MANAGEMENT PLAN

Pollution Incident Response Management Plan

BHP

NEC-STE-MTP-009

Version: 12.1 | Released: 13/04/2022

Key Contact: Environment Superintendent

Table of Contents

| 1 | Preface | |
|----|--|-----|
| 2 | Key Contacts | 2 |
| 3 | Purpose | 2 |
| 4 | References | 2 |
| 5 | Description of Risks and Key Controls | 2 |
| 6 | Inventory of Pollutants | 4 |
| 7 | Safety Equipment | 4 |
| 8 | Contact Details | 4 |
| 9 | Internal Reporting of a Pollution Incident | 5 |
| 10 | Reporting a Pollution Incident to the Relevant Authorities | 5 |
| 11 | Communicating with neighbours and the local community | 6 |
| 12 | Actions to be taken during or immediately after a pollution incident to minimise harm to persons | |
| 13 | Maps | 6 |
| | 13.1 Figure 1: Map of Mt Arthur Coal in relation to the Hunter River, surrounding mine sites and the community | 7 |
| | 13.2 Figure 2: Map of Mt Arthur Coal with the focal point on the western part of the mine | 8 |
| | 13.3 Figure 3: Map of Mt Arthur Coal with the focal point on the south eastern part of the mine | 9 |
| 14 | Training and testing of the PIRMP | |
| 15 | Version Management | .10 |

1 Preface

The NSWEC Pollution Incident Response Management Plan (PIRMP) ensures the comprehensive and timely communication about a pollution incident to staff at the premises, the relevant authorities specified in the Protection of the Environment Operations Act 1997 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; 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.

2 Key Contacts

- Specialist Environment
- Environment Superintendent
- Health, Safety, Environment Manager

3 Purpose

This Pollution Incident Response Management Plan (PIRMP) is a requirement of Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act). The objective of the PIRMP is to:

- ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment
 Protection Authority (EPA), other relevant authorities specified in the POEO Act 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; 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.

The PIRMP has been developed to meet the requirements of section 153C of the POEO Act and the *Protection of the Environment Operations (General) Regulation 2009* (POEO (G) Regulation). Any changes to supporting documents referenced by this PIRMP must ensure the requirements of section 153C of the POEO Act continue to be met.

Reporting a pollution incident to relevant authorities in accordance with this PIRMP and implementation of the PIRMP itself must be undertaken for any pollutant incident for which there is a risk of 'material harm to the environment' within the meaning of section 147 of the POEO Act.

4 References

- Incident Management Plan NEC-STE-MTP-001
- Emergency Management Plan NEC-STE-MTP-006
- MAC-HSE-STD-002 Project Approval 09_0062
- MAC-HSE-STD-001 Environment Protection Licence 11457
- MAC-ENC-MTP-041 Environmental Management Strategy

5 Description of Risks and Key Controls

Table 1 provides a summary of key risks to human health or the environment associated with Mt Arthur Coal's activities, including the preventative controls to minimise risk.

| Hazard | Key controls |
|---|--|
| Blast fume emission offsite | Product selection and quality testing, loading procedures, assessment of ground conditions, sleep time, groundwater, previous experience, detailed short-term weather condition review, assessment of weather conditions at time of blasting and postponement of blast if wind direction poor and high fume risk. Fume risk procedure, fume rating post shot. |
| Unauthorised discharge of mine affected water offsite | Real-time monitoring system with alarms for dam levels, inspections by pump crew, integrated water management system (including water balance model), dewatering pipeline and dam locations within mine affected water management area as much as possible, survey water checks, weekly water checks, water quality monitoring program, geotechnical dam inspections, monthly reconciliations for water balance, maintenance program for key water infrastructure, Hunter River Salinity Trading Scheme regulations, controlled discharge point (manual locked valve), dam management plan, dam transfer pumps and reticulation infrastructure, dam maintenance. |
| Discharge of tailings outside containment structures Daily visual inspections of tailings pipeline, vegetation management p place to ensure line is visible during inspections, leak detection system (Citec), majority of the line is in the mine affected water management are line located in bunded area of the clean water catchment, auto flushing to prevent build up and blockages. | |
| Discharge of sewage outside of containment structures | Pump out tank system, licensed contractor, located within mine affected water management area, sewage treatment system maintenance procedure (regular 3-month, 6-month, annual & biannual checks & maintenance), weekly inspection, site sewage package plants (Industrial area and CHPP) drain within mine affected water management area, wetlands are used to polish the treated effluent from the Industrial Area plant. |
| Discharge of hydrocarbons outside of containment structures | Bunding and spill containment structures, spill response trailer, spill kits and absorbent material, servicing confined to controlled areas, spill response procedure, waste tracking procedure. |
| Discharge of hazardous materials outside of containment structures | Bunding and spill containment structures, hazardous materials management system, material safety data sheets (MSDS), substances are listed and risk assessed in Chemalert system, spill response trailer, spill kits and absorbent material, spill response procedure, waste tracking procedure. |
| Discharge of sediment offsite | Water diversion, collection drains and sediment dams established for sediment control established prior to disturbance, drainage controls disturbed areas, topsoil stockpiles are seeded, numbered and sign posted once completed, use of sumps for exploration drilling. |
| Unauthorised clearing outside disturbance boundary | Ground disturbance permit process, drainage controls, supervision of drilling contractors (geologist on site with drillers full time), clearing and topsoil stripping procedure, approval boundary reference layers maintained and referred to by mine planning engineers. |
| Incorrect or unauthorised disposal of waste | Total waste management contract, monthly reports from waste contractor, segregation of waste into specific bins for recycling, weekly monitoring program, tracking process for hazardous wastes routinely audited, chemical approval process evaluates environmental aspects of disposal, risk planning prior to major shutdowns during which waste management is considered, waste handling and disposal procedure. |
| Coal spillage outside containment structures | Coal loading system is designed to not overfill wagons, monthly inspections of rail corridor by contractor, CCTV monitoring during train loading, operator at train loading facility monitoring the process. |
| Spontaneous combustion | Spontaneous combustion management plan, selective material placement and burial with inert capping material, identification of high risk material, selective removal, regular inspections and monitoring, management of heating in the base of parts of the ROM pad, turnover of ROM and product coal to minimise residence time, stockpile separation. |

| Hazard | Key controls | | |
|--------|--|--|--|
| Fire | Maintained graded fire breaks around assets and grazing leases to reduce fuel loads, large capacity water trucks, Bushfire Management Plan and Emergency Response Plan, restricted access, no smoking permitted in vehicles, fire extinguishers in all vehicles, fire extinguisher training. | | |

6 Inventory of Pollutants

The Chem Alert database contains an inventory of potential pollutants kept on the premises, including the maximum quantity of any potential pollutant that is likely to be stored at the premises. A detailed and current inventory of potential pollutants can be sourced by generating a stock holding report in the Chem Alert database. Contact the Environmental Team or the Warehouse Supervisor for access to the Chem Alert Database.

7 Safety Equipment

MAC resources are identified during the risk management event identification phase. Refer to Table 2 for a list of internal safety equipment used for environmental incidents utilised by MAC operation.

| Name | Description | Location | | |
|---|--|--|--|--|
| Rescue Truck | An all-terrain vehicle, operating on mine roads and under mine traffic conditions equipped to provide rapid response to emergency situations. | Rescue shed adjacent to main workshop | | |
| Fire Tender Trailer | Two wheeled trailer used as a back-up firefighting resource via dispensing of water. | Rescue shed adjacent to main workshop | | |
| Spill Response Trailer | Mobile trailer with contents used to allow rapid response to containing, controlling and cleaning-up oil and chemical spills. | Rescue shed adjacent to main workshop | | |
| Fire extinguishers, hose reels and blankets | Portable devices used to extinguish fires. | Located in light vehicles and buildings | | |
| Water carts | Water carrying vehicles with firefighting capabilities and used for dust suppression, laying water to maintain & control haul road conditions. | In pits | | |
| Fire suppression systems | Installed system used to control and extinguish fires without human intervention. | Surface mobile equipment, and Mining Equipment | | |
| Trauma kits | Medical kits containing first aid supplies used in the control and management of injuries associated with emergencies. | Light vehicles, shovels and excavators | | |

Table 2 List of Safety Equipment

8 Contact Details

The key individuals who are responsible for activating the response plans and managing the responses are detailed in the Emergency Management Plan (NEC-STE-MTP-006).

9 Internal Reporting of a Pollution Incident

In the event of any pollution incident, site personnel must notify their supervisor immediately and or the Statutory OCE (Production 11), who will then contact the following personnel:

- Environment Superintendent (Primary Contact) or Health Safety Environment Manager (Secondary Contact); and
- Relevant Department Superintendent or Manager.

If a pollution event is identified on the boundary of the MAC premises which has reached or has the potential to reach neighbouring properties (MAC owned or private), the Land Access & Approvals Team shall be notified immediately and can provide approval to access BHP owned off-site properties to facilitate further investigation or the implementation of control measures. The Land Access & Approvals Team is also accountable for notifying relevant external stakeholders who may be affected by the impacts of the pollution incident.

- Primary Contact: Specialist Access Tenements & Offset; or
- Secondary Contact: Land Access & Approvals Manager.

10 Reporting a Pollution Incident to the Relevant Authorities

The Environment Superintendent or delegate is responsible for reporting any pollutant incident where material harm to the environment is caused or threatened within the meaning of Section 148 of the POEO Act. After becoming aware of the incident, the Environment Superintendent or delegate shall immediately notify each of the relevant authorities outlined in Table 3 of the incident and all relevant information about it.

Section 149 of the POEO Act and the Regulation requires verbal notification to each relevant authority followed by notification in writing within 7 days of the date on which the incident occurred. The initial verbal notification and written notification report must include the following information, if known:

- Time, date and duration of the incident;
- Duration of the event;
- Locations where pollution is occurring or is likely to occur;
- Nature, estimated quantity or volume and concentration of any pollutants involved, if known*;
- Circumstances in which the incident occurred (including the cause of the incident, if known)*; and
- Action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known*.

* If this information is not known to the person when the initial notification is made but becomes known afterwards, that information must be notified immediately after it becomes known to each authority listed above.

An EPA protocol for notifying the relevant authorities is available for reference at: <u>http://www.epa.nsw.gov.au/pollution/notificationprotocol.htm</u>.

Table 3 Relevant Authorities

| Relevant Authority | Verbal Notification Process | Written Notification Process |
|--|---|---|
| Department of Planning & Environment (DPIE) | Local Compliance Officer or Singleton DPIE Office. | To the local Compliance Officer and via the DPIE Portal. |
| Environment Protection Authority (EPA) | Environment Line 131 555 Record the EPA event ID provided as it is required for other notifications. | regops.metroregulation@epa.nsw.gov. au or relevant compliance officer. |
| Public Health Unit (Newcastle) | 02 4924 6477 After hours ask for Environment Health Officer on call as this diverts to John Hunter Hospital. Provide EPA event record ID if requested. | HNELHD- PHEnvironmentalHealth@health.ns w.gov.au |
| Safe Work NSW | 131 050 Select option for notification of reportable incident. Provide EPA event record ID if requested. Record notification reference number if provided. | <u>contact@safework.nsw.gov.au</u> |
| Muswellbrook Shire Council | 02 6549 3700 Contact customer service. Record notification reference number if provided. | council@muswellbrook.nsw.gov.au |
| Fire and Rescue NSW | 000 | ZoneRW2@fire.nsw.gov.au |

| | Request Fire & Rescue NSW. Record notification reference number if provided. | |
|--|--|--|
| | | |

11 Communicating with neighbours and the local community

Mt Arthur Coal is committed to providing early warnings and regular updates to the community about any pollution incident related to its mining operations. A contact list of nearby premises and community and government organisations is maintained by the Corporate Affairs team. Contact will be made only to those relevant to the pollution event.

12 Actions to be taken during or immediately after a pollution incident to minimise harm to persons

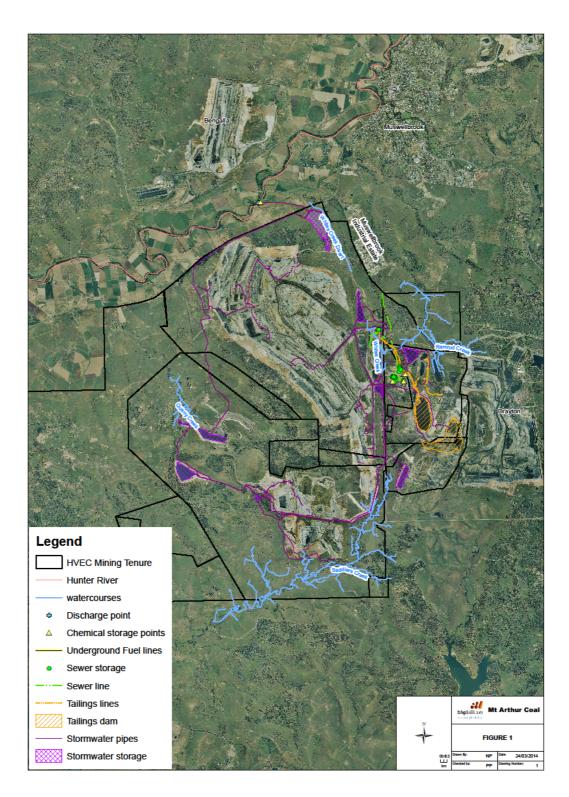
Mt Arthur Coal will provide its employees and contractors with early warnings and regular updates about any relevant pollution incident; communication methods may include email, 2-way radio communications and prestart briefings. The General Manager or delegate will make the decision on when communication is required for the pollution incident.

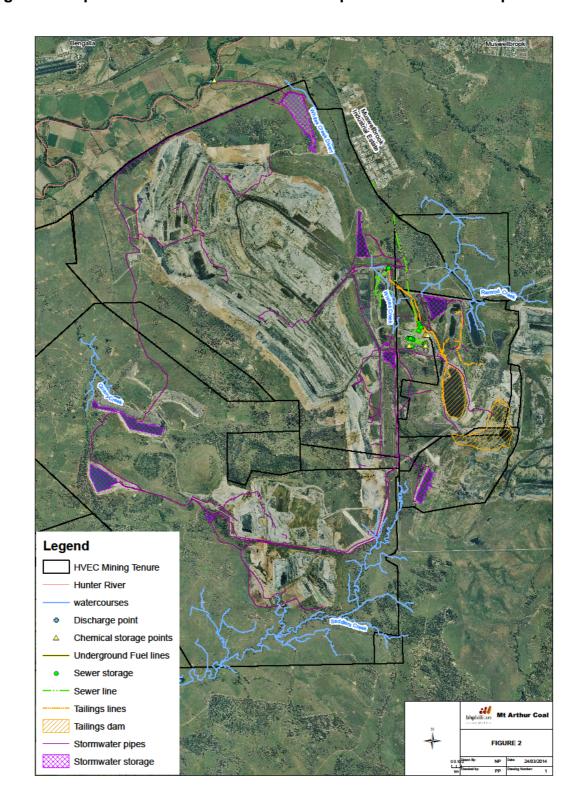
One of the primary objectives of the NEC-STE-MTP-001 Incident Management Plan (IMP) is to protect human safety. This includes the people who work at the operation, or who are directly affected by the coal operation (s20, *Coal Mine Health and Safety Act 2002*). The IMP provides specific arrangements to minimise the risk of harm to any persons who will be on the premises, who are likely to be on the premises or who are otherwise potentially affected should an incident occur.

13 Maps

Figure 1, Figure 2, and Figure 3 show the maps of the location of the premises, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises, location of stormwater drains, and discharge points relevant to Mt Arthur Coal's operations.

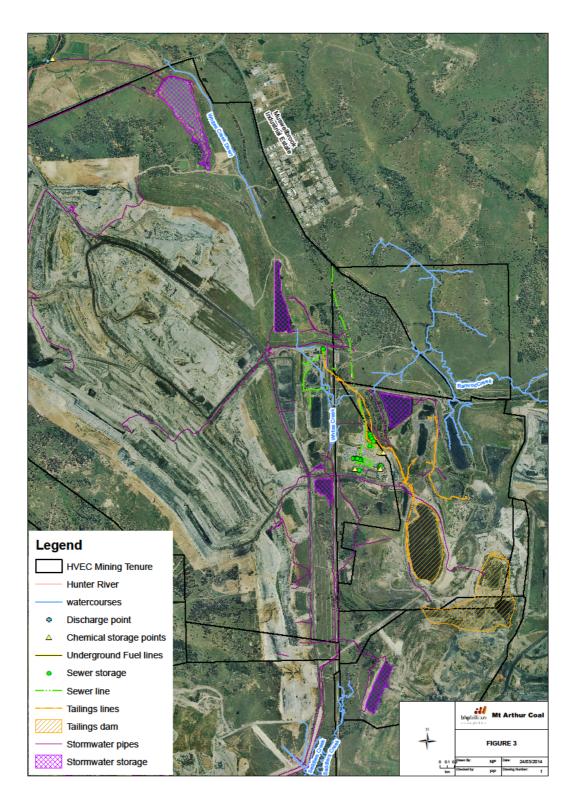
13.1 Figure 1: Map of Mt Arthur Coal in relation to the Hunter River, surrounding mine sites and the community





13.2 Figure 2: Map of Mt Arthur Coal with the focal point on the western part of the mine

13.3 Figure 3: Map of Mt Arthur Coal with the focal point on the south eastern part of the mine



14 Training and testing of the PIRMP

This plan is tested to ensure the information is up to date and the plan is capable of being implemented. All employees and contractors undergo awareness training on this plan as part of their introduction to site.

The PIRMP will be tested by the Environment Team routinely at least once every twelve months OR within one month of an activation.

Training records and details of the testing, including dates and the person/s conducting the testing will be recorded in line with MAC-STE-FRM-296 Pollution Incident Response Management Plan Test.

15 Version Management

| Data | Version | Version Control | | | |
|------------|---------|-----------------|--------------|--|--|
| Date | Major | Minor | Page(s) | Details | |
| 05/02/14 | 1.0 | | 1-9 | Document Development | |
| 27/03/14 | 2.0 | | 4-10 | Updated hyperlink to HSEC risk register, removed hyperlink and reference to Critical Safety Equipment register, included section on reporting to the relevant authorities, and updated maps. | |
| 05/11/14 | 3.0 | | 6 | Removed disconnected mobile number for Department of Mines. | |
| 05/12/14 | 4.0 | | 6,11 | Included mobile number for Department of Planning and Environment. Including reference and map of MPL263. | |
| 20/04/15 | 5.0 | | 6 | Removed mobile number for Muswellbrook Shire Council. | |
| 29/02/16 | 6.0 | | 1,2,5,6,7,12 | Updated role titles, italicised reference to legislation, updated contact numbers for Department of Planning and Environment and Department of Mines, updated link to EPA protocol for notifying relevant authorities. | |
| 23/09/16 | 7.0 | | 4,6,13 | Updated link to report, updated contact numbers and updated titles. | |
| 13/10/16 | 8.0 | | 6 | Updated link to EPA protocol for notifying relevant authorities. | |
| 31/01/17 | 9.0 | | 12 | Addition of Figure 5. | |
| 10/10/18 | 10.0 | | 5,6 | Document reviewed following execution of observed opportunities during tailings spill - #420001507 25/05/20018. (Outcome - no material harm to environment) | |
| | | | | Updated roles, contact details and community notification details. | |
| 19/11/2020 | 11.0 | | All | Formatting changes and update to contact details | |
| 29/11/2021 | 12.0 | | All | Major review, introduction of escalation protocol for off-site properties, details for stakeholders / regulators updated. | |
| 13/04/2022 | | 12.1 | 10 | Update to section 14 to include requirement to test PIRMP 1 month post activation. | |