



Bengalla Mine

Pollution Incident Response Management Plan

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1. INTRODUCTION

Bengalla Mining Company Pty Limited (BMC) operates the Bengalla Mine (Bengalla) which is located approximately 4 km west of Muswellbrook in the Upper Hunter Valley, New South Wales (NSW). Bengalla is generally bound by Wybong Road to the north, Overton Road to the east and the Muswellbrook-Ulan Rail Line to the south and Roxburgh Road to the west.

BMC was granted Development Consent for State Significant Development (SSD) 5170 on 3 March 2015 by the Secretary of the NSW Department of Planning and the Environment (DP&E) for the Continuation of Bengalla Mine. SSD-5170 enables BMC to continue open cut coal mining of up to 15 Million tonnes per annum (Mtpa) of run of mine (ROM) coal until 2039. BMC commenced under SSD-5170 on 1 October 2015.

BMC holds Environment Protection Licence (EPL) 6538 with the NSW Environment Protection Authority (EPA) for Bengalla. BMC is required to comply with the Protection of the Environment Operations Act 1997 (POEO Act). This Pollution Incident Response Management Plan (PIRMP) has been developed to satisfy the POEO Act requirements.

1.1. Purpose

Per the POEO Act, the holder of an EPL must prepare, keep, test and implement a pollution incident response management plan that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates and includes the following:

- holder of an EPL must prepare a Pollution Incident Response Management Plan (PIRMP);
- the PIRMP must include the information detailed in the POEO Act (Part 5.7A);
- licensee must keep the plan at the premise to which the EPL relates;
- licensee must test the PIRMP at least every 12 months and after a pollution incident in accordance with the Protection of the Environment Operations (General) Regulation 2022 (POEO(G) Regulation); 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 of the POEO Act, the licensee must immediately implement the PIRMP (section 153F, POEO Act).

1.2. Definitions

POEO Act definitions.

Material Harm

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.

Pollution Incident

An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, 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.

Regulatory Authority

Is the EPA, a local authority or a public authority prescribed for the purposes of section 6 (3) of the POEO Act.

Relevant Authority

Means any of the following:

- (a) the appropriate regulatory authority,
- (b) if the EPA is not the appropriate regulatory authority - the EPA,
- (c) if the EPA is the appropriate regulatory authority - the local authority for the area in which the pollution incident occurs,
- (d) the Ministry of Health,
- (e) SafeWork NSW as referred to in clause 1 of Schedule 2 to the Work Health and Safety Act 2011,
- (f) Fire and Rescue NSW.

Site

Premises described in EPL 6538.

1.3. PIRMP Activation

If a pollution incident occurs at the site resulting in potential or actual material harm to the environment within the meaning of section 147 of the POEO Act, this PIRMP must be implemented immediately.

1.4. Abbreviations

Bengalla:	Bengalla Mine
BMC:	Bengalla Mining Company Pty Limited
EPA:	Environmental Protection Authority
EPL:	Environment Protection Licence
PIRMP:	Pollution Incident Response Management Plan
POEO Act:	Protection of the Environment Operations Act 1997
POEO(G) Reg:	Protection of the Environment Operations (General) Regulation 2022

2. REGULATORY REQUIREMENTS

Table 1 lists information required by Section 153C of the POEO Act (1997) No 156 and Clause 71, 72, 74 & 75 of the POEO (G) Regulation and details where this information is in this PIRMP.

Table 1: Section 153C of the POEO Act and clause 71, 72, 74 & 75 of the POEO (G) Regulation

Section 153C	Detail required	Location in Document
POEO Act 1997 No 156		
A pollution incident response management plan must be in the form required by the regulation and must include the following:		
(a)	The procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to: (i) the owners or occupiers of premises in the vicinity of the premises to which the EPL or the direction under section 153B relates, and (ii) the local authority for the area in which the premises to which the environment protection license or the direction under section 153B relates are located and any area affected, or potentially affected, by the pollution, and (iv) any persons or authorities required to be notified by Part 5.7 (of the POEO Act)	Sections 3.1 and 4.1
(b)	A detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection license, or the occupier of the relevant premises, to reduce or control any pollution.	Section 6.1.1
(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 6.1.2
(d)	Any other matters required by the regulations.	This table below
POEO (general) Regulation 2022		
Section 71		
A PIRM plan:		
(a)	Must be in written form, and	This document
(b)	May form part of another document required to be prepared under or in accordance with another law if the information required to be included in the PIRM plan is readily identifiable as that information in that other document.	N/A
Section 72		
For the Act, Section 153C (d), the following matters must be included in the PIRM plan:		
(a)	72 A description of the hazards to human health or the environment associated with the activity to which the licence relates (the “relevant activity”).	Section 5

(b)	72 The likelihood of the hazards occurring, including details of conditions or events that could, or would, increase the likelihood,	Section 5
(c)	72 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 6.2
(d)	72 An inventory of potential pollutants on the premises or used in carrying out the relevant activity	Section 5.1
(e)	72 The maximum quantity of a pollutant likely to be stored or held at particular locations, including underground tanks, at or on the premises to which the licence relates	Section 5.1
(f)	72 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 6.3
(g)	72 The names, positions and 24-hour contact details of individuals who: (i) are responsible for activating the PIRM plan; and (ii) (ii) are authorised to notify relevant authorities under the Act, Section 148; and (iii) (iii) are responsible for managing the response to a pollution incident.	Section 4
(h)	72 The contact details of each relevant authority referred to in the Act, Section 148.	Section 4.1
(i)	72 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 4.2
(j)	72 The arrangements for minimising the risk of harm to persons who are on the premises or who are present where the scheduled activity is being carried on.	Section 4.3
(k)	72 A detailed map, or set of maps, showing the location of the premises to which the licence relates, the surrounding area likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises.	Section 8
(l)	72 A detailed description of how any identified risk of harm to human health will be reduced, including, as a minimum, by early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk	Section 4.3
(m)	72 The nature and objectives of any staff training program in relation to the PIRM plan.	Section 7.1
(n)	72 The dates on which the PIRM plan has been tested and the name of the person who carried out the test	Section 7.2
(o)	72 The dates on which the PIRM plan is updated	Section 7.2
(p)	72 The way in which the PIRM plan is to be tested and maintained	Section 7.2
Section 74		
(1) A PIRM plan must be made readily available:		
(a)	To an authorised officer on requests, and	This document

(b)	To a person who is responsible for implementing the PIRM plan at the premises: (i) To which the relevant licence relates, or (ii) Where the activity takes place.	This document
(2) A PIRM plan must be made publicly available in the following way within 14 days after it is prepared:		
(a)	In a prominent position on a publicly accessible website of the person who is required to prepare the PIRM plan.	PIRM plan is available on the Bengalla website (link below).
(b)	If the person does not have a website – by providing a copy of the PIRM plan, without charge, to a person who makes a written request for a copy.	N/A
(3) Subsection (2) applies only in relation to a part of the PIRM plan that includes information required under:		
(a)	The Act, Section 153C(a); and	
(b)	This Regulation, Section 72(h) and (i) or 73(b)(ii) and 73(b)(iii).	
(4) Personal information, within the meaning of the Privacy and Personal Information Protection Act 1998, is not required to be included in a PIRM plan made available to a person other than an authorised officer.		
Section 75		
(1) A PIRM plan must be tested:		
(a)	Routinely at least once every 12 months; and	Section 7.2
(b)	If a pollution incident occurred during an activity to which an environmental protection licence relates, which caused or threatened material environmental harm to the environment, within the meaning of the Act, Section 147 – within 1 month of the incident occurring.	Section 7.2
(2) The test must be carried out in a way to ensure the following:		
(a)	The information included in the PIRM plan is accurate and up to date; and	Section 7.2
(b)	The PIRM plan is capable of being implemented in a workable and effective way.	Section 7.2
(3) A test carried out under subsection (1)(b) must assess the matters specified in the subsection (2) in light of the incident.		

<https://newhopegroup.com.au/environmental-management-plans/>

3. PREMISE DETAILS

3.1. Site Details

Table 2: EPL Details

Environment Protection Licence (EPL) Details	
Name of licensee: (including ABN)	Bengalla Mining Company Pty Limited 32 053 909 470
EPL number:	6538
Premises name and address:	Bengalla Mine Bengalla Road Via Muswellbrook NSW 2333
Company or business contact details	Name: Hayley Frazer Position: Environment and Approvals Superintendent Business hours contact number/s: 02 6542 9360 After hours contact number/s: 0400 332 404 Email: hayley.frazer@newhopegroup.com.au
Website address:	www.bengalla.com.au
Scheduled activity/activities on EPL:	Coal works Mining for coal
Fee-based activity/activities on EPL:	Coal works Mining for coal

4. RESPONSIBILITIES AND NOTIFICATIONS

Responsibilities for activation, notifications, and management of PIRMP response is shown in **Table 3**.

Table 3: Responsible Persons

Pollution incident – person/s responsible	
<p>PIRMP activation: Primary Contact</p> <p>PIRMP activation: Secondary Contact</p>	<p>Name: Hayley Frazer Position or title: Environment and Approvals Superintendent Business hours contact number/s: 02 6542 9360 After hours contact number/s: 0400 332 404 Email: hayley.frazer@newhopegroup.com.au</p> <p>Name: Cam Halfpenny Position or title: General Manager Business hours contact number/s: 02 6542 9501 After hours contact number/s: 0429 701 500 Email: cam.halfpenny@newhopegroup.com.au</p>
<p>Notifying relevant authorities: Primary</p> <p>Notifying relevant authorities: Secondary</p>	<p>Name: Hayley Frazer Position or title: Environment and Approvals Superintendent Business hours contact number/s: 02 6542 9360 After hours contact number/s: 0400 332 404 Email: hayley.frazer@newhopegroup.com.au</p> <p>Name: Cam Halfpenny Position or title: General Manager Business hours contact number/s: 02 6542 9501 After hours contact number/s: 0429 701 500 Email: cam.halfpenny@newhopegroup.com.au</p>
<p>Managing response to pollution incident: Primary</p> <p>Managing response to pollution incident: Secondary</p>	<p>Name: Hayley Frazer Position or title: Environment and Approvals Superintendent Business hours contact number/s: 02 6542 9360 After hours contact number/s: 0400 332 404 Email: hayley.frazer@newhopegroup.com.au</p> <p>Name: Cam Halfpenny Position or title: General Manager Business hours contact number/s: 02 6542 9501 After hours contact number/s: 0429 701 500 Email: cam.halfpenny@newhopegroup.com.au</p>

4.1. Notification Details of Relevant Authorities

Relevant authorities contact details are shown in **Table 4**.

Table 4: Notifications of Relevant Authorities

Notification of relevant authorities		
Fire & Rescue NSW / Rural Fire Service	Contact number:	1300 729 579 or 000
NSW Rural Fire Service	Contact number:	1300 729 579 or 000
NSW Environmental Protection Agency	Contact number:	13 15 55
NSW Health Hunter New England Local Health District	Contact number:	02 4924 6477
SafeWork NSW	Contact number:	13 10 50
Muswellbrook Shire Council	Contact number:	02 6549 3700
NSW Office of Transport Safety Investigations (Rail)	Contact number:	1800 677 766
Department of Planning, Housing and Infrastructure	Contact number:	02 6575 3400
Resources Regulator	Contact number:	1300 814 609
NSW Dam Safety	Contact number:	0403 681 645

Note: There may be other notifications required.

Record keeping forms are included at the back of this document to collate incident details during the enactment of this plan and document regulatory and other notifications made under this plan.

4.2. Notification Details of Neighbours and Local Community

After BMC General Manager approval neighbours and the local community will be notified of the Pollution Incident causing Material Harm at the Site.

Communication may include:

- Notification placed on the BMC web site.
- The use of telephone calls and/or SMS.
- Email to community representatives.
- Newsletter.
- Community information meetings.
- Door knocking.

During a Pollution Incident causing Material Harm at the Site notification updates will occur if there is change in conditions.

Communications with neighbours and the local community where relevant shall include:

- Description of the event.
- Location of the event.
- Date and time.
- Actions required.

4.3. Notifications on site

After BMC General Manager approval Site personnel will be notified of the Pollution Incident causing Material Harm at the Site.

Communication may include:

- Radio.
- The use of telephone calls and/or SMS.
- Email to employees and operators.
- Contractors will be notified by the contract coordinator / manager on site.
- Emergency alarm.

During a Pollution Incident causing Material Harm at the Site notification updates will occur if there is change in conditions.

On site communications where relevant shall include:

- Description of the event.
- Location of the event.
- Date and time.
- Actions required.

5. MAJOR HAZARDS

Major hazards identified at Bengalla include:

- spills (e.g. hydrocarbon, hazardous chemicals etc.) resulting in land contamination;
- spills (e.g. hydrocarbon, hazardous chemicals, saline or sediment laden water, etc.) resulting in water contamination;
- blast fume (e.g. blast fume containing NOx) leaves EPL 6538 Site;
- major health risk (e.g. pandemic)
- uncontrolled water discharge (for example dam failure, storm activity); and
- fire (for example bushfire).

Table 5 shows each major hazard and the likelihood of the major hazard occurring and potential conditions to increase the likelihood of occurrence.

Table 5: Description and Likelihood of Hazards

Hazard	Likelihood	Potential Conditions to Increase Likelihood
Hazardous Spill	Low - Medium	Rainfall event Insufficient spill controls Insufficient storage Common storage of incompatible products Use of unapproved chemicals on site No safety data sheet for chemical Chemicals in unlabelled containers
Uncontrolled Water Storage Discharge	Low - Medium	Rainfall event Pumping infrastructure not available SCADA system failure
Effluent discharge	Low	Rainfall event Non competent operator Failure of effluent truck tank Driver error
Major Health Risk	Medium - High	Pandemic (COVID-19) Bacteria (legionnaires in air conditioning) Plague (mice)
Explosives	Low	Unplanned event (misfire) Sabotage (activist activity)
Radiation	Low	Exposure leak Damage to radiation device
Fire Coal stockpiles Bushfire	Medium	Extreme weather conditions (temperature, wind, and low humidity) Bushfire - Increased vegetation load
Blast Fume	Medium	Blast planning (incorrect use of product)

		Rainfall impacting on drill pad and holes
Hydrocarbon spill	Low	Failure when transferring diesel from truck to storage Failure of storage tank Rupture of truck lines Rupture of transfer lines
Gas Release	Low	Failure of cylinder Impact from store vehicle
Bioremediation Area	Low	Hydrocarbon release Transportation Incident
Spontaneous Combustion	Low	Not managing carbonaceous material

5.1. Inventory of Pollutants

BMC potential pollutants are detailed in **Table 6**.

Table 6: Inventory of Potential Pollutants

Pollutant Type	Location	Capacity
Grease		
Bulk Grease Tank	Out of Pit Fuel Farm	2,000 kg
Bulk Grease Tank	Out of Pit Fuel Farm	2,000 kg
Bulk Grease Tank	Workshop Bay 6	2,000 kg
Bulk Grease Tank	CHPP	1,250 kg
Diesel		
Tank 1	Out of Pit Fuel Farm	108,000 L
Tank 2	Out of Pit Fuel Farm	108,000 L
Tank 13	Inpit Fuel Farm	108,000 L
Tank 14	Inpit Fuel Farm	108,000 L
Tank 15	Inpit Fuel Farm	108,000 L
Oil		
Tank 4	Out of Pit Fuel Farm	25,000 L
Tank 5	Out of Pit Fuel Farm	15,000 L
Tank 6	Out of Pit Fuel Farm	15,000 L
Tank 7	Out of Pit Fuel Farm	10,000 L
Tank 8	Out of Pit Fuel Farm	10,000 L
Tank 12	Out of Pit Fuel Farm	16,800 L
Tank 16	Inpit Fuel Farm	5,000 L
Tank 17	Inpit Fuel Farm	5,000 L
Coolant		

Tank 9	Out of Pit Fuel Farm	10,000 L
Tank 18	Inpit Fuel Farm	3,000 L
Waste Oil		
Tank 11	Out of Pit Fuel Farm	25,000 L
Tank 19	Inpit Fuel Farm	3,000 L
Waste Coolant		
Tank 10	Out of Pit Fuel Farm	5,000 L
Gas		
Acetylene	Stores	31m ³
LPG	Stores	450m ³
Mine Water		
South Loop Road Dam	On site	0.5 ML
ROM North Dam	On site	11 ML
Wantana West Dam	Old Belt Road	16 ML
Train Loadout Dam	Train Loadout	0.5 ML
East Facilities Dam	CHPP	80 ML
West Facilities Dam	CHPP	80 ML
Dry Creek East	On site	93 ML
Washery Dam	CHPP (West of Bengalla Link Rd)	25 ML
Staged Discharge Dam (DW1)	CHPP (West of Bengalla Link Rd)	700 ML
Sediment Water		
North Dump Dam	Overton Road	0.5 ML
Ramp Dam	Overton Road	16 ML
Endwall Dam	Old Belt Road	80 ML
Bengalla East Sediment Dam (Homestead Dam)	Old Belt Road	43 ML
Bengalla West Sediment Dam (Farm Dam)	Old Belt Road	5 ML
ROM South Dam	CHPP	0.5 ML
Contaminated Water		
Facilities Sump	Vehicle wash bay	0.5 ML
Effluent Water		
Waste Water Treatment Plant (WWTP) Aeration Lagoons	CHPP WWTP	0.25 ML
Sodium Hypochlorite	CHPP WWTP	1,000 L
Bioremediation Area		
Waste Hydrocarbon (solid)	On Site	86m ³



Chemicals at Bengalla are included in the Chem Alert register which available at key locations around the Site. All chemicals have a relevant Safety Data Sheet.

6. INCIDENT MANAGEMENT

6.1. Emergency Response

This PIRMP will be activated when:

- A BMC employee, contractor or supplier becomes aware of a Pollution Incident causing Material Harm at the Site; or
- A notification from an external party regarding a Pollution Incident causing Material Harm at the Site.

6.1.1. During a Pollution Event

Upon activation of the PIRMP the following process is to be followed:

- If evacuation of personnel is required, all employees and contractors will be evacuated to the nearest evacuation assembly area. Visitors will be escorted by company personnel to the nearest and safest evacuation assembly point. Audible warning alarms will be commenced via the site 2-way radio system or through administration speaker system.
- Supervisor (or other) reports Pollution Incident causing Material Harm to Environment at the Site to Environment Superintendent immediately. Where not available, contact authorised person listed in **Table 3** and provide the following details (if available):
 - a. location of event;
 - b. date, time and nature of event;
 - c. extent of event;
 - d. actions taken; and
 - e. whether emergency services are required or have been contacted.
- If assistance is required immediately during a Pollution Incident causing Material Harm at the Site, the relevant people shall be contacted directly by the event controller.
- Relevant BMC management plans and procedures shall be activated. See BMC website and information systems e.g. Lotus Notes.
- Commence actions to contain pollutant, secure the event site and assess event area to determine the scale of the event and establish scale of response required for environmental and health and safety.
- For environmental assistance, the Environment Superintendent shall be the point of contact.
- For health and safety assistance, the Health and Safety Manager shall be the point of contact.
- BMC have external consultants available to assist in the event response or provide expert technical assistance, for example medical, toxicological, environmental etc.
- Deploy event response equipment and personnel as required.
- If contractors are required for clean up the event area the Environment Superintendent shall arrange cleaning and collection to occur.

6.1.2 Notification of a Pollution Incident

Environment Superintendent will undertake notifications of the Pollution Incident causing Material Harm at the Site with the Relevant Authority immediately after becoming aware of the event.

Where other stakeholders may be impacted (e.g. neighbours and the local community) or where directed by the EPA, those identified stakeholders are to be contacted by the Environment Superintendent or delegate.

6.1.3 Following a Pollution Incident

Following a Pollution Incident causing Material Harm at the Site the following actions will be undertaken:

- Assessment of the event to determine necessary controls and remedial works including review of relevant BMC management plans and procedures.
- Remediation works may include:
 - Sampling and/or monitoring.
 - Installation of controls.
 - Engagement of specialist consultants and/or contractors.
 - Procurement of additional/replacement supplies (e.g. spill kit material).
 - Consultation with Relevant Authority and/or neighbours and the local community.
- Notification update as required to Relevant Authority and/or neighbours and the local community.
- Internal investigation of the event.
- A report of the Pollution Incident causing Material Harm at the Site may be requested by the Relevant Authority. Details may include the following:
 - Date, time, and nature of the event.
 - Identifying the cause (or likely cause) of the event.
 - Describing what action has been taken to date.
 - Describing proposed measures to address the event
- Participation in any external investigation of the event.
- Review of the PIRMP for effectiveness.
- Appropriate communication of any changes to the PIRMP.

6.1.4 Hazard Response

Relevant to all guides there may be a requirement to activate an emergency.

When an emergency is activated the person shall place a call over the two-way radio – Channel 1: stating “Emergency – Emergency – Emergency - This is an Emergency”.

Details of the event if available shall be given being:

- Nature of event.
- Location of event.
- Number of personnel injured / extent of event.
- Assistance required.

Dial 666 to notify Dispatch or nearest Supervisor/Team Leader/Responsible Person.

External emergency services required to be contacted by phoning 000.

If safe to do so ensure the welfare of any injured person.

Hazardous Substances Spill

If unplanned spill/discharge occurs the following actions may be taken:

1. Contain the spill.
2. Clean-up the spill by removing contaminated material for remediation or treat in-situ as directed by the Environment Superintendent.

Spill Kits are generally located in the following areas:

- Mine Crib Hut.
 - Workshop Fuel Farm.
 - In Pit Fuel Farm.
 - Workshop.
 - Coal Handling and Preparation Plant (CHPP).
 - Orica Compound.
3. Contaminated products are to be placed in sealed containers and labelled ready for appropriate disposal.
 4. Spills are to be recorded in the information management system.
 5. Environmental department shall arrange water or soil sampling and analysis, as required.
 6. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
 7. Post event debrief with relevant personnel as required.

Water Storage Failure

BMC operate two declared (previously known as prescribed) dams under the *Dam Safety Act 2015*. These dams are:

- Clean Water 1 Dam (CW1) (900ML) and
- Staged Discharge Dam (DW1) (700ML).

If an unplanned dam failure occurs the following actions may be taken:

1. Person(s) witnessing or coming upon a dam failure shall activate an emergency response.
2. Initiate and deploy equipment to contain released waters.
3. Notify as required neighbours and the local community.
4. Undertake water sampling and analysis as necessary.
5. Undertake a surveillance inspection of the dam by a certified dam inspector.
6. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
7. Post incident debrief with relevant personnel as required.

Unplanned Effluent Discharge

BMC operate an on-site Wastewater Treatment Plant (**WWTP**). The WWTP is located between the CHPP stockpiles and the East and West Facilities Dams. The WWTP receives wastewater from the administration and bathhouse showers and toilets. A Waste Contractor also transports wastewater from

If an unplanned effluent discharge occurs the following actions may be taken:

1. Person witnessing or coming upon a significant spill shall activate an emergency response.
2. Contain the spill.
3. Spills are to be recorded in the information management system.
4. Undertake water or soil sampling and analysis, as required.

5. Clean-up the spill.
6. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
7. Post event debrief with personnel as required.

Storm/Flood Event

The water management system has been designed to meet the conditions of SSD-5170, the conditions of EPL 6538 and the requirements of Dam Safety New South Wales where applicable.

If a storm/flood event occurs the following actions may be taken:

1. Activate an emergency response.
2. Ensure no ongoing threat to personnel working on site.
3. Contain water where reasonable and feasible.
4. Liaise with site technical personnel, internal and external emergency response personnel to determine required response.
5. Pump water to other dams away from flood affected areas.
6. Contain contaminated material (caused by inundation and failure of machinery, diesel/ oil leaks) using booms if reasonable and feasible.
7. Initiate dam inspections by certified inspectors for those dams listed as declared dams.
8. Undertake water sampling and analysis as required.
9. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
10. Post Incident debriefing with relevant personnel as required.

Major Health Risk

Potable water is trucked to site by a local water carrier. This water is used for drinking and shower purposes within the main office, bathhouse and adjacent workshop areas and is delivered to the crib hut, dragline and drills for similar uses.

In a major health risk occurs the following actions may be taken:

1. Confirm safety and wellbeing of employees and those at risk.
2. Investigate problem identify contamination.
3. Isolate area.
4. Undertake sampling and analysis.
5. Review water treatment programme.
6. Take necessary remedial action.
7. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
8. Post event debrief with relevant personnel as required.

Explosives Event

BMC stores explosives and other related material within the existing explosives storage facility (magazine) and the reload facility. In the event of a significant explosion the following actions may be taken:

1. Notify relevant Supervisor and Emergency Response Team of the emergency immediately.

2. Assess the situation and determine best possible emergency response plan in consultation with Emergency Response Team.
3. If required call for necessary assistance from Dragline Drill and Blast Superintendent and Orica Emergency Response Service.
4. Coordinate/manage the emergency area by cordoning off the area and restrict access of non-essential personnel.
5. After injured/ill personnel have been treated/rescued ensure the accident scene is left undisturbed and information is gathered from witnesses (to assist in the accident investigation).
6. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
7. Post event debrief with relevant personnel as required.

Magazine or Reload Facility Fire

If a significant Magazine or Reload Facility fire occurs the following actions may be taken:

1. If exclusion zone is established ensure equipment is allocated to park up dependent on location (i.e. north or south of exclusion zone)
2. Assist the Supervisor (Emergency Controller) with allocation of personnel to transport operators from park up areas north of the exclusion zone.
3. If fire not within the exclusion zone, then attempt to extinguish.
4. If the fire is within the exclusion zone, the fire is to be left to burn out.
5. In the event of a scrub or grass fire passing through the magazine compound or reload facility, an exclusion zone is to be set up around the area until sufficient time has deemed to have passed by the Mining Engineering Manager.
6. Magazine – 1000m exclusion zone.
7. Reload Facility – 1000m exclusion zone.
8. Coordinate/manage the emergency area and ensure sentries are allocated to prevent access to the exclusion zone.
9. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
10. Post event debrief with relevant personnel as required.

Radiation Emergency

Radioactive source locations at Bengalla include:

- Centrifuge floor of CHPP Washery Building on correct medium pipeline one on each module.
- In front of clarified water tank on the first thickener, underflow pump, delivery pipeline.
- In front of clarified water tank on the second thickener, underflow pump, delivery pipeline.
- In front of clarified water tank on the third thickener, underflow pump, delivery pipeline

If radioactive gauge damage occurs the following actions may be taken:

1. Person witnessing or coming upon a damaged radioactive gauge shall activate an emergency response.
2. Confirm safety and wellbeing of employees and those at risk.
3. Barricade a minimum distance of 10m around the damaged radioactive gauge.
4. Notify relevant Supervisor and Emergency Response Team.
5. Inspect the gauge and render safe. Any work involving the removal or dismantling of any part of the gauges or sources is only to be carried out by a licensed R10 Radiation Worker.

6. Environment Superintendent to report the event to the Relevant Authority as required.
7. Post Incident debrief with relevant personnel as required.

Bushfire

If a bushfire occurs the following actions may be taken:

1. Person witnessing or coming upon a bushfire shall activate an emergency response.
2. Assess the nature and magnitude of the fire, the potential for fighting the fire and determine the best possible course of action / recovery plan in consultation with Supervisor.
3. Evacuate the area of all personnel and if safe to do so organise for all equipment to be parked up in a safe location out of the path of the bushfire.
4. Activate Emergency Response Team if required.
5. Contain the fire (if safe to do so) otherwise retreat to a safe location.
6. Request assistance from dispatch if external emergency resources are required i.e. Rural Fire Service
7. Provide access to emergency personnel to attend to the fire.
8. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
9. Post Incident debrief with relevant personnel as required.

Blast Fume

BMC undertake regular blasting which may result in blast fume.

If a blast fume event occurs the following actions may be taken:

1. The shot firer shall take action to move any person in the path of the fume event to a safe location.
2. Notify Environment Superintendent.
3. Implement immediate notification to any off-site people in the path of the fume and advise them of the actions to take to avoid adverse impacts.
4. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
5. Post event debrief with relevant personnel as required.

Hydrocarbon Release

BMC receive regular deliveries of fuels and hydrocarbons.

If an uncontrolled release occurs the following actions may be taken:

1. Contain the release by preventing entry to drains and water ways.
2. Notify relevant Supervisor and Environment Superintendent.
3. Implement clean-up.
4. Commence investigation as to cause of the event.
5. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
6. Post Incident debrief with relevant personnel as required.

Gas Release

Bengalla store LPG and Acetylene for use at Site.

If a gas leak occurs the following actions may be taken:

1. All persons working in the immediate area shall be evacuated.
2. Confirm safety and wellbeing of employees.
3. Obtain gas protective equipment to enable isolation of the area to be completed.
4. Notify the Supply Superintendent, Environment Superintendent and Safety Manager.
5. Safety Manager to assess health of persons and implement actions to monitor health of workers.
6. Implement clean-up.
7. Commence investigation as to cause of the incident.
8. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
9. Post Incident debrief with relevant personnel as required.

Bioremediation Area

Bengalla has a hydrocarbon bioremediation area, see **Figure 11** for location. Material is transported from the Bengalla Workshop and Wash Down areas to the bioremediation area for treatment and then co-disposal in pit via in pit haul roads.

If a spill or release during transportation occurs, the following actions may be taken:

1. Contain the release.
2. Notify the area Supervisor and Environment Superintendent.
3. Implement clean-up process.
4. Commence investigation as to cause of the event.
5. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
6. Post event debrief with relevant personnel as required.

Spontaneous Combustion

If a spontaneous combustion event occurs that has an offsite impact, the following actions may be taken:

1. Assess the outbreak, the potential for managing the outbreak and determine the course of action in consultation with Mining staff.
2. Notify the area Supervisor and Environment Superintendent.
3. Mining Supervisor to evacuate the immediate area of all personnel (if required)
4. Implement management processes.
5. Commence investigation, as required, to cause of the outbreak in consultation with Mine Geologist and Technical Services
6. Environment Superintendent to report the Pollution Incident causing Material Harm at the Site to the Relevant Authority, as required.
7. Post event debrief with relevant personnel as required.

6.2 Pre-emptive Controls

BMC implement controls to manage the Major Hazards on site. Some of these controls include, but are not limited to:

- All BMC employees, contractors and visitors receive emergency preparedness and response training during their site familiarisation induction.
- BMC have dedicated emergency response teams who undergo regular training.

- BMC competent mine planning and operational personnel.
- BMC has readily accessible personal protective equipment for all staff, contractors and visitors.
- Spill containment/control kits and equipment including emergency spill kits that are located at various locations around the Site.
- BMC have dedicated fire control systems including dedicated fire truck and trailer, watercarts, and water hydrants located throughout the infrastructure and CHPP area.
- Fire suppression on relevant HME (dragline, drills, excavators).
- Hydrocarbon and chemical storage per relevant Australian Standards and Dangerous Goods Licence.
- Real time bulk tank storages.
- Real time water level monitoring and alarm capabilities on high risk dams.
- Certain bunded areas.
- Chemical authorisation and approval processes.
- Post rainfall inspections (25 mm in 24 hours) of dams.
- Security measures for explosives magazine and pit entry.
- Weed control and ground maintenance programs.
- Drone surveillance as required.
- Health controls for workforce (e.g. work from home, temperature checking daily (when applicable)).
- Weekly inspections of key water storages.
- Real time meteorological system.
- Pre-blast environmental assessment process utilising predictive forecasting for blasting activities.

6.3 Safety Equipment

Resources available at Bengalla for emergency response include:

- An on-site Emergency Response Team.
- HAZMAT box at entrance to Bengalla containing key information for external emergency services.
- Firefighting equipment installed at Bengalla complies with the *Australian Standard (AS) 2419.2 Fire Hydrant Installations* and *AS2441 Installation of Fire Hose Reels*.
- Firefighting equipment is compatible with local fire authorities.
- A competent person conducts routine inspections as per *AS 1851 Maintenance of Fire Protection Equipment parts 1 – 16*.
- Fire Equipment Registers that identify the equipment and its location at Bengalla.
- A fire system impairment procedure has been developed to ensure fire system maintenance does not impact negatively on our ability to respond to fire emergencies.
- Mobile equipment has fire extinguishers fitted.
- Heavy vehicles including haul trucks and loading units are fitted with fire suppression systems.
- Water carts are equipped to respond to fire emergencies in the open cut mine areas.
- 5ML of clean water is stored in a dam on Site that can be available for firefighting purposes.

- Dedicated emergency response ambulance carrying first aid equipment is in the Emergency Response Shed.
- Emergency response equipment is available such as breathing apparatus, holmatro tools, oxygen delivery units, defibrillators etc.
- Emergency back-up generators for water hydrants.
- Personal protective equipment including gloves, hard hats, coveralls, masks, hearing protection
- Eye wash, showers and hand wash stations located at various locations around Site.
- Gas monitoring meters located in CHPP, rescue truck, maintenance and production.
- Safety data sheets stored in Chemaalert.
- Spill Kits containing some or all of the following:
 - Absorbent materials ('Kitty Litter').
 - Boom Spill containment socks.
 - Pads bale.
 - Broom.
 - Personal protective equipment (coveralls, rubber gloves, plastic bags); and
 - Shovels.

Figures 5-7 show the location of where key safety equipment is stored at Bengalla.

7. TRAINING, TESTING AND COMMUNICATION

7.1. Training

Training in incident response and emergency response occurs through BMC inductions for all staff, contractors, and visitors.

Training is undertaken in the form of toolbox talks, U-Day presentations, field exercises or desktop exercises required by this PIRMP are conducted annually.

Records of testing of this PIRMP are at **Table 7**.

7.2. Testing and Review

A copy of this PIRMP will be available by Bengalla within fourteen days of an update resulting from:

- any changes to EPL 6538;
- a Pollution Incident causing Material Harm at the Site;
- an independent environmental audit that recommends changes to the PIRMP; or
- a practical exercise or simulation.

BMC will review, and if necessary, revise this PIRMP.

The PIRMP will be tested to ensure that the information included in this PIRMP is accurate and the PIRMP can be implemented. Testing will be undertaken by desktop simulation or using practical drills at the following intervals:

- at least once every 12 months; or
- within one month of a Pollution Incident causing Material Harm at the Site occurring.

A record of testing undertaken on the PIRMP since commencement under SSD-5170 is provided in **Table 7**.

Change history and website uploading history is provided in **Table 8**.

Table 7: Record of Testing

Testing Date	Tested By	Details	Findings	Next Scheduled testing date
15 December 2016	Laurel McGinnity (Environmental Advisor) Ben Simpson (Environmental Advisor) Craig White (Environment & Approvals Specialist) John Campbell (Technical Services Manager)	Desktop simulation of coal stockpile fire.	<ul style="list-style-type: none"> • Update website link and reference • Legal advice may be required prior to approving amendments to this PIRMP • Update with current site maps as appropriate • Check phone numbers are current 	15 December 2017
15 December 2017	Laurel McGinnity (Environmental Advisor) Ben Simpson (Environmental Advisor) Danielle Nicol (Environmental Vacation Student) Clare Akauma (Environmental Vacation Student) Craig White (Environmental & Approvals Superintendent) John Campbell (Technical Services Manager) Scott Batey (Health and Safety Manager)	Desktop simulation of a bushfire has started in the CW1 (ML1711) area north of Wybong Road. Strong winds have quickly spread the fire towards Mt Pleasant infrastructure. The wind direction changes and the fire crosses Wybong Road and starts to encroach on the Bengalla explosives magazine and reload facility.	<ul style="list-style-type: none"> • Include in the explosive’s scenario a link to the site Explosives Emergency Management Plan. • Update contact details to include Mt Pleasant Operations. • Confirm calling Triple zero will link to the local Rural Fire Service • Review and implement options if appropriate for an additional gate access into Bengalla from Bengalla Link Road • Include a bushfire scenario in the PIRMP • Confirm the Emergency Response Plan contains reference to the PIRMP 	15 December 2018
19 December 2018	Cam Halfpenny (Chief Executive Officer) Scott McGeachie (CHPP & Maintenance Manager) Brett Domrow (Technical Services Manager) Stephen Meares (Production Dispatch & Services Superintendent)	The Wantana West Dam pump failed during a storm event.	<ul style="list-style-type: none"> • The storm/flood emergency response guide is capable of being implemented in a workable and effective manner 	19 December 2019

	<p>Russell Hartin (CHPP Superintendent); Tim Woodward (Infrastructure and Capital Projects Superintendent) Paul Neely (Superintendent Short Term Mine Planning) Craig White (Environmental & Approvals Superintendent) Dave Lawson (Infrastructure Supervisor) Laurel McGinnity (Senior Environmental Advisor)</p>			
<p>16 December 2019</p>	<p>Scott Simpson (Technical Services Manager) Craig White (Environmental Superintendent) Scott Batey (Health and Safety Manager) Pam Simpson (Senior Environmental Advisor) Peter Madden (Environmental Advisor)</p>	<p>A blast has slept for 7 days. The location of the blast is in pit adjacent to the northern end wall. The blast is scheduled to fire in low risk wind speed conditions. The window of low risk wind conditions is anticipated as 7:00am to 8:00am. The wind is from the south east. Any particulates or fume from the blast is likely to move towards the Mt Pleasant Mine infrastructure area where Mt Pleasant Mine employees and contractors may be located. The wind is increasing to medium wind speed conditions at the time of the blast.</p>	<ul style="list-style-type: none"> • The BMC & MPO Statutory Boundary Management Plan is to be reviewed and updated where appropriate • The Post Blast Fume Generation Mitigation and Management Plan to be reviewed and updated where appropriate 	<p>16 December 2020</p>
<p>17 December 2020</p>	<p>Pam Simpson (Senior Environmental Advisor) Peter Madden (Environmental Advisor) Scott Simpson (Technical Services Manager) Beth Viertel (Acting Health and Safety Manager)</p>	<p>A B Double is unloading fuel into the Bengalla fuel storage tanks adjacent to the store. During fuel delivery the line</p>	<ul style="list-style-type: none"> • Inspect current fuel delivery infrastructure and determine if upgrades are required • The PIRMP to be updated to include hydrocarbon spills 	<p>17 December 2021</p>

	Dave Lawson (Maintenance Supervisor)	from the B trailer disengages from the tanker resulting in fuel being pumped onto the ground and entering a drain west of the fuel station. Approximately 30,000L of diesel has been released into the Bengalla drainage system prior to fuel pumping stopped.		
23 December 2021	Pam Simpson (Senior Environmental Advisor) Paul Neely (Superintendent Short Term Mine Planning) Jake Kell (Statutory and Projects Superintendent) Craig White (Environment Superintendent) Ben Simpson (Environmental Specialist) Jamie Costello (Dragline, Drill and Blast and Services Superintendent)	A spontaneous combustion outbreak has occurred in the base of the low south base dump. Spontaneous combustion odours may be leaving site. Access to the area has been restricted by reject trucks dumping along the main route to the area.	<ul style="list-style-type: none"> • Review current Spontaneous Combustion Management Plan to include ROM raw coal and inpit. • Update PIRMP to include spontaneous combustion management • Review method of capturing spontaneous combustion outbreaks in mining area • Review JHA's regarding hot dig areas 	19 December 2022
7 December 2022	Craig White (Environment Superintendent) Ben Simpson (Environmental Specialist) Pam Simpson (Senior Environmental Advisor) Sam Parkinson (Maintenance Technician) Chad Reid (Maintenance Technician) Adam Lanske (JBA Contractor, Environmental Officer) Russell Hartin (CHPP, Infrastructure and Logistics Manager) Scott Simpson (Technical Services Manager)	Uncontrolled discharge from DW1 impacting the MBK-Ulan Rail line and Bengalla Link Road.	<ul style="list-style-type: none"> • Review Dam Safety Emergency Plan and update where required. • Review PIRMP and update where required. 	7 December 2023
7 December 2023	Ben Simpson (Senior Environmental Specialist) Hayley Frazer (Environment and Approvals Superintendent) Pam Simpson (Senior Environmental Advisor) Scott Simpson (Technical Services Manager)	Train derailment within Bengalla Rail Loop resulting in coal and hydrocarbon spillage.	<ul style="list-style-type: none"> • Review PIRMP and update where required. • Review inventory of mobile emergency response equipment. 	7 December 2024



	Seydou Cisse (Senior Environmental Specialist)			
9 April 2024	Hayley Frazer (Environment and Approvals Superintendent) Kent Flaherty (Health, Safety, Engineering & Technology Manager) Beth Virtel (Health & Safety Superintendent) Jake Kell (Statutory & Projects Superintendent) Glenn Meyn (Mining Manager) Clinton Kent (Mining Superintendent) Marcelle Jones (Senior Health and Safety Adviser) Jamie Costello (Dragline Drill and Blast Superintendent) John Campbell (Maintenance Manager) Ben Edwards (Mobile Maintenance Superintendent) Mitchell Pearce (Statutory Surveyor) Scott Simpson (Technical Services Manager)	Fume from fire/explosion of explosive storage facility	<ul style="list-style-type: none"> • Review PIRMP and update where required. • Review inventory of mobile emergency response equipment. • Update Mount Pleasant Operations Contact Details • Update Near Neighbour contact details/register 	December 2025

Table 8: PIRMP Update Details

Date PIRMP Reviewed	Reason for Update	Action	Date Completed and Uploaded to Website
27 March 2017	PIRMP Exercise 16 December 2016	Review PIRMP and amend PIRMP where required and upload to BMC website	July 2017
31 August 2018	PIRMP Exercise 15 December 2017	Review PIRMP and amend PIRMP where required and upload to BMC website	October 2018
2 April 2019	PIRMP Exercise 19 December 2018	Review PIRMP and amend PIRMP where required and upload to BMC website	April 2019
16 March 2020	PIRMP Exercise 16 December 2019	Review PIRMP and amend PIRMP where required and upload to BMC website	March 2020
5 February 2021	PIRMP Exercise 17 December 2020 and PIRMP Guideline (Revision March 2020)	Review PIRMP and amend PIRMP where required and upload to BMC website	8 March 2021
20 January 2022	PIRMP Exercise 23 December 2021	Review PIRMP and amend PIRMP where required and upload to BMC website	8 February 2022
30 December 2022	PIRMP Exercise 7 December 2022	Review PIRMP and amend PIRMP where required and upload to BMC website	30 December 2022
23 December 2023	PIRMP Exercise 7 December 2023	Review PIRMP and amend PIRMP where required and upload to BMC website	5 February 2024
17 April 2024	Mock site emergency exercise 9 April 2024.	Review of legislative requirements under the POEO Act and POEO General Regulations and amend PIRMP where required and update to BMC website. Inclusion Table 8-10 to document incident details and regulatory and landholder notifications record for PIRMP enactments. Review and update to figures as required.	11 March 2025

Table 9: PIRMP Incident Enactment Details

Incident Detail Required	Incident Details Provided
A. The time, date, nature, duration and location of the incident;	
B. The location of the place where pollution is occurring or is likely to occur (eg. Is the incident static or is the pollution likely to move?);	
C. The nature, the estimated quantity or volume and the concentration of any pollutants, if known;	
D. The circumstances in which the incident occurred (including the cause of the incident, if known);	
E. The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known;	
F. Other information prescribed by the regulators.	

Table 10: PIRMP Incident Enactment - Relevant Authority Notifications (see Section 4.1)

Authority	Contact Number	Date	Time	Contact Person	Reference Number	Comments or Further Action
NSW EPA Environmental Line	131 555					
Fire & Rescue NSW / Rural Fire Service <i>(Nb. If the situation warranted calling 000 as a first point of notification, you do not need to ring Fire and Rescue again)</i>	1300 729 579 or 000					
NSW Health Hunter New England Local Health District	(02) 4924 6477					
SafeWork NSW	131 050					
Muswellbrook Shire Council	(02) 6549 3700 (24hrs)					
Department of Planning, Housing and Infrastructure	(02) 6575 3400					



Resources Regulator	1300 814 609 (option 2, then option 5)					
NSW Office of Transport Safety Investigations (Rail)	1800 677 766					
NSW Dam Safety <i>(Nb. Only if incident involved prescribed dam on premises)</i>	0403 681 645 (24hrs)					

Table 11: PIRMP Enactment Landholder Notifications (see Section 4.2)

Landholder/Local Community	Date	Time	Contact Person (if other than Landholder)	Detail Provided	Comments or Further Action

*Nb. This table should consider neighbouring landholders identified in **Figure 1**, as well as neighbouring mine contacts.*

8. FIGURES

- Figure 1: Location and Surrounding Land Ownership
- Figure 2: EPL 6538 Premise Boundary
- Figure 3: Pollutant Storage
- Figure 4: Infrastructure Areas Drainage and Storage
- Figure 5: Spill Kit Locations
- Figure 6: Fire Hydrant and Extinguisher Locations
- Figure 7: Site First Aid Room and Site Emergency Vehicle Locations
- Figure 8: Site Clean Water Diversion Dam and Levee and Hunter River
- Figure 9: Bioremediation Area
- Figure 10: ORICA Reload Facility – Fire Fighting Red Zones
- Figure 11: ORICA Reload Facility and BMC Explosive Magazine Locations

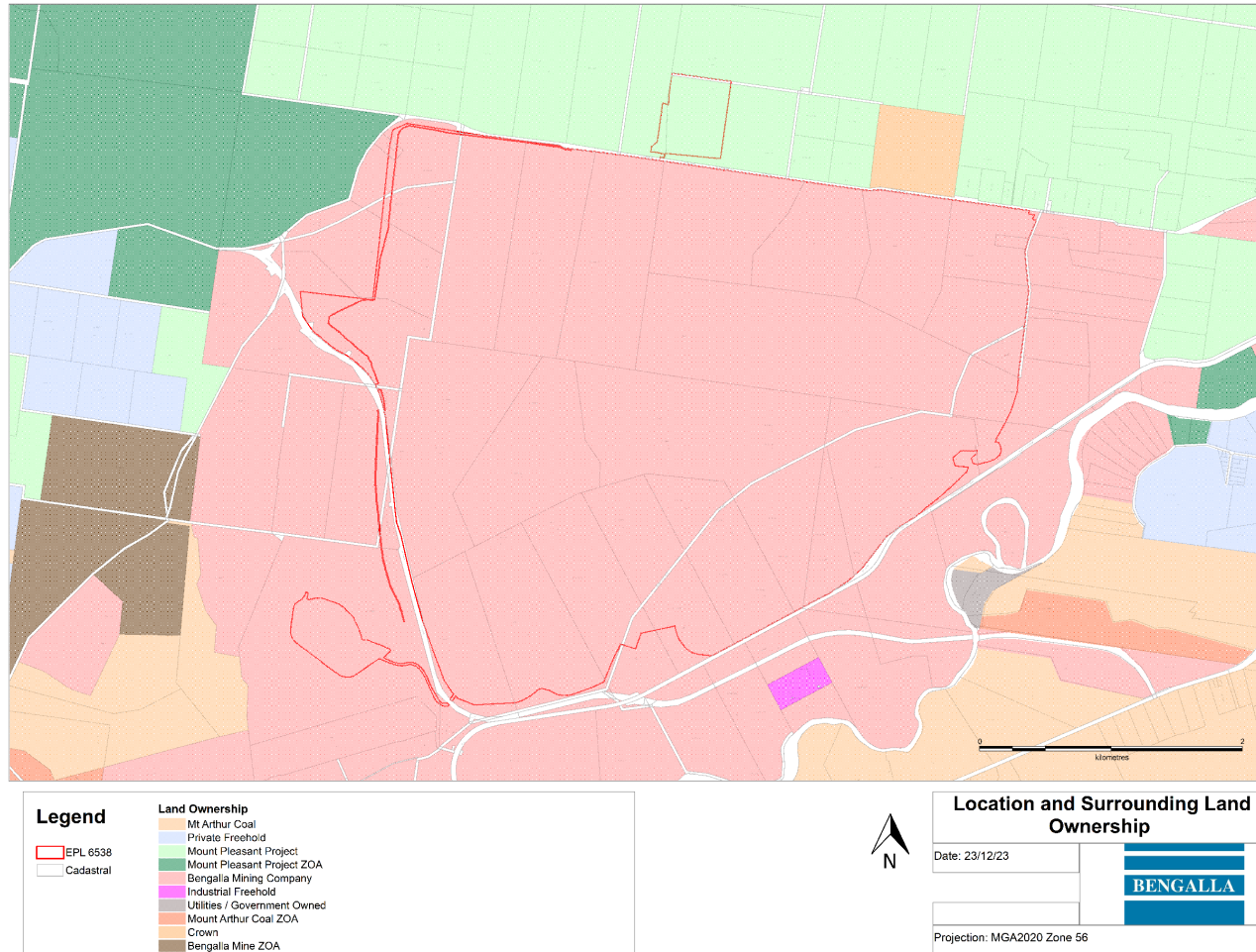


FIGURE 1: Location and Surrounding Land Ownership

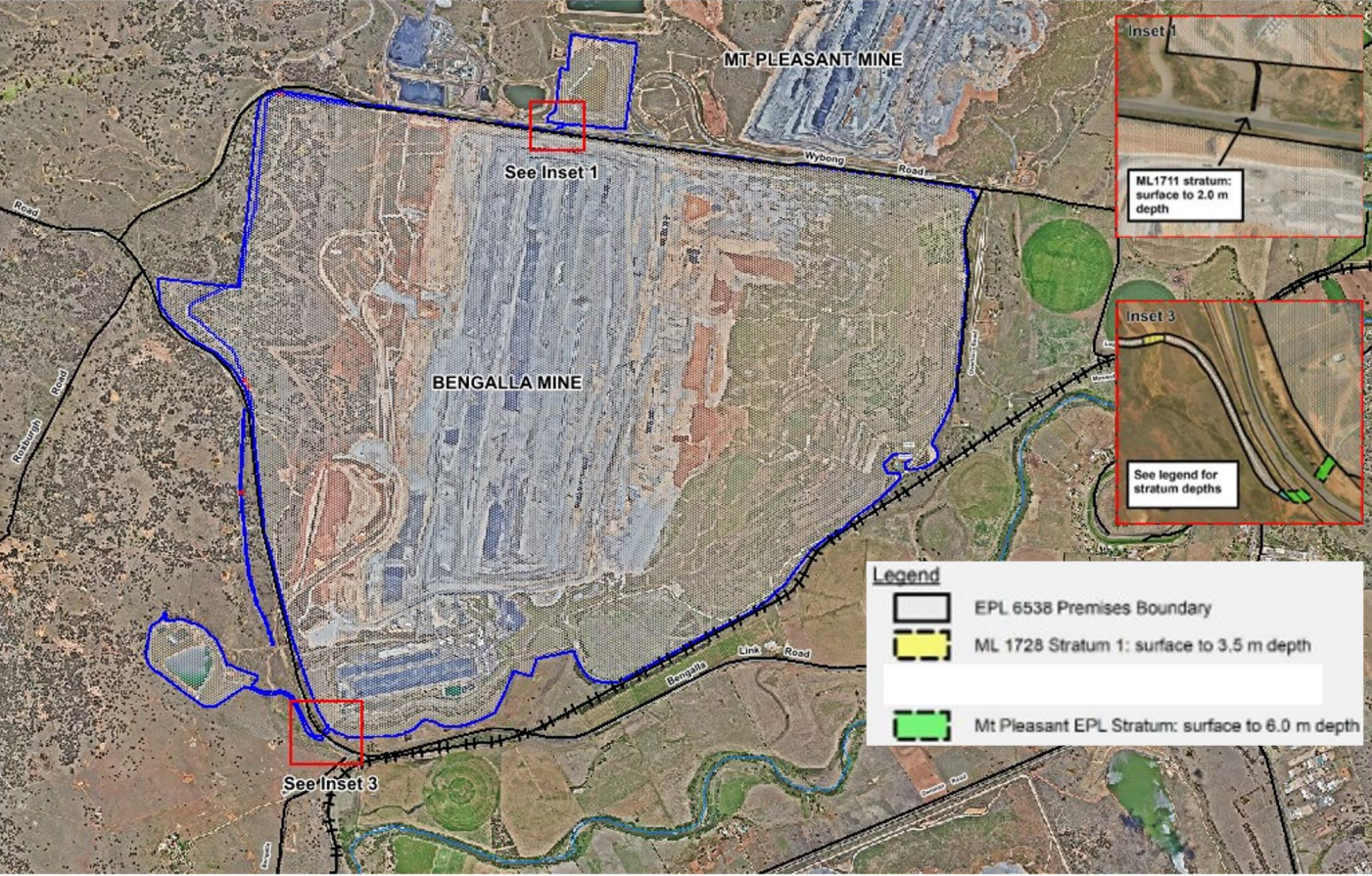


FIGURE 2: EPL 6538 Premise Boundary



(Note reference points on plan relate to Table 7 Inventory of Pollutants)

FIGURE 3: Pollutant Storage



FIGURE 4: Infrastructure Areas Drainage and Storage

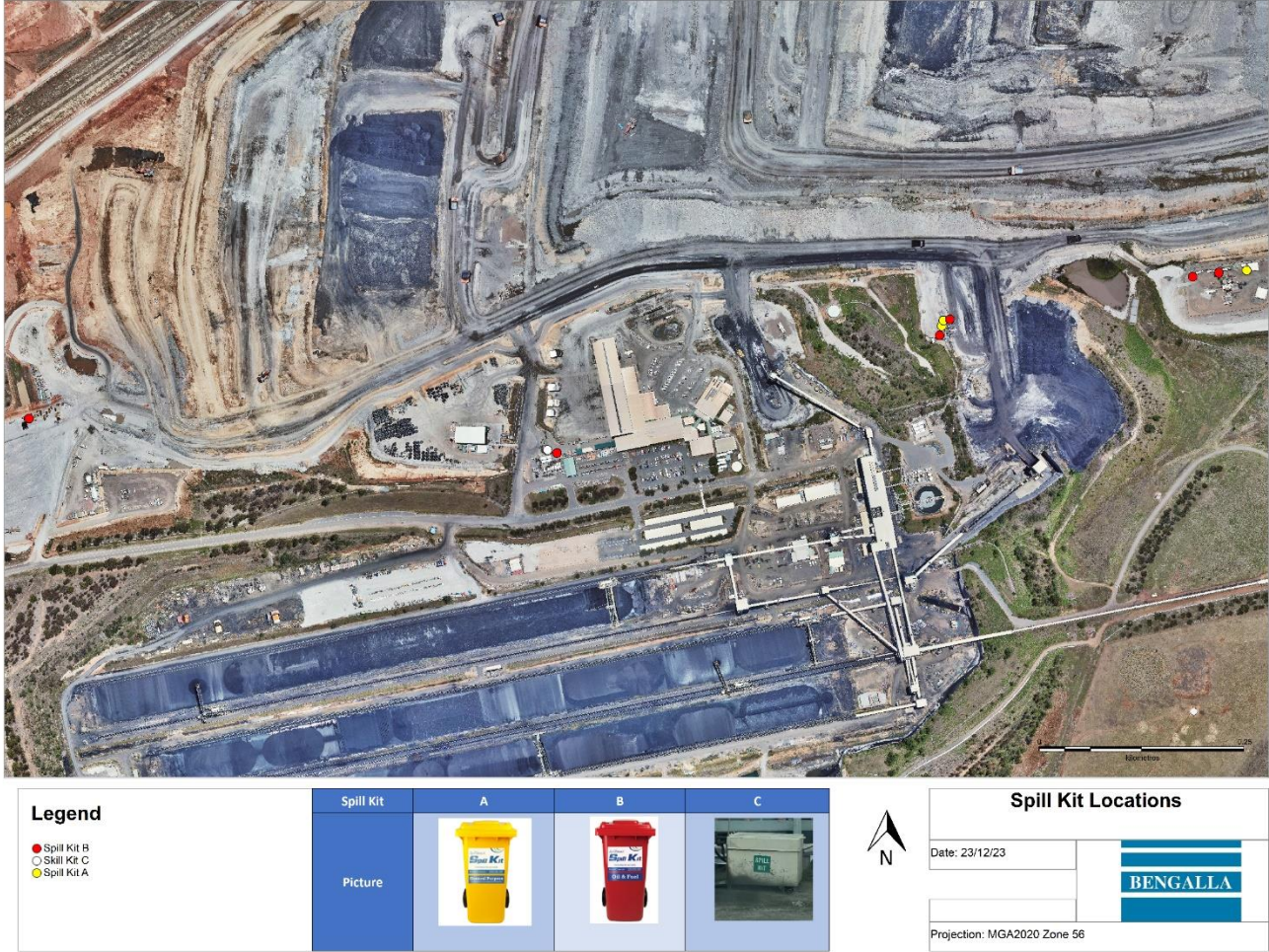


FIGURE 5: Spill Kit Locations



FIGURE 6: Fire Hydrant and Extinguisher Locations



FIGURE 7: Site First Aid Room and Site Emergency Vehicle Locations



FIGURE 8: Site Clean Water Diversion Dam and Levee and Hunter River

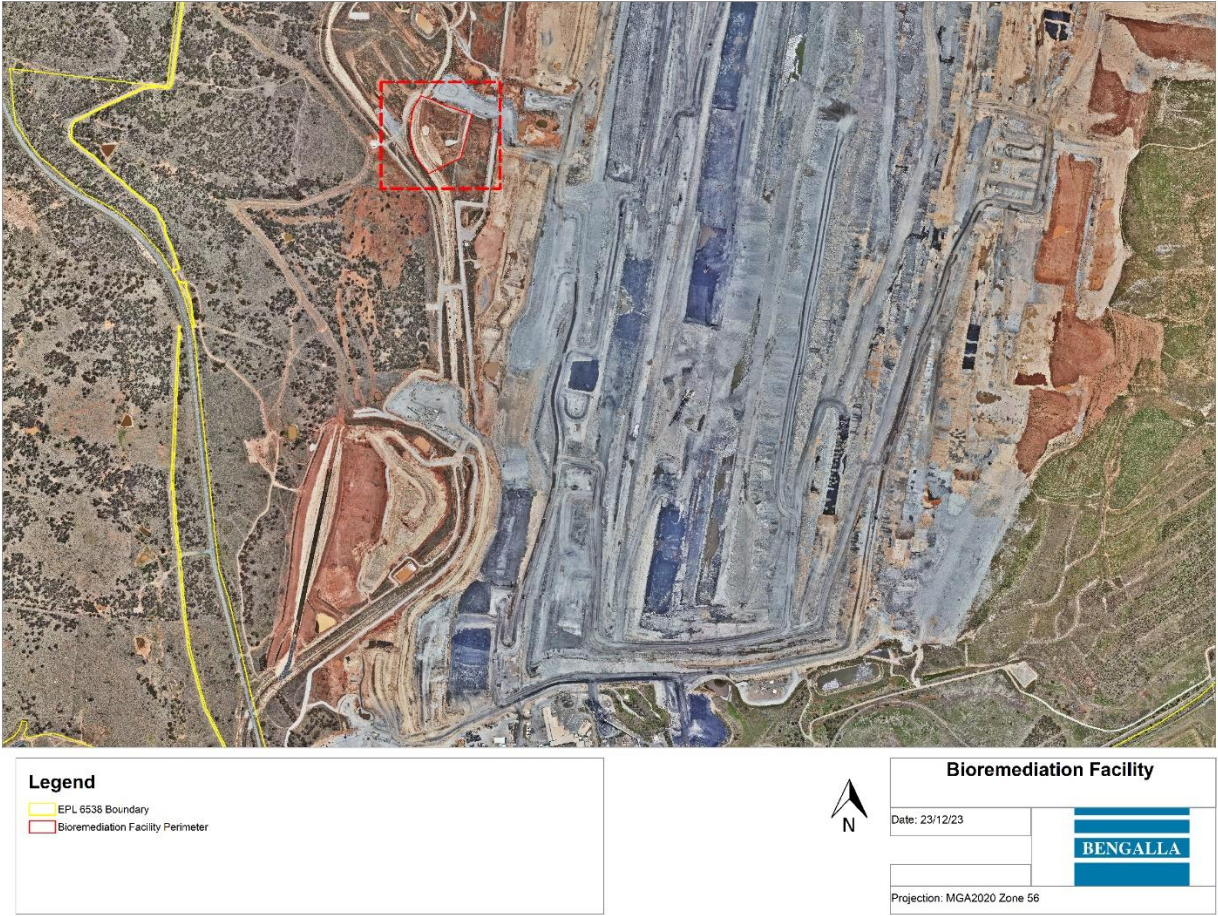


FIGURE 9: Bioremediation Area

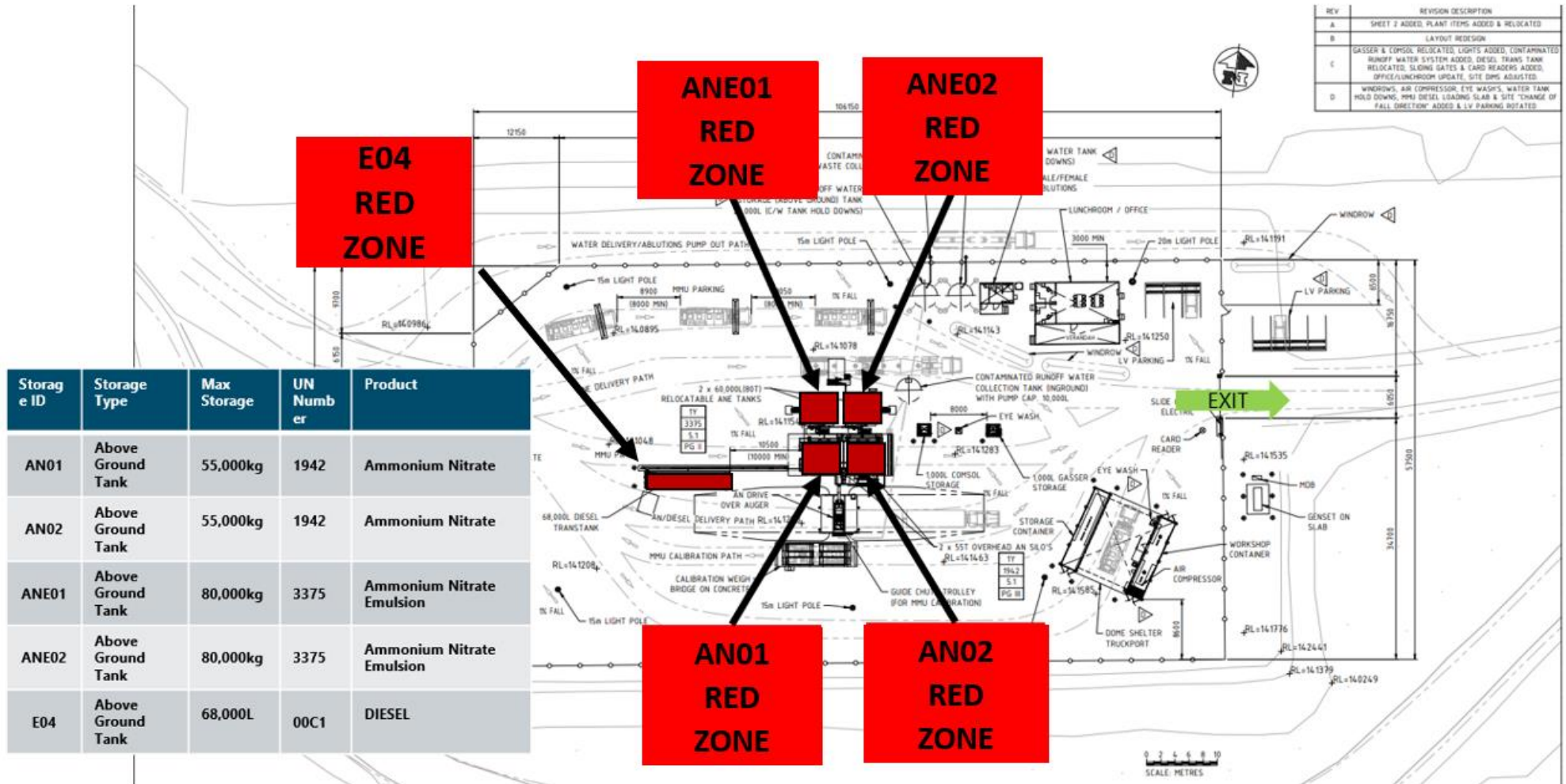


FIGURE 10: ORICA Reload Facility – Fire Fighting Red Zones



FIGURE 11: ORICA Reload Facility and Explosive Magazine Locations