low. Any environmental clean ups will be done so in accordance with statutory requirements with any follow up sampling and analysis conducted.
			Nearby residents	E	2	Low	Stored in small quantities underground	E	2	Low	Not required - see TARP procedure
Liquid Petroleum Gas		Air	Onsite workers	E	4	Low	Kept in open air area, if leak occurs area is well ventilated. Small cylinders kept on site.	E	4	Low	Not required - see TARP procedure
			Nearby residents	E	4	Low	Nearest resident located too far to be affected by gas leak as small amounts kept in cylinders.	E	4	Low	Not required - see TARP procedure
Diesel	3 x Bulk Tanks	Air	On site workers	E	2	Low	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, Spill kits available	E	2	Low	Not required - see TARP procedure
		Surface water	Local creek	C	3	Medium	Self contained bunding, concrete surface, drains report to WTP	E	4	Low	Not required - see TARP procedure
			Nearby residents	C	2	Medium	Self contained bunding, concrete surface, drains report to WTP	E	2	Low	Not required - see TARP procedure
		Groundwater	On site workers	D	3	Medium	Self contained bunding, concrete surface, drains report to WTP	E	3	Low	Not required - see TARP procedure
Paints		Air	On site workers	D	2	Low	Small quantities kept on site. PPE used for clean ups, Spill kits available.	E	2	Low	Not required - see TARP procedure
		Surface water	Nearby residents	E	2	Low	Small quantities kept on site in concreted area, spill kits available	E	2	Low	Not required - see TARP procedure
			On site workers	E	2	Low	Small quantities kept on site in concreted area, spill kits available	E	2	Low	Not required - see TARP procedure
			Local creek	E	2	Low	Small quantities kept on site in concreted area, spill kits available	E	2	Low	Not required - see TARP procedure
Hydraulic Oil		Surface water	Onsite workers	E	2	Low	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, Spill kits available	E	3	Low	Not required - see TARP procedure
			Nearby residents	C	2	Medium	Stored on bunding in low quantities concrete surface, drains report to WTP	E	2	Low	Not required - see TARP procedure
			Local creek	C	3	Medium	Stored on bunding in low quantities concrete surface, drains report to WTP	E	4	Low	Not required - see TARP procedure
Sewage (major surface facilities area)		Surface water	Groundwater aquifer	C	3	Medium	Fully enclosed pipeline and storage area. Checked daily.	E	3	Low	Any overflows, leaks or broken pipes report immediately to Sydney Water Sewage Department.
			Onsite workers	C	3	Medium	Fully enclosed pipeline and storage area. Checked daily.	E	3	Low	Any overflows, leaks or broken pipes report immediately to Sydney Water Sewage Department.
			Local creek	C	3	Medium	Fully enclosed pipeline and storage area. Checked daily.	E	3	Low	Any overflows, leaks or broken pipes report immediately to Sydney Water Sewage Department.
		Groundwater	Groundwater aquifer	C	3	Medium	Fully enclosed pipeline and storage area. Checked daily.	E	3	Low	Any overflows, leaks or broken pipes report immediately to Sydney Water Sewage Department.
			Local creek	C	3	Medium	Fully enclosed pipeline and storage area. Checked daily.	E	3	Low	Any overflows, leaks or broken pipes report immediately to Sydney Water Sewage Department.
			Nearby residents	E	3	Low	Fully enclosed pipeline and storage area. Checked daily.	E	3	Low	Any overflows, leaks or broken pipes report immediately to Sydney Water Sewage Department.
Coal reject material		Groundwater	Surface water	C	2	Medium	Material solidifies and is stored in previous mine workings. Rejects managed in small stockpile at Surface Facilities Area well away from sensitive receptors.	D	2	Low	Not required - reporting of any non-conformances to EPA under licence agreement
Drift rock waste		Surface water	Local creek	C	2	Low	Stored where any runoff gets diverted to WTP.	C	2	Low	Not required - reporting of any non-conformances to EPA under licence agreement
Coal slump		Surface water	Local creek	C	4	High	Stockpile management plan in place, further assessments are being undertaken. Current management is outlined in the SLOPE STABILITY MANAGEMENT PLAN.	A	4	High	Coal slumps are managed under the Metropolitan Coal's Safety Management System and in particular the Slope Stability Management Plan. Immediately activate the PIRMP and notification procedure. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety risks. Contain the area and prevent people from entering the area when not necessary. If safe to do so immediately contain spill and stop spill where possible and block pathway to creek. Sample water downstream and send to laboratory for TSS analysis immediately and after clean up. Conduct follow up sampling to ensure compliance with EPL conditions.
			Groundwater aquifer	E	2	Low	Product coal sits on a compacted based. Most runoff reports overland to surface water management system storages.	E	2	Low	Not required - see TARP procedure
General waste		Surface water	Local creek	C	1	Low	Staff are trained in appropriate waste storage, appropriate bins are supplied throughout the site. Inspections are undertaken regularly.	D	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor
			Groundwater aquifer	E	1	Low	Staff are trained in appropriate waste storage, appropriate bins are supplied throughout the site. Inspections are undertaken regularly.	E	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor
		Groundwater	On site workers	E	1	Low	Staff are trained in appropriate waste storage, appropriate bins are supplied throughout the site. Inspections are undertaken regularly.	E	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor

Potential Pollutant	Maximum Amount Stored on Site	Potential Release Pathway (Media)	Potential Receptor Pollution Risk	Inherent Risk			Management Actions	Managed Risk			Pollution Incident Response
				L	C	Risk		L	C	Risk	
Absorbents (spent oil spill material)		Surface water	Groundwater aquifer	E	1	Low	All disused of material is disposed of in appropriate containers supplied.	E	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor
			Local creek	E	1	Low	All disused of material is disposed of in appropriate containers supplied	E	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor
			Groundwater aquifer	E	1	Low	All disused of material is disposed of in appropriate containers supplied	E	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor
		Groundwater	Local creek	E	1	Low	All disused of material is disposed of in appropriate containers supplied	E	1	Low	Clean up any spills immediately, report any non-conformances to area supervisor
Gear Lubricant		Surface water	Nearby residents	E	1	Low	Stored on bunding in low quantities concrete	E	1	Low	Not required - see TARP procedure
			Onsite workers	E	1	Low	Stored on bunding in low quantities concrete surface, drains report to WTP.	E	1	Low	Not required - see TARP procedure
			Local creek	C	2	Extreme	Stored on bunding in low quantities concrete surface, drains report to WTP.	E	4	Low	Not required - see TARP procedure
Grease		Surface water	Nearby residents	E	1	Low	Stored on bunding in low quantities concrete surface, drains report to WTP.	E	1	Low	Not required - see TARP procedure
			Onsite workers	E	1	Low	Stored on bunding in low quantities concrete surface, drains report to WTP.	E	1	Low	Not required - see TARP procedure
			Local creek	C	2	Extreme	Stored on bunding in low quantities concrete surface, drains report to WTP.	D	2	Low	Not required - see TARP procedure
Solcenic Oil	10,000L	Surface water	Nearby residents	E	1	Low	Stored in bunded area, concrete surface, drains report to WTP, PPE worn for spill clean ups, spill kits available.	E	1	Low	Not required - see TARP procedure
			Onsite workers	E	1	Low	Stored in bunded area, concrete surface, drains report to WTP, PPE worn for spill clean ups, spill kits available.	E	1	Low	Not required - see TARP procedure
			Local creek	C	3	Medium	Stored in bunded area, concrete surface, drains report to WTP, PPE worn for spill clean ups, spill kits available.	D	3	Medium	Not required - see TARP procedure
		Groundwater	Local creek	D	3	Medium	Stored in bunded area, concrete surface, drains report to WTP, PPE worn for spill clean ups, spill kits available.	E	3	Low	Not required - see TARP procedure
UG Diesel Pods	2 x 2,000L tanks	Air	On site workers	E	2	Low	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, spill kits available.	E	2	Low	Not required - see TARP procedure
		Surface water	Local creek	C	3	Medium	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, spill kits available.	E	3	Medium	Not required - see TARP procedure
			Nearby residents	E	2	Low	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, spill kits available.	E	2	Low	Not required - see TARP procedure
			Groundwater aquifer	E	2	Low	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, spill kits available.	E	2	Low	Not required - see TARP procedure
		Groundwater	On site workers	E	2	Low	Self contained bunding, exposure limited to filling tanks, PPE used for clean ups, spill kits available.	E	2	Low	Not required - see TARP procedure
Flocculent for WTP	10,000L tank	Air	On site workers	C	2	Medium	Bunded and checked daily, PPE worn.	D	2	Low	Not required - see TARP procedure
		Surface water	Local creek	C	2	Medium	Bunded and checked daily	D	2	Low	Not required - see TARP procedure
			Nearby residents	E	2	Medium	Bunded and checked daily	E	2	Low	Not required - see TARP procedure
			Groundwater aquifer	E	2	Medium	Bunded and checked daily	E	2	Low	Not required - see TARP procedure
		Groundwater	Local creek	E	2	Low	Bunded and checked daily	E	2	Low	Not required - see TARP procedure
Water Storage Dams 1 and 2		Surface water	Nearby residents	E	2	Low	No residents located immediately downstream of dam.	E	2	Low	Not required - Reporting of any discharges to EPA.
			Local creek	C	3	Medium	Overflows only during times of peak rainfall. Overflows into water way capturing other turbid runoff. Reserve pumps purchased to help prevent discharges.	D	3	Medium	Not required - Reporting of any discharges to EPA.
		Groundwater	Local creek	E	3	Low	Turbid water only stored. Not anticipated to have impacts upon the local creek via groundwater.	E	3	Low	Not required - Reporting of any discharges to EPA.
Welding gas (oxy acetylene)		Air	Nearby residents	E	3	Low	Nearest resident located too far to be affected by gas leak as small amounts kept in cylinders	E	3	Low	Not required - see TARP procedure
			Onsite workers	C	3	Medium	Kept in caged area in open air, if leak occurs area is well ventilated. Small cylinders kept on site. Hot works procedure exists.	D	3	Low	Not required - see TARP procedure

Potential Pollutant	Maximum Amount Stored on Site	Potential Release Pathway (Media)	Potential Receptor Pollution Risk	Inherent Risk			Management Actions	Managed Risk			Pollution Incident Response
				L	C	Risk		L	C	Risk	
Fuel supply trucks (diesel) entering surface area	Two trucks per week containing approximately 34,000L of diesel fuel	Surface water	Nearby residents	D	3	Medium	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	E	3	Medium	Follow SURFACE SPILL RESPONSE PROCEDURE. Follow notification process outlined in PIRMP.
			Onsite workers	D	3	Medium	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	D	3	Medium	Wear appropriate PPE - including appropriate face masks
			Local creek	D	4	High	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	D	4	Medium	Immediately activate the PIRMP and notification procedure. Fuel spills are managed under the Metropolitan Coal's Safety Management System. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety and explosion risks. Contain the area and prevent people from entering the area when not necessary. If safe to do so immediately contain spill and stop spill where possible and block pathway to creek. Sample water downstream and send to laboratory for TPH, BTEX and PAH analysis immediately and after clean up. Conduct follow up sampling to ensure compliance with EPL conditions.
		Groundwater	Local creek	D	4	High	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport. Surfaces are mostly paved on-site and therefore no anticipated impacts to local rivers via groundwater.	E	4	Low	Immediately activate the PIRMP and notification procedure. Fuel spills are managed under the Metropolitan Coal's Safety Management System. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety and explosion risks. Contain the area and prevent people from entering the area when not necessary. If safe to do so immediately contain spill and stop spill where possible and block pathway to creek. Sample water downstream and send to laboratory for TPH, BTEX and PAH analysis immediately and after clean up. Conduct follow up sampling to ensure compliance with EPL conditions.
Coal reject trucks leaving the surface facilities area (whilst still on Metropolitan property)		Surface water	Nearby residents	C	1	Low	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of	D	1	Low	Initiative SURFACE SPILL RESPONSE PROCEDURE.
			Onsite workers	C	1	Low	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	E	2	Low	Wear appropriate PPE - including appropriate face masks
			Local creek	D	3	Medium	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	D	3	Medium	Immediately activate the PIRMP and notification procedure. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety risks. Contain the area and prevent people from entering the area when not necessary. Contain spill using barriers. Engage a clean up crew remove any coal from water ways using a bobcat and shovels. Install sediment fencing, Sample water downstream for TSS immediately and after clean up. Conduct follow up sampling to ensure compliance with EPL conditions.
		Groundwater	Local creek	C	4	High	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	C	4	High	Immediately activate the PIRMP and notification procedure. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety risks. Contain the area and prevent people from entering the area when not necessary. Contain spill using barriers. Engage a clean up crew remove any coal from water ways using a bobcat and shovels. Install sediment fencing, Sample water downstream for TSS immediately and after clean up. Conduct follow up sampling to ensure compliance with EPL conditions.
Coal trucks leaving the surface facilities area (whilst still on Metropolitan property)		Surface water	Nearby residents	C	2	Medium	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	D	2	Low	Notification to the public via the website
			Onsite workers	C	3	Medium	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	D	3	Medium	Wear appropriate PPE - including appropriate face masks
			Local creek	C	4	High	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	C	4	High	Immediately activate the PIRMP and notification procedure. Fuel spills are managed under the Metropolitan Coal's Safety Management System. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety and explosion risks. Contain the area and prevent people from entering the area when not necessary. If safe to do so immediately contain spill and stop spill where possible and block pathway to creek.
		Groundwater	Local creek	E	4	High	Speed limits on road ways, truck drivers are inducted into the drivers code of conduct. Further, there is a Surface Transport Management Plan which outlines a number of procedures to be followed to mitigate risks associated with surface transport.	C	4	High	Immediately activate the PIRMP and notification procedure. Fuel spills are managed under the Metropolitan Coal's Safety Management System. Use the SURFACE SPILL RESPONSE PROCEDURE to undertake the clean up. In addition to the Spill Response Procedure the following must be considered: Assess health and safety and explosion risks. Contain the area and prevent people from entering the area when not necessary. If safe to do so immediately contain spill and stop spill where possible and block pathway to creek.

Risk Assessment Ranking Matrix

Area of Effect	Estimation of Consequences Assessment				
	1 - Low	2 - Minor	3 - Moderate	4 - Major	5 - Critical
(P) Harm to people	Report only Near miss No medical treatment (RO)	Slightly Injured First aid treatment Low Level short term inconvenience (FAI)	Medical Treatment Injuries Disabling reversible impairment (MTI RWI)	Significant Injury or Disabling Irreversible impairment (LTI PPD TPD)	Fatality/fatalities Significant irreversible health effects (TPD)
(E) Environmental impact	Environmental nuisance Limited damage to minimal area of low significance	Minor short to medium term material environmental harm to small area(s) of limited significance	Serious short to medium term environmental harm with widespread impacts	Major environmental harm Relatively wide spread medium to long term impacts	Extreme environmental harm Long term wide spread effects on environment
(A) Asset damage and other consequential business losses	Slight damage <$5,000 No disruption to operations	Minor damage <$50,000 Brief disruption < 12 hours	Localised damage <$500,000 Partial shutdown < 1 day	Major damage <$2,000,000 Major shutdown <1 week	Extensive damage >$2,000,000. Extensive loss > 1 week
(R) Impact on reputation	Slight impact Public aware but no public concern	Limited impact Some local public concern	Considerable impact with potential for wider public concern	National impact with potential for wider public concern	International impact International public attention

Likelihood of Consequence Assessment		Risk Ranking				
		1 - Low	2 - Minor	3 - Moderate	4 - Major	5 - Extreme
A (Very likely)	Assessed that this consequence from the hazard has occurred several times on this site or is very likely to occur at some time on this site	L	M	H	E	E
B (Likely)	Assessed that this consequence from the hazard has occurred on this site previously or is assessed to be likely to occur at some time on this site	L	M	H	H	E
C (Possible)	Assessed as possible that this consequence from the hazard could occur on this site at some time	L	M	M	H	E
D (Unlikely)	Assessed as unlikely that this consequence from the hazard will occur on this site / enterprise at any time	L	L	M	M	H
E (Highly unlikely)	Assessed that there is no practical possibility that this consequence from the hazard would ever occur on this site / enterprise	L	L	L	L	M

Risk Rating calculation - Read clockwise, e.g. for People P 3 B = H (People Moderate Likely → HIGH RISK

APPENDIX B

POLLUTION INCIDENT NOTIFICATION FORM
AUTHORITIES NOTIFICATION FORM
POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN AUDIT FORM

Pollution Incident Response Management Plan

Pollution Incident Notification Form

DATE:
TIME:
NAME & POSITION:
SITE NAME:
SITE TYPE:

Description of Incident (including time, date, nature and duration of incident). Provide accurate information only, if some parameters (i.e. chemical type) are unknown **DO NOT SPECULATE.**

Location of incident

Location of the place where pollution is occurring or is likely to occur

The nature, estimated quantity or volume and the concentration of any pollutants involved, if known, DO NOT SPECULATE

The circumstances in which the incident occurred (including the cause of the incident, if known)

Actions being undertaken

Pollution Incident Response Management Plan

PIRMP Authorities Notification Form

DATE:
NAME & POSITION:
SITE NAME:
SITE TYPE:

This form is to be used in conjunction with the Pollution Incident Notification Form.

The following authorities **MUST** be contacted following an incident:

Authority	**Contact details**
Environment Protection Agency (EPA)	131 555
Ministry of Health	(02) 9391 9000
Fire and Rescue NSW	000 (Emergency)
SafeWork NSW	13 10 50
Wollongong City Council	(02) 4227 7111

The following information MUST be provided to the relevant authorities (**IF KNOWN, DO NOT SPECULATE**) **:**

Time ☐

Date ☐

Nature of Incident (i.e. spill of chemical, dam release with unknown properties etc.) ☐

Duration of Incident (i.e. how long ago did it occur if known) ☐

Location of Incident (i.e. Metropolitan Coal Mine – underground, surface etc.) ☐

Location where pollution is occurring or is likely to occur ☐

Estimated quantity of any pollutants involved ☐

Concentration of any pollutants involved ☐

The circumstances in which the incident occurred (including the cause of the incident ☐

Actions being undertaken to control spill ☐

Pollution Incident Response Management Plan Audit

An audit of the effectiveness of the Pollution Incident Response Management Plan (PIRMP) must be undertaken annually with the outcomes of the audit logged on this document and reported in the PIRMP Performance Register. There are two types of audits that can be used for the review, a major incident mock scenario or an audit of personnel knowledge of the PIRMP. The person undertaking the audit will decide the most appropriate method of audit to be carried out.

DATE:
NAME & POSITION:
SITE NAME:
SITE TYPE:

Audit Scenario Type

Major Incident Mock Scenario ☐

Personnel Knowledge Check ☐

Major Incident Mock Scenario

Personnel involved:

NAME	POSITION

Incident scenario:

Audit:

TEST	PASS (yes/no)	Comments
Did the personnel assess the risks involved and clear the area if safe to do so?		
Did the personnel check the MSDS and label for spill response (if applicable)?		
Did the personnel put in place any controls to prevent further spillage or losses?		
Did the personnel involved then notify the Control Room?		
Did the control room fill out the Pollution Incident Notification Form?		
Did the control room immediately contact the person authorised to activate the PIRMP and notify authorities?		
Did the person who was authorised to activate the PIRMP notify the person responsible for implementing the response?		
Did the person notifying the authorities know who to contact and where this information is available?		
Was the response for activating the PIRMP done so in a timely manner?		
Was the response effective in containing the pollution?		

Results of audit:

Personnel Knowledge Check Scenario

NAME OF PERSONNEL BEING TESTED:
POSITION:

Testing of the PIRMP:

TEST	**PASS (yes/no)**	**Comments**
Did the person know that there is a PIRMP?		
Did the person know the procedure for implementing the PIRMP?		
Did the person know who to notify?		
Did the person know what to do if the person to notify was unavailable?		
Did the person know where the contact details for the authorities are kept?		
Did the person know where to find the PIRMP?		
Did the person know where the MSDS were located?		
Did the person know where the Major Spill Cache is?		

Results:

AUTHORISED:
SIGNED:
DATE: