

Pollution Incident Response Management Plan

Mount Thorley Warkworth

DOCUMENT CONTROL

Version	Date	Revision Description	Reviewer	Approver
1	30 August 2012	Original Document	Environmental Specialist – Chris New	General Manager – Tom Lukeman
2	22 August 2013	Annual Review	Environmental Specialist – Chris New	Manager Environment – Andrew Speechly
3	30 December 2014	Annual Review Minor changes to internal response system. Addition of PIRMP testing record. Updates to Dangerous Goods inventories and locations to reflect audit findings in the Environmental Protection Authority (EPA) 2013 Compliance report.	Environmental Specialist – Chris New	Manager Environment – Andrew Speechly
4	27 January 2016	Annual Review and update in accord with actions in EPA enforceable undertaking.	Environmental Specialist – Chris New	Manager Environment – Andrew Speechly
5	10 January 2017	Annual review	Environmental Specialist – Chris New	Manager Environment – Andrew Speechly
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7	17 November 2017	Updated document to Yancoal template	Environmental Advisor – Daniel Solomon	Manager Environment – Andrew Speechly
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9	1 October 2019	Revision and final updates to document following outcomes from the 2018 annual testing of the PIRMP and a post incident PIRMP test carried out on 26 April 2019.	Environment and Community Coordinator - Wade Covey	Environment & Community Manager (Acting) – Bill Baxter

TESTING HISTORY SUMMARY

Testing	Date	Description	Coordinator
1	2 Oct 2013	Annual testing of PIRMP	Kevin Hall Senior Advisor Emergency Services
2	16 Sept 2014	Annual testing of PIRMP	Kevin Hall Senior Advisor Emergency Services
3	18 Nov 2015	Annual testing of PIRMP	Kevin Hall Senior Advisor Emergency Services
4	14 Dec 2016	Annual testing of PIRMP	Kevin Hall Senior Advisor Emergency Services
5	11 December 2017	Annual testing of PIRMP	Kevin Hall Senior Advisor Emergency Services
6	23 November 2018	Annual testing of PIRMP	Steven Carvosso Senior Advisor Emergency Services
7	26 April 2019	Post Incident PIRMP Test	Wade Covey Environment and Community Coordinator

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1 INTRODUCTION

1.1 Background and Scope

The Protection of the Environment Legislation Amendment Act 2011 (PELA) received assent on 16 November 2011 resulting in changes to the *Protection of the Environment Operations Act 1997* (POEO Act). The intent of the PELA is to improve the way pollution incidents are reported and managed. Provisions include a requirement for holders of an Environmental Protection Licence (EPL) to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP). The specific requirements for PIRMPs are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO(G) Regulation). In summary, this legislation requires the following:

- holders of an EPL 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 the POEO(G) Regulation (clause 98C) and be in the form required by the POEO(G) Regulation (clause 98B)
- licensees must keep the plan at the premises to which the EPL relates (section 153D, POEO Act)
- licensees must test the plan at least every 12 months and after a pollution incident in accordance with the POEO(G) Regulation (clause 98E); and
- if a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened (within the meaning of Part 5.7) licensees must immediately implement the plan (section 153F, POEO Act).

As the holder of three environment protection licences (EPL 24, EPL 1376 and EPL 1976) Mount Thorley Warkworth Operations (MTW) is required to comply with Part 5.7A of the Protection of the Environment Operations Act 1997 (POEO Act) to prepare, keep, test and implement a PIRMP.

This document also details the procedures for notification of pollution incidents resulting in or having the potential to cause material harm to the environment. The notification of environmental incidents under this PIRMP is only required for those incidents causing or threatening to result in material environmental harm (a material harm incident) as defined in the POEO Act (refer to **Section 5.0**).

1.2 Objectives

The objectives of the PIRMP are to:

- facilitate comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Protection of the Environment and Operations Act 1997 (such as local councils, NSW

Ministry of Health, WorkCover NSW, and Fire and Rescue NSW) and people outside the facility who may be affected 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.

1.3 Definitions

Pollution Incident (POEO Act definition)

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.

Notifiable Pollution Incident (Section 148 of the POEO Act).

A pollution incident is required to be notified if material harm to the environment is caused or threatened,

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

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

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.

‘Material harm’ can include on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

Incident Management Team (IMT)

The group of persons with authority and responsibility to set objectives and initiate actions associated with the implementation of the PIRMP in order to control or contain the pollution incident, and notify stakeholders (all relevant authorities, neighbours and local community).

Incident Controller

The most senior person onsite at the time from the affected area who has the skills and ability to take control and manage the situation.

1.4 Regulatory Requirements

Specific detail is required for inclusion in the PIRMP. **Table 2.1** lists information mandated under Section 153C of the POEO Act and clause 98C of the POEO(G) Regulation and details where this information is located in this document.

Table 2.1 – Document Directory

Section/ Clause	Requirement	Section Addressed
POEO Act 1997 no 156		
153C (a)	A pollution incident response management plan must be in the form required by the regulations and must include the following: 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: <ul style="list-style-type: none"> (i) the owners or occupiers of premises in the 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 (iii) any persons or authorities required to be notified by Part 5.7. 	Section 5.0
153C (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 4.0 and Appendix 1
153C (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.	Section 5.0
153C (d)	Any other matter required by the regulations.	See below
POEO (G) Regulation		
98C (1) (a)	A description of the hazards to human health or the environment associated with the activity to which the licence relates (the relevant activity).	Section 2.0

98C (1) (b)	The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood.	Section 2.2
98C (1) (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 4.0
98C (1) (d)	An inventory of potential pollutants on the premises or used in carrying out the relevant activity.	Section 2.3
98C (1) (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 2.3
98C (1) (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 4.0
98C (1) (g)	The names, positions and 24-hour contact details of those key individuals who: (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.	Section 3.0
98C (1) (h)	The contact details of each relevant authority referred to in section 148 of the Act.	Section 5.0
98C (1) (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 5.0
98C (1) (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.	Section 4.0
98C (1) (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.	Figure 3.1, Figure 3.2 and Figure 3.3 Note: Storm water diversion shown on Figure 3.3 .
98C (1) (l)	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 4.0, Section 5.3 and Appendix 1
98C (1) (m)	The nature and objectives of any staff training program in relation to the plan.	Section 6.1
98C (1) (n)	The dates on which the plan has been tested and the name of the person who carried out the test.	Section 6.2
98C (1) (o)	The dates on which the plan is updated.	Section 6.0
98C (1) (p)	The manner in which the plan is to be tested and maintained.	Section 6.2

2 MT THORLEY WARKWORTH OVERVIEW

2.1 Site Details

Mt Thorley Warkworth (MTW) is an integrated operation of two open cut mines, Warkworth Mining Limited (WML) and Mount Thorley Operations (MTO) which are located adjacent to each other approximately 15 km south west of Singleton in the Hunter Valley region of New South Wales (refer to **Figure 3.1**).

MTW is an open cut mine, using dragline and truck and shovel methods. Employees work in shifts 24 hours a day, seven days a week. MTW is generally located near public roads comprising the Golden Highway alongside the northern and eastern WML boundary, Wallaby Scrub and Charlton Roads to the west. The operation is bisected by Putty Road, with WML located to the north of the Putty Road, and MTO to the south.

The major infrastructure at the site is predominantly located on the far eastern edge of the lease adjacent to Jerry's Plains Road. The facilities include:

- workshops – to provide servicing and repair services to the mining fleet;
- vehicle washing facilities – vehicle washing facilities are provided for both heavy and light vehicles;
- fuel storages – bulk oil and fuel storages for handling new and waste oil;
- storage hoppers and crushers;
- coal stockpiles;
- coal preparation plants;
- raw and product stockpiles;
- coal transportation loading facilities;
- mine water treatment, pipelines, and discharge facilities;
- sewage management facilities;
- reject emplacement areas;
- rehabilitation areas;
- bathhouse;
- general stores; and
- explosives compounds

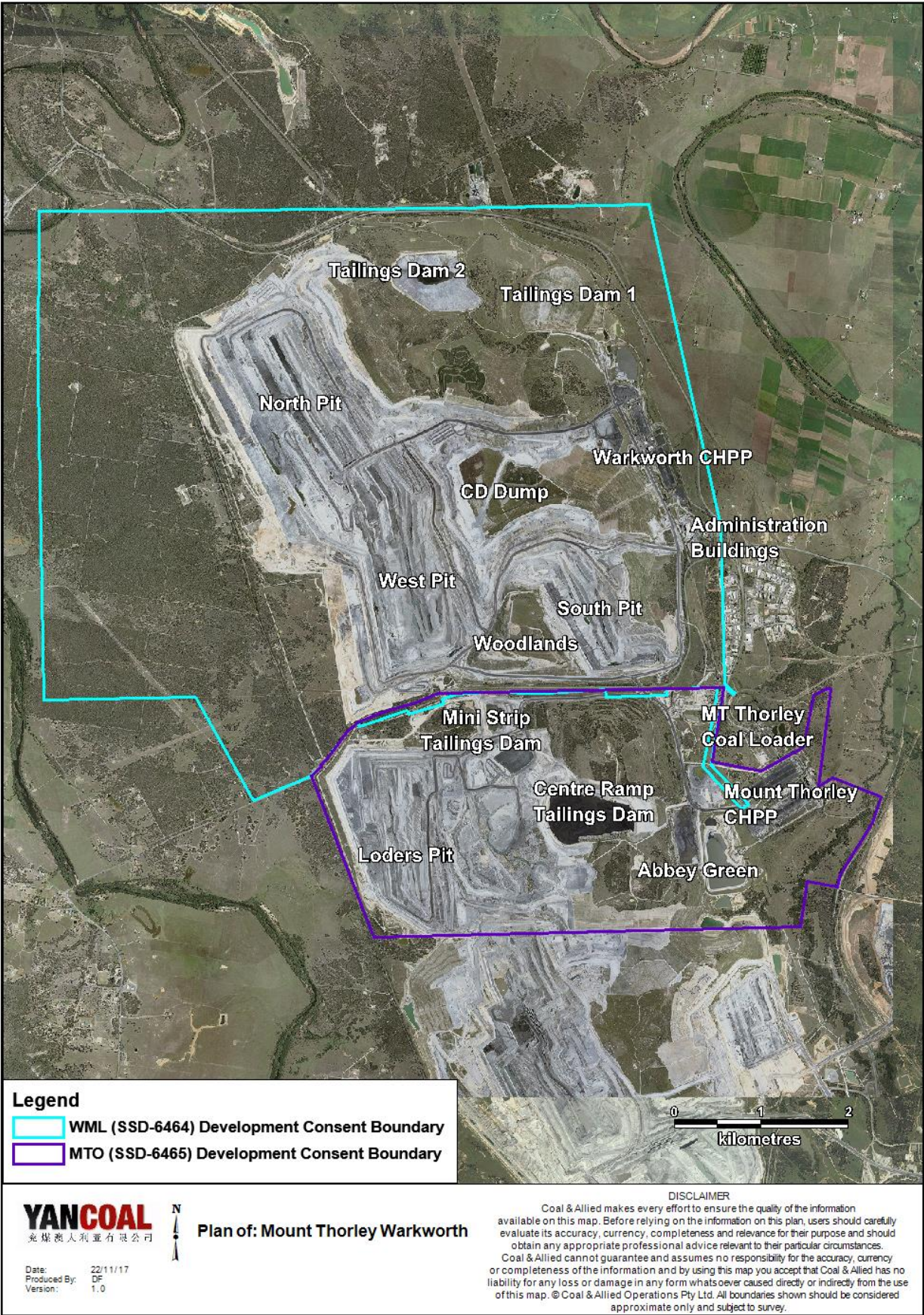


Figure 3.1 Regional Location

2.2 Environmental Hazards

The potential main hazards relevant to this PIRMP which have been identified for MTW operations are:

- Spills (e.g. hydrocarbon, chemicals, greases and oils etc.) resulting in land contamination;
- spills (e.g. hydrocarbon, chemicals, wastewater, saline or sediment laden water, etc.) resulting in contamination of water bodies (including groundwater);
- major water discharge (e.g. dam failure); and
- explosions.

2.3 Inventory of Pollutants

A range of chemicals and substances are utilised at MTW. They are used for a number of purposes including but not limited to mining, coal processing, water treatment, cleaning, fuel, and lubricants used for machinery maintenance. Most substances have the potential to be classed as a pollutant if stored in sufficient quantity and / or in a manner or location which has potential to impact a sensitive environmental or community receptor.

Certain types of water stored and transported across the MTW will be classed as a pollutant should they enter clean receiving waters. Sources include mine water, water from surface dirty water management systems and effluent from sewage management facilities.

The location of chemical and potential pollutant storage areas at MTW are shown on **Figure 3.2**. Potential downstream receptors are shown on **Figure 3.3**. An inventory of potential pollutants at MTW is presented in **Table 3.1** and **Table 3.2**.

Table 3.1: Potential Pollutant Inventory at Mount Thorley Warkworth

Facility	Class/ Pollutant	Max. Storage Capacity per facility (L)	Number of Facilities
Diesel tank	C1	550,000	1
Combustible liquids tank	C1	112,000	1
Diesel tank	C1	2,160,000	1
Diesel Tank	C1	220,000	1
Combustible liquids tank	C1	140,000	1
Combustible liquids tank	C1	3,690	1
Combustible liquids tank	C1	24,000	1
Diesel tank	C1	16,000	1
Diesel tank	C1	2,000	1
Diesel tank	C1	135,000	1
Diesel tank	C1	47,000	1
Diesel tank	C1	97,000	4
Combustible liquids tank	C1	119,000	1

Combustible liquids tank	C1	33,000	1
Combustible liquids tank	C1	2,870	1
Combustible liquids tank	C1	89,410	1
Combustible liquids tank	C1	6,000	5
Ammonium Nitrate	5.1	165,000 (Kg)	1
Ammonium Nitrate Emulsion	5.1	160,000 (Kg)	1
Mine water dam (Dam 6S SOOP prescribed facility)	TSS, EC	2,255,000,000	1
Mine water dam (Dam 9S discharge dam)	TSS, EC	76,000,000	1
Mine water dam (Dam 1N discharge dam)	TSS, EC	171,000,000	1
Tailings Storage Facility (Abbey Green TSF prescribed facility)	TSS, EC	5,672,300 (m3)*	1
Tailings Storage Facility (Centre Ramp TSF prescribed facility)	TSS, EC	14,140,000 (m3)*	1

* Data sourced from Operation and Maintenance Manuals

Table 3.2: Total storage capacity for dangerous goods on-site at Mount Thorley Warkworth

Material Type	Approximate Quantity On Site
Explosives	325,000 Kg
Hydrocarbons	4,071,970 L
Mine Water	2,584,000,000 L
Mine Tailings	19,812,300 m3



Figure 3.2 Location of Potential Pollutants



Figure 3.3 Location of Potential Downstream Receptors

3 MANAGEMENT AND RESPONSIBILITY

3.1 PIRMP Management

The specific responsibilities associated with the management and implementation of the PIRMP is outlined in **Table 4.1**.

Table 4.1 PIRMP Key Contacts and Management Responsibilities

Contact Name	Contact Number	Role	Responsibility
Gary Mulhearn	0403 963 081	Environment & Community Manager (ECM)	<p>Owner of the PIRMP document.</p> <p>Authorised to:</p> <ul style="list-style-type: none"> • Activate the PIRMP; • Notify and liaise with relevant authorities; • Notify Yancoal Corporate; • Be part of the Incident Management Team (IMT); • Notify and liaise with neighbours and community; • Advise and support Incident Controller from environmental perspective. • Collect environmental samples as required; • Test the PIRMP; • Train staff in their responsibilities under the PIRMP; • Publish relevant part of PIRMP on website; • Review and update the PIRMP as required; and, • Maintain the PIRMP Performance Register.
Wade Covey Olivia Lane	0419 436 991 0429 700 370	Environment and Community Coordinators	<p>Authorised to:</p> <ul style="list-style-type: none"> • Activate the PIRMP; • Notify and liaise with neighbours and community; • Assist in preparing, maintaining and implementing the PIRMP; and • Assist the ECM with PIRMP responsibilities.
ESO	0429 701 550	Site Emergency Response Team	<p>Authorised to:</p> <ul style="list-style-type: none"> • Advise and/or provide technical assistance to incident controller; • Isolate relevant infrastructure as necessary (e.g. pipelines, power); and • Call on external specialist assistance to assist as required.

Further roles and responsibilities related to an environmental incident under the PIRMP are detailed in **Table 4.2**.

Table 4.2: Further Roles and Responsibilities

Role	Responsibilities
MTW General Manager	<ul style="list-style-type: none">• Consult with the Environment & Community Manager or delegate on whether an incident is determined to be a Pollution Incident.• Authorise communications to public and media• Provide resources for the effective implementation of this document
Supervisors	<ul style="list-style-type: none">• Immediately notify their direct manager and the environmental department of the incident.
All employees and contractors	<ul style="list-style-type: none">• Contain pollution where possible (and if safe to do so);• Immediately notify Supervisor of any pollution incidents.

3.2 Legal Duty to Notify

All Workers and contractors at MTW are responsible for alerting their supervisors to all environmental incidents or hazards which may result in an environmental impact, regardless of the nature or scale.

Notification responsibilities are detailed in the POEO Act (Section 148), which encompasses all site workers, including contractors and sub-contractors. These can be categorised broadly as:

- ***The duty of Workers or any person undertaking an activity:***

Any person engaged as a Worker or undertaking an activity must, immediately after becoming aware of any potential incident that is believed to cause or threatens to cause material harm to the environment, notify the Environment & Community Manager and General Manager of the incident and all relevant information about it.

- ***The duty of the person conducting a business or undertaking (PCBU) or occupier of a premises to notify:***

The occupier of the premises on which the incident occurs, who is notified (or otherwise becomes aware of) a potential pollution incident, must undertake notification to the appropriate regulatory authority of any 'material harm incidents', including relevant information.

Notification shall be undertaken by the Environment & Community Manager or General Manager.

4 INCIDENT MANAGEMENT

A pollution incident is defined in the POEO Act 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 noise.

In the case of an environmental incident, prior to any other action, the site must contact Fire and Rescue NSW (1300 729 579 or 000) if the incident presents an immediate threat to human health or property. Fire and Rescue NSW are the first responders, as they are responsible for controlling and containing incidents. Where there is no threat to human health or services, Fire and Rescue NSW must still be contacted for information purposes, but as the last point of contact as detailed in **Section 5.2**.

All possible actions should be taken to control the pollution incident in order to minimise health, safety and environmental consequences. These actions, to the maximum extent possible, aim to:

- provide for the safety of people at and within the vicinity of the site; and
- contain the pollution incident.

The following actions are to be implemented in the event of an incident including:

1. secure the scene and contain the incident;
2. undertake notification of material harm incident (as required);
3. gather information (i.e. environmental monitoring);
4. undertake investigation into the cause of the incident;
5. review and classify information from investigation and identify any ongoing actions; and
6. implement those actions identified.

Incident management at MTW focuses on actions to:

- provide and maintain response resources, including equipment and/or training to minimise the environmental impacts associated with the incident;
- establish that response operations are carried out in a safe, well-organised, legal and effective fashion;
- provide for the safety and welfare of all responders, employees, contractors and visitors (where applicable);
- continuously assess the incident to determine the adequacy of incident response operations;
- minimise effects on people, the environment, property, production, and company reputation; and

- where necessary, utilise environmental monitoring to quantify impacts as a result of the incident.

With regards to the main hazards identified in **Section 2.2**, the following actions shall be undertaken:

Spills (including hydrocarbons, effluent, chemicals such as pre-coating material etc.) resulting in land or water contamination:

- Workers shall take all practical measures to stop the source of the spill (if safe to do so), utilise spills kits located on site, and any other resources available, to ensure that spills are contained or directed in such a manner as to be captured by existing controls (i.e. sediment basins).

Discharge of dirty water (e.g. dam failure or dam discharge) resulting in land or water contamination:

- Where possible water will be redirected (or pumped) into alternative containment areas. Priority will be to protect water resources, meaning in the case where no other storage facilities are available, water in the damaged storage area may be pumped onto dry land for absorption purposes.

Explosions and Fire:

- The use of explosives will be managed by appropriately qualified personnel in accordance with the Blast Management Plan. All Workers at MTW will follow the instruction of these qualified personnel for the management of blasting activities. In the case of an unintended fire and/or explosion, standard evacuations proceedings will be followed in accordance with the relevant Emergency Management Plan.

An incident Response Procedure specific to operations at MTW is provided in **Appendix 1**.

5 NOTIFICATION PROCEDURE

5.1 Determination of Material Harm

Following containment of the incident, immediate action must be taken to determine if the incident can be classified as a 'material harm incident'. As defined by Section 147 of the POEO Act, a material harm incident has occurred if the incident:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
- results in actual or potential loss (including all 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) or property damage of an amount, or amounts in aggregate, exceeding \$10,000.00 (or such other amount as is prescribed by the regulations).

It is possible for a material harm incident to occur on land that is within the boundary of the EPL. The determination of a material harm incident will be made by the General Manager in consultation with the Environment & Community Manager at the time of the incident.

5.2 Internal and External Notification

As discussed in **Section 3.1**, notification of an environmental incident is the responsibility of all site and contractor personnel. If an incident is classified as notifiable to external stakeholders, the person undertaking external notification must complete the **PIRMP Pollution Incident Details Form** and the **PIRMP Authorities Notification Form** shown in **Appendix 2**. Once completed, these forms are to be provided to the Incident Controller.

In the event of a 'material harm incident', response and notification must be undertaken as per the notification listing below.

External Notification List

Department	Contact Details
1. Fire and Rescue NSW	000 (to be contacted first if the incident presents an immediate threat to human health or property and emergency services are required. In all other cases commence notification as per the list below.
2. Environment Protection Authority – Environment Line	13 15 55
3. The Ministry of Health via the local Public Health Unit: Newcastle Office	(02) 4924 6477 Fax (02) 4924 6048 <i>After Hours Contact:</i> (02) 4924 6477 (diverts to John Hunter Hospital) - ask for Public Health Officer on call
4. SafeWork NSW	13 10 50
5. Singleton Shire Council	(02) 6578 7290 Council After Hours Ph. 6572 1400
6. Fire and Rescue NSW	1300 729 579 or 000 (to be contacted first if the incident presents an immediate threat to human health or property and emergency services are required. Fire and Rescue NSW to be contacted last if emergency response is not required).
7. NSW Department of Planning, Industry and Environment (The Secretary)	(02) 9228 6333 or 1300 305 695 (Sydney Office)

8. NSW Department of Planning, Industry and Environment (Compliance Division)	Phone: (02) 6575 3400 Email: compliance@planning.nsw.gov.au Ann Hagerthy on Phone: (02) 6575 3407, Mob: 0428 976 540 Or Leah Cook on Phone: (02) 6575 3403, Mob: 0429 191 164
9. NSW Department of Planning, Industry and Environment – Resource Regulator (Environmental Compliance Division)	Phone: 1300 814 609 Email: resource.regulator@planning.nsw.gov.au Monique Meyer on Phone: (02) 4063 6722 or Mob: 0429 168 008 Email: monique.meyer@planning.nsw.gov.au

On the identification of an environmental incident or hazard, personnel will report the issue immediately to their supervisor, who in turn shall report it to the Environment & Community Manager and or General Manager on site. Immediately is taken to mean ‘promptly and without delay’.

The decision on whether to notify the incident in accordance with Part 5.7 of the POEO Act should not delay immediate actions to provide the safety of people or contain a pollution incident. However, incident notification will be made as soon as it is safe to do so¹.

After initial notification of any ‘material harm incident’, it will be the responsibility of the Environment & Community Manager or delegated person to liaise with any authority listed that requests additional information, or is providing directions for management of the ‘material harm incident’. This may include incident investigation reports and ongoing environmental monitoring results.

5.3 Notifying Neighbours and Local Community

Communicating with neighbours and the local community is an important element in managing the response to any incident. Early warnings and regular updates (during and post incident) are to be provided (after appropriate internal approval) to the owners and occupiers of premises who may be

¹ EPA, *Frequently Asked Questions Regarding the Duty to Notify of a Pollution Incident*
<<http://www.epa.nsw.gov.au/legislation/poefaqnotify.htm>>

affected by an environmental incident occurring at Mount Thorley Warkworth. A current register of near neighbours and residents is kept internally and will be used to inform the necessary people of a pollution incident. Emergency details **MUST NOT** be released to unauthorised persons (i.e. media) without prior approval by the General Manager or delegate.

Communication mechanisms may include the following:

- incident notifications placed on the Yancoal website;
- the use of telephone calls or SMS, as appropriate to the circumstances.

The most appropriate communication mechanism will be employed based on the particular details of the incident, such as time of day, incident severity, available communication mechanisms and persons directly or immediately affected by the incident.

Examples of the notification advice for pollution incident scenarios are provided in **Table 6.2**.

Table 6.2: Notification to Neighbours and Community: Examples of information that may need to be communicated

Potential Pollution Emergency	Stakeholders to be notified	Key message	Possible Communication Mechanism During an Incident	Possible Communication Mechanism Post Incident
Hazardous Substance Spill	<ul style="list-style-type: none"> • Near neighbours • If road closures are required – likely traffic such as emergency services and school buses. 	<ul style="list-style-type: none"> • Avoid incident zone 	<ul style="list-style-type: none"> • Phone call /SMS 	<ul style="list-style-type: none"> • Website notification • Phone call/SMS
Failure or overtopping of Tailings or Mine Dam	<ul style="list-style-type: none"> • Downstream neighbours • If road closures are required – likely traffic such as emergency services and school buses 	<ul style="list-style-type: none"> • Relocate livestock and equipment • Keep clear of creeks and waterways • Do not use water from the local creeks until further notice 	<ul style="list-style-type: none"> • Phone call /SMS 	<ul style="list-style-type: none"> • Website notification • Phone call/SMS

6 TRAINING, TESTING, REVIEWING AND COMMUNICATION

6.1 Training

All MTW personnel will receive training on their reporting obligations in respect of pollution incidents. Regular refresher instructions will be provided to personnel, with new starters to receive information as part of their induction process. Records are kept to demonstrate personnel which have undertaken training.

In addition, routine training exercises involving key personnel across each site may be used to test the PIRMP.

6.2 Testing

Testing of the PIRMP will be undertaken to check that the information is accurate and current and that the plan is capable of being implemented in a workable and effective manner. Testing shall be undertaken in the following ways:

1. The PIRMP will be tested by assessing and reviewing it and making any necessary changes as required. Testing is taken to be either a desktop simulation/review or practical exercises/drills. Testing will include all components of the plan, including the effectiveness of training .
2. A review of the PIRMP will occur every 12 months commencing from the date of authorisation by the Environment and Community team. Dates on which the plan has been tested are shown in the testing summary table at the front of this document.
3. The PIRMP will be tested/reviewed within one month from the date of any pollution incident that occurs in the course of an activity to which the EPL relates. This test/review will be undertaken in light of the incident, to provide the information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner.

Records of testing and review will be included in the training history table at the front of this plan. Information in this table will include:

- the manner in which the test was undertaken
- dates when the plan has been tested
- the person who carried out the testing; and
- the date and description of any update of or amendment to the plan.

6.3 Review and Maintenance

This plan will be reviewed by a representative from the Environmental Department annually and after any incident or test for the purpose of continual improvement.

6.4 Availability of the PIRMP

The PIRMP shall be kept in written form at the EPL premises and shall be made available to all personnel responsible for implementing the plan, and to an authorised officer (as defined in the POEO Act) on request.

The PIRMP will be made publicly available on Yancoal Australia's website:

<https://insite.yancoal.com.au/document-library/management-plans-mtw>

The PIRMP is maintained as an internal controlled document. Electronic copies are managed within the site's Site Document Register (SDR) and hard copies can be found at:

- Warkworth Admin (BRRP Cupboard and Main Foyer);
- Mount Thorley Admin Area (BRRP Cupboard and Main Foyer);
- Health Centre main Foyer;
- Mine Dispatch.
- North CHPP
- South CHPP

No personal information (within the meaning of the *Privacy and Personal Information Protection Act 1998*) will be made publicly available as part of the PIRMP.

7 REFERENCED DOCUMENTS:

MTW Acknowledgement of Notification of Dangerous Goods on Premises 2014
Chemicals Register- Chernalert
MTW Dam Safety Emergency Plan (DSEP)
MTW Emergency Response Plan (ERP)
MTW Business Resilience Management Plan (BRMP)
Hydrocarbon Management Plan
Hazardous Substances and Dangerous Goods Procedure
MTW Incident Management System



Appendix 1

MTW Incident Response Procedure and Flow Chart

In the case of an incident that presents an immediate threat to the health and safety of people or threat to property, the following plans may be enacted:

- MTW Dam Safety Emergency Plan (DSEP);
- Emergency Response Plan (ERP);
- Business Resilience Management Plan (BRMP).

A summary of the emergency notification procedure has been provided below.

1. Ensure the immediate safety of everyone.
2. Notify:
 - a. **By radio** – Press **RED** button on radio, then press PTT Key (Push to Talk) to speak;
 - b. **By telephone** – 3222 or (02) 65701522

Say - EMERGENCY, EMERGENCY, EMERGENCY

3. Then state clearly:
 - Your name;
 - Nature of the emergency;
 - Location of emergency; and
 - What assistance is required.
4. MAPS/Control Room Operator will:
 - Notify Emergency Services Officer (ESO) on duty;
 - Notify Mining Shift Coordinator;
 - Await further instructions from the ESO and Mining Shift Coordinator.
5. If required, evacuate the area and assemble at your emergency muster point.

Where practicable, immediate actions should be taken to control and contain the pollution incident to mitigate any potential impact. The following equipment is available at MTW in order to minimise the risk to human health and the environment when containing a pollution incident:

- Personal Protective Equipment (long pants, long sleeved shirts, enclosed shoes, safety glasses, helmets, protective suits, gloves);
- Spill kits are located in high risk areas and can contain equipment such as additional PPE, shovels, rakes, absorbent material and containment devices;
- Vacuum trucks or pumps may be used by trained personnel.

Additional information regarding the availability and use of this equipment is provided in the Hazardous Substances and Dangerous Goods Procedure and Hydrocarbon Management Plan.

Incidents that happen at site will vary in the severity of the impact they create. Most can be handled as part of normal operational procedures and will not require escalation to an emergency.

Where there is no immediate threat to the health and safety of people or threat to property the event must be immediately communicated to the individual's supervisor. The supervisor or incident reporter must then immediately notify a member of the Environmental Services team, to ensure that any impact is appropriately managed and an assessment made as to whether the event is notifiable under the PIRMP.

The process of responding to a pollution incident under emergency and non-emergency situations is provided below.

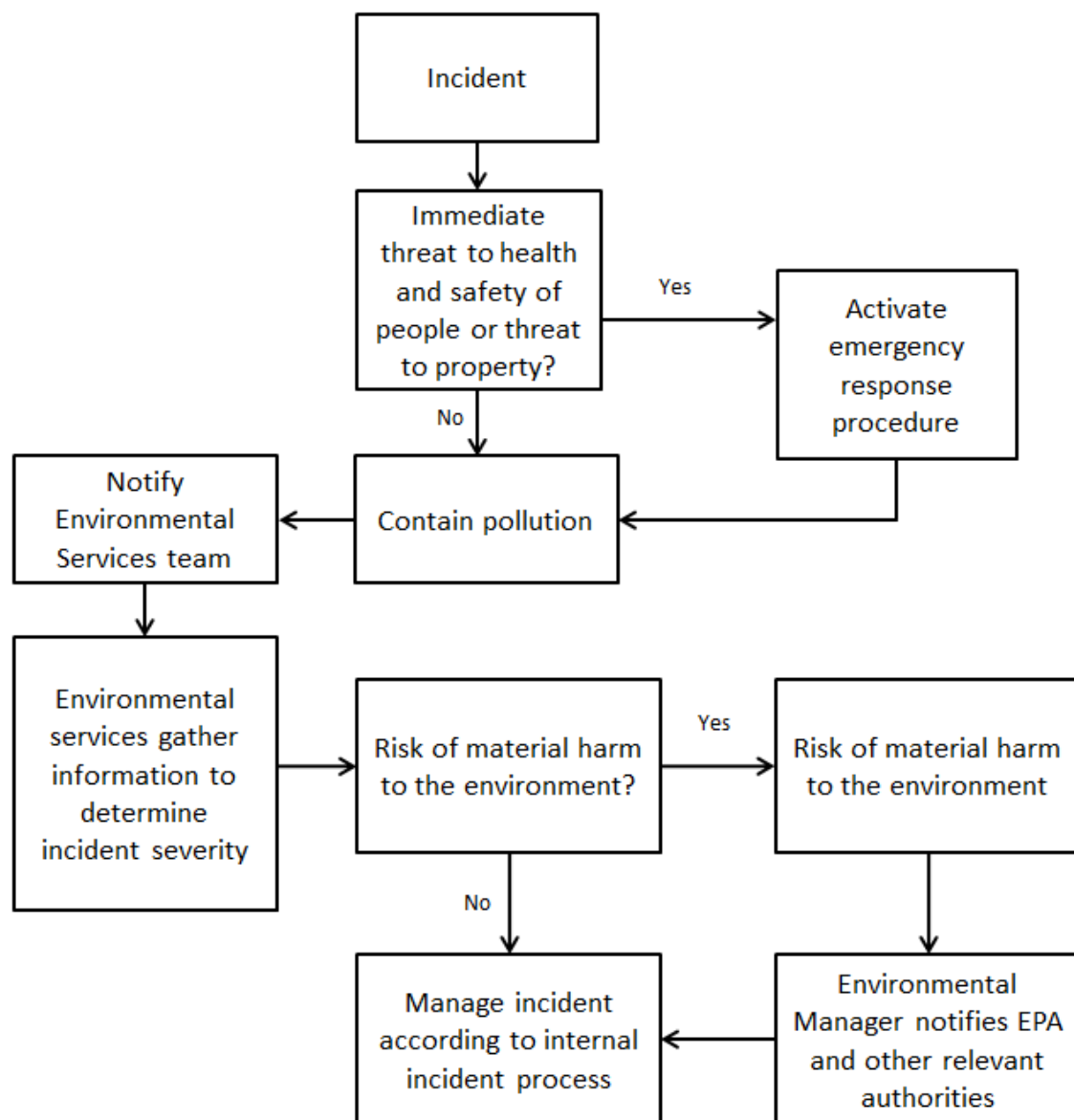


Figure 1 - Pollution incident response process

Incident Response Scenarios

An incident causing offsite discharge of water pollutants is the most likely scenario to threaten risk of material harm to the environment requiring activation of the Pollution Incident Response Management Plan.

Discharge of water pollutants has the potential to occur via the following scenarios:

- Hazardous Substance Spills
- Failure of Tailings or Water Storage Facilities
- Overtopping of water management facilities

Hazardous Substances Spill

MTW stores and uses quantities of hazardous substances, as listed in WorkCover Notifications of Dangerous Goods on Premises. Substances include, but are not limited to, fuels and lubricants used for equipment or machinery, waste materials or wastewater and chemicals used in cleaning or production processes.

Failure of Tailings or significant Water Storage Facilities

Failure of major storage facilities containing tailings and poor quality water (including salinity, sediment or effluent) has the potential to result in offsite water pollution.

Major storage facilities include:

- Dams 6S (SOOP), 9S and 1N
- Active Tailings Dams

Failure of any of the dams leading to offsite flow may occur as a result of:

- Contents exceeding storage capacity and spilling from the dam
- Failure of water infrastructure linked to the dam (i.e. Pipes, valves, pumps, spillways)
- Major embankment failure

The potential for material harm offsite if a dam failure occurs is due to changes to the Flow Rate, Total Suspended Solids, Electrical Conductivity, or pH of the receiving waters.



Appendix 2

PIRMP Incident Details and Notification Form

FORM: PIRMP - Pollution Incident Details

Usage: Use this form to record details of the Pollution Incident reported. This information is to be used with the PIRMP – Authorities Notification Form.

DATE & TIME:
MTW

Name and position of person reporting the incident

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Description of Incident (including when incident first occurred if known). Provide accurate information only, if some parameters (i.e. chemical type) are unknown **DO NOT SPECULATE.**

Date & Time of Incident:	
Nature of Incident:	
Duration of Incident (i.e. how long ago did it occur if known)	
Location of Incident (i.e. CHPP, WML, MTO, in pit etc.)	
Location where pollution is likely to occur (IF KNOWN, DO NOT SPECULATE)	
Estimated quantity of any pollutants involved (IF KNOWN, DO NOT SPECULATE)	
Concentration of any pollutants involved (IF KNOWN, DO NOT SPECULATE)	
Actions being undertaken to control pollution incident	

FORM: PIRMP - Authorities Notification

USAGE: This form is to be used in conjunction with the Pollution Incident Details Form.

DATE:
NAME & POSITION UNDERTAKING NOTIFICATION:
SITE (CHPP or MINE):

The following authorities **MUST** be contacted following an incident (as described in the Pollution Incident Response Management Plan):

Authority	Contact Details	Notification (Y/N). Any Details from Authority.
1. Fire and Rescue NSW	1300 729 579 or 000 (to be contacted first if the incident presents an immediate threat to human health or property and emergency services are required.	
2. Environment Protection Authority – Environment Line	13 15 55	
3. The Ministry of Health via the local Public Health Unit: Newcastle Office	(02) 4924 6477 Fax (02) 4924 6048 <i>After Hours Contact:</i> (02) 4924 6477 (diverts to John Hunter Hospital) - ask for Public Health Officer on call	
4. SafeWork NSW	13 10 50	
5. Singleton Shire Council	(02) 6578 7290 Council After Hours Ph. 6572 1400	
6. Fire and Rescue NSW	1300 729 579 or 000 (to be contacted first if the incident presents an immediate threat to human health or property and emergency services are required. Fire and rescue to be contacted last if emergency response is not required).	
7. NSW Department of Planning, Industry and Environment (The Secretary)	(02) 9228 6333 or 1300 305 695 (Sydney Office)	
8. NSW Department of Planning, Industry and	Phone: (02) 6575 3400 Email: compliance@planning.nsw.gov.au	

Environment (Compliance Division)	Ann Hagerthy on Phone: (02) 6575 3407, Mob: 0428 976 540 Or Leah Cook on Phone: (02) 6575 3403, Mob: 0429 191 164	
9. NSW Department of Planning, Industry and Environment – Resource Regulator (Environmental Compliance Division)	Phone: 1300 814 609 Email: resource.regulator@planning.nsw.gov.au Monique Meyer on Phone: (02) 4063 6722 or Mob: 0429 168 008 Email: monique.meyer@planning.nsw.gov.au	

The following information **MUST** be provided to the relevant authorities (Refer to PIRMP - Pollution Incident Details Form):

- Date of incident
- Time of incident
- Nature of Incident (i.e. spill of unknown 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. CHPP, in pit etc.)
- Location where pollution is likely to occur (**IF KNOWN, DO NOT SPECULATE**)
- Estimated quantity of any pollutants involved (**IF KNOWN, DO NOT SPECULATE**)
- Concentration of any pollutants involved (**IF KNOWN, DO NOT SPECULATE**)
- Actions being undertaken to control pollution incident