## Permit<sup>1</sup>

**Environmental Protection Act 1994** 

Environmental Authority (MIN101017310) Non Code Compliant Level 1 Mining Project

Environmental Authority (Mining Lease) Non Code Compliant Level 1
Mining Project

Permit<sup>1</sup> Number: MIN101017310 - Alpha Coal Mine

Section 212 Environmental Protection Act 1994

Takes effect:

Permit Holder(s)

**Date of Grant of Tenure** 

Name

#### **Details**

Location(s)
Mining Lease (application) 70426
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Ordeliosser Lawaday Delegate Environmental Politection Act 1904
TA December 2012

<sup>&</sup>lt;sup>1</sup> Permit Includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

in a year.

38(1)(d) Surface Coating

Anodising, electroplating, enamelling or galvanising, using, in a year, the following quantity of surface coating materials:

more than 10000t

Schedule 2, Environmental Protection Regulation 2008 38(2)(b) Surfacing Coating

Coating, painting or powder coating, using, in a year, the following quantity of surface coating materials:

more than 100t

Schedule 2, Environmental Protection Regulation 2008
43 Concrete batching

Consisting of producing 200t or more of concrete or concrete products in a year, by mixing cement with sand, rock, aggregate or other similar materials.
Schedule 2, Environmental Protection Regulation 2008

56(1) Regulated waste storage

Receiving and storing 5t or more or 500 or more equivalent passenger units, of tyres or parts of tyres.

Schedule 2, Environmental Protection Regulation 2008 50(1)(d) Weste Disposal

Operating a facility for disposing of, in a year the following quantity of waste under subsection (1)(a):

more than 200000t

Schedule 2, Environmental Protection Regulation 2008 53(2)(c) Sewage Treatment

Operating sewage treatment works, other than no-release works, with

a total daily peak design capacity of: more than 1500 to 4000 Equivalent Persons

Schedule 2, Environmental Protection Regulation 2008 54(3) Water Treatment

Treating 10ML or more raw water in a day

Schedule 2, Environmental Protection Regulation 2008

The anniversary date of the environmental authority is 17 December 2012

The environmental authority is subject to the attached conditions of approval.

Christopher Loveday

Delegate

Environmental Protection Act 1994

17 December 2012

### Additional advice about the approval

- 1. This approval pursuant to the Environmental Protection Act 1994 does not remove the need to obtain any additional approval for this activity or comply with any relevant legislative requirements under other state and/or Commonwealth legislation. Other legislation for which a permit may be required for the mining activities includes but is not limited to the:
  - · Strategic Cropping Land Act 2011;
  - Wild Rivers Act 2005;
  - Aboriginal Cultural Heritage Act 2003;
  - Land Protection (Pest and Stock Route Management) Act 2002;
  - Nature Conservation Act 1992:
  - Vegetation Management Act 1999;
  - Mineral Resources Act 1989:
  - Water Act 2000:
  - · Forestry Act 1959; and
  - Environmental Protection and Biodiversity Conservation Act 1999.
- 2. This approval pursuant to the Environmental Protection Act 1994 does not absolve the need for the environmental authority holder to adhere to any provision of the Environmental Protection Act 1994 or of any relevant State and/or Commonwealth legislation. Such provisions include but are not limited to are:
  - Financial assurance Part 6 and section 367 Environmental Protection Act 1994;
  - General environmental duty section 319 Environmental Protection Act 1994; and
  - Duty to notify of environmental harm section 320 Environmental Protection Act 1994.
- 3. This environmental authority authorises the mining activities specified within the Alpha Coal Mine Environmental Management Plan. Where discrepancies between the Environmental Management Plan and the environmental authority occur, the environmental authority takes precedence.
- 4. This environmental authority consists of the following Schedules and Appendices:

Schedule A	General Conditions	
Schedule B	Air	
Schedule C	Water	
Schedule D	Noise & Vibration	
Schedule E	Waste	
Schedule F	Land	
Schedule G	Dams	
Schedule H	Sewage Treatment	
Schedule I	Water Treatment	
Schedule J	Community	
Schedule K	Figures	
Schedule L	Definitions	
Appendix 1	Rehabilitation Requirements	



#### Schedule A: General

#### Financial assurance

- A1 Provide to the administering authority financial assurance for the amount and in the form acceptable to the administering authority in accordance with the most recent edition of the administering authority's Guideline Calculating financial assurance for mining projects, before the proposed mining activities can commence or be varied.
- A2 The amount of financial assurance must be reviewed by the holder of this environmental authority when a plan of operations is amended or replaced or the environmental authority is amended.

#### Coal Extraction

A3 The environmental authority holder is approved for a coal extraction rate of up to 45 million tonnes per annum (Mtpa) of run-of-mine (ROM) ore in accordance with this environmental authority.

#### Maintenance of measures, plant and equipment

- A4 The environmental authority holder must:
  - a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this
    environmental authority;
  - maintain such measures, plant and equipment in a proper and efficient condition; and operate such measures, plant and equipment in a proper and efficient manner.
- A5 No change, replacement or alteration of any plant or equipment is permitted if the change, replacement or alteration increases, or is likely to substantially increase, the risk of unlawful environmental harm caused by the mining activities.

NOTE: Change in this case does not refer to trivial changes e.g. a larger and stronger item of equipment replaces a small and outdated item of equipment, it takes up a slightly larger area (ie. Creating a larger area of disturbance, covered by the plan of operations).

#### Monitoring and records

- A6 Except where specified otherwise in another condition of this authority, all monitoring records or reports required by this environmental authority must be kept for a period of not less than 5 years.
- A7 Upon request from the administering authority, copies of monitoring records and reports must be made available and/or provided to the administering authority's nominated office within 10 business days or by an alternative timeframe agreed between the administering authority and the holder.
- As Any management or monitoring plans, systems or programs required to be developed and implemented by a condition of this environmental authority must be reviewed for effectiveness in minimising the likelihood of environmental harm on an annual basis, and amended promptly if required, unless a particular review date and amendment program is specified in the plan, system or program.

  NOTE: Change in this case does not refer to trivial changes e.g. a larger and stronger item of equipment replaces a small and outdated item of equipment, it takes up a slightly larger area (ie. Creating a larger area of disturbance, covered by the plan of operations).

#### Notification of emergencies, incidents and exceptions

A9 The holder of this environmental authority must notify the administering authority by written notification within 24 hours, after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority.

- A10 The holder of this environmental authority must notify the administering authority by written notification within 24 hours, after becoming aware of any emergency, incident or information about circumstances which results or may result in environmental harm not in accordance with the conditions of this environmental authority or a contravention of the conditions of this environmental authority.
- A11 Not more than 10 business days following the initial notification of an emergency, incident or information about circumstances which result or may result in environmental harm or the release of contaminants, written advice must be provided to the administering authority in relation to:
  - a) available results and interpretation of any samples taken and analysed; and
  - b) proposed actions to prevent a recurrence of the emergency or incident;
- A12 The notification in conditions A9 and A10 must include, but not be limited to, the following:
  - a) The environmental authority number and name of the holder;
  - b) The name and telephone number of the designated contact person;
  - c) The location of the emergency or incident;
  - d) The date and time of the emergency or incident;
  - e) The time the holder of the environmental authority became aware of the emergency or incident;
  - f) Where known:
    - i. the estimated quantity and type of substances involved in the emergency or incident:
    - ii. the actual or potential cause of the emergency or incident;
    - iii. a description of the nature and effects of the emergency or incident including environmental risks, and any risks to public health or livestock;
  - g) Any sampling conducted or proposed, relevant to the emergency or incident;
  - Immediate actions taken to prevent or mitigate any further environmental harm caused by the emergency or incident; and
  - What notification of stakeholders who may be affected by the emergency or incident has occurred or is being undertaken.

#### Risk Management

A13 The holder of this environmental authority must develop and implement a risk management system for mining activities which conforms to the Standard for Risk Management (ISO31000:2009) within 3 month of issue of Environmental Authority.

NOTE: Implementation of a risk management system is not a defence against a breach of any other condition of this environmental authority.

#### **Emergency Response and Contingency Planning**

A14 An emergency response/contingency plan must be developed and implemented within the current plan of operations to manage unacceptable risks identified in the risk management system or the associated monitoring.



- A15 The emergency response/contingency plan must address the following matters:
  - response procedures to be implemented to reduce the likelihood of environmental harm from arising from incidents of unacceptable risk;
  - b) response procedures to minimise the extent and duration of environmental harm by an incident;
  - the practices and procedures to be employed to restore the environment or mitigate any environmental impact caused;
  - d) a description of the resources to be used in response to an incident;
  - e) the training of staff that will be called upon to respond to incidents;
  - f) procedures to investigate the cause of any incidents, including releases, and where necessary, implement remedial actions to reduce the likelihood of recurrence of similar events;
  - g) the provision and availability of documented procedures to staff attending any incident to enable them to effectively respond; and
  - timely and accurate reporting of the circumstance and nature of incidents to the administering authority.

#### Third Party Audit

- A16 The holder of the environmental authority must nominate an appropriate third party auditor to audit compliance with the conditions of this environmental authority within 1 year of the commencement of this environmental authority, and then at regular intervals not exceeding 3 years.
- A17 The holder must, at its cost, arrange for independent certification by a third part auditor of findings of the audit report required under condition A16.
- A18 Within ninety days of completing the audit, provide a written report to the administering authority detailing any non-compliance issues that were found (if no non-compliance issues were found this should be stated in the report). If non-compliance issues were found the report must also address:
  - a) actions taken by the holder of this environmental authority to ensure compliance with this
    environmental authority; and
  - b) actions taken to prevent a recurrence of non-compliance.
- A19 Where a condition of this environmental authority requires compliance with a standard published externally to this environmental authority and the standard is amended or changed subsequent to the issues of this environmental authority the holder of this environmental authority must:
  - comply with the amended or changed standard within 2 years of the amendment or change being made, unless a different period is specified in the amended standard or relevant legislation; and
  - until compliance with the amended or changed standard is achieved, continue to remain in compliance with the standard that was current immediately prior to the relevant amendment or change.

#### Activity

- A20 Land subject to mining activities, works previously approved under MDL 285, irrespective of its termination; and early works must be rehabilitated to a non polluting, safe, stable and self sustaining landform.
- A21 Contaminants must not be released to the receiving environment unless they are in accordance with the contaminant limits authorised by this environmental authority.
- A22 This environmental authority authorised environmental harm referred to in the conditions. Where no condition or this environmental authority is silent on matter, the lack of a condition or silence does not authorise environmental harm.

A23 The authorised mine domains and identified areas associated with each domain are listed in *Table 1: Mining Domains* and *Figure 1: Mining Domains*. The domains must not exceed the maximum disturbance areas listed in *Table 1: Mining Domains* and *Figure 1: Mining Domains*.

NOTE: Variation of mining activities to those identified in Table 1: Mining Domains is considered to be in accordance with these conditions as long as the variation does not cause a significant increase in environmental harm.

NOTE: The extent of a domain relates to the domain as a whole, including major features, rather than each use that forms the domain. The major features are listed in the Sub Domain column of Table 1: Mining Domains.



Table 1: Mining Domains

Mine Domain	Sub Domain	Tenure Type and Number	Location (central coordinates)		Maximum disturbance area (ha)
latins.	nd Figure 1, Alfaby Des	e managridan	Easting	Northing	
Pits and Mine Waste	ia a value toh sada na	ML70426	Central portion of the mining lease: running north to south Refer to Figure 1		16,447
or factions, refree their cain culums of Table 1:	Pits/Voids/ Overburden and Rejects Emplacement	ML70426	445,644.9	7,431,237.6	
	Run of Mine (ROM) stockpile (north)	ML70426	448,265.5	7,433,436.0	
	Run of Mine (ROM) stockpile (south)	ML70426	447,734.3	7,427,288.9	
Tailings Storage     Facility		ML70426	East of Domain 1  Located in the south-east of the lease		2,237
	Tailings Dams	ML70426	452,022.1	7,425,922.9	
	Tailings Decant Dam	ML70426	450,921.7	7,427,971.9	
3. Infrastructure	7	ML70426	Eastern portion of the mining lease: running north to south Refer to Figure 1		2,016
	Product stockpile	ML70426	449,646.8	7,431,670.9	
	Landfill	ML70426	451,794.4	7,431,235.2	
	СНРР	ML70426	449,707.4	7,430,741.9	
	Accommodation Village and Raw Water Dam	ML70426	455,968.4	7,435,712.7	
	LIA	ML70426	451,490.9	7,436,965.0	
	MIA	ML70426	450,314.6	7,429,793.3	
	Water Treatment	ML70426	454,336.8	7,433,246.3	
	Sewage Treatment	ML70426	451,754.1	7,437,629.6	
	Train Load Out facility	ML70426	449,65.8	7,432,627.6	
Remainder of     Mining Lease     Area	Exploration, Utilities and Land Management	ML70426	Areas within the mining lease that are not included in the above three domains. Refer to Figure 1		32,840

A24 Mining activities which will result in land becoming significantly disturbed must only occur within the mine domains identified within *Table 1: Mining Activities*.

#### **Definitions**

Words and phrases used throughout this environmental authority are defined in the Definitions section of this authority. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the *Environmental Protection Act 1994*, its regulations and policies must be used.

#### Schedule B: Air

#### **Dust Nuisance**

- B1 The release of dust and/or particulate matter resulting from the mining activity must not cause an environmental nuisance at any nuisance-sensitive place
- B2 Exceedence of any of the following levels when measured at any nuisance sensitive place is an environmental nuisance for the purposes of B1:
  - a) a level of deposited dust of 120 milligrams per square metre per day based on a monthly average;
  - b) a concentration of total particulate matter suspended in the atmosphere of 90 micrograms per cubic metre over a 1 year averaging time.

#### **Dust Compliance**

- The Environmental Authority holder must take all reasonable and practical measures to limit the concentration of particulate matter generated by the mining activities to an aerodynamic diameter of less than 10 micrometres (PM10) of 50 micrograms per cubic metre over a 24-hour averaging time at any nuisance sensitive place with no more than five exceedences recorded over twelve months.
- Where monitoring at location identified in *Table 2: Air Quality Monitoring Details* indicates that the air quality levels detailed in conditions B2 and B3 have been exceeded the holder must investigate the matter and report to the administering authority within 14 days of receipt of monitoring results:
  - a) The concentration of PM10 particles or dust deposition rate recorded:
  - b) A description of meteorological conditions occurring at the time; and
  - c) The measures taken to reduce dust generated by the mining activities.

### **Ambient Dust Monitoring Program**

- Prior to the commencement of mining activities other than mineral development maintenance activities for the project, the holder must develop and submit for approval to the administering authority, an Ambient Dust Monitoring Program (as outlined in *Table 2: Air Quality Monitoring Details*), to specify how the ambient dust impacts of the project will be monitored. The program shall include, but not necessarily be limited to:
  - a) procedures for monitoring dust emissions from the project, in accordance with the requirements of this approval;
  - b) locations, frequencies and methods for monitoring PM10 and deposited particulate matter;
  - c) provision for the use of at least three Tapered Element Oscillating Microbalance Samplers
    (TEOMS), five dust depositional gauges and one meteorological station capable of monitoring wind
    direction and speed;
  - d) investigation of the use of TEOMS as part of the integrated air quality monitoring network. Should
    an alternative sampling method be proposed; the holder may seek approval from the administering
    authority to exclude this requirement. In seeking such exclusion, the reasons for the exclusion shall
    be provided and be fully justified;
  - the holder shall utilise real time monitoring data to inform environmental management decisions associated with the project;
  - f) a framework for identifying actual and potential dust impacts, and for applying proactive and reactive mitigation and management measures to address those impacts;
  - g) provision for independent review and auditing of the Program; and



- h) mechanisms for updating the Program.
- B6 Ongoing monitoring must be conducted in accordance with the standards, and at the locations specified in Table 2: Air Quality Monitoring Details.

Table 2: Air Quality Monitoring Details

Air Quality Determination	Sampling Frequency	Monitoring Standard	Monitoring Point	Approximate Monitoring Point Location	
			Description	Easting (m)	Northing (m)
PM <sub>10</sub> Hourly	sampling and analysis of ambient air - Determination of suspended particulate matter - PM <sub>10</sub>	AQMS(1): Forrester Homestead	446,462	7460,888	
			AQMS(9): Monklands Homestead	445,097	7411,185
	so beaud yate 100 ka merloan		AQMS(12): Alpha Coal Project Accommodation Village	455,734	7435,283
Dust deposition	Monthly  AS 3580.10.1:2003: Methods for sampling and analysis of amblent air - Determination of particulate matter - Deposited matter -	DG(1): Forrestor Homestead	446,462	7460,888	
			DG(2): Monklands Homestead	445,097	7411,185
	e over na ol es ci 48 a revo e coo out over		DG(3): Alpha Coal Project Accommodation Village	455,734	7435,283
			DG(4): Kia-Ora Homestead	437,918	7414,891
	n sekind er# l		DG(5): Surbiton Homestead	461,950	7440,055
Meteorological data <sup>1</sup>	Hourly	AS 2923:1987: Ambient air - Guide for measurement of horizontal wind for air quality applications	MS1: Alpha Coal Project Accommodation Village	455,734	7435,283

Wind speed and direction, humidity, temperature and precipitation.

- B7 Where monitoring at locations identified in condition B6 indicates that the air quality levels detailed in conditions B2 and B3 have been exceeded, the holder of this environmental authority must investigate the matter and report to the administering authority within 14 days of receipt of monitoring results:
  - a) the concentration of PM10 particulates or dust deposition rate recorded;
  - b) a description of meteorological conditions occurring at the time; and
  - c) the measures taken to reduce dust generated by the mining activities.
- When requested by the administering authority or as a result of a complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer):
  - a) additional dust and particulate monitoring (including dust deposition, total suspended particles (TSP), PM10 and PM2.5) must be undertaken at a place(s) relevant to the potentially affected nuisance sensitive place in accordance with the standards specified in *Table 2: Air Quality Monitoring Details*; and
  - b) the results of the additional monitoring must be notified to the administering authority within 14 days following the receipt of the results by the holder. This includes providing interim reports if the monitoring lasts for more than one month.

NOTE: This monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place. Monitoring must be conducted in accordance with the appropriate standards.

- B9 If monitoring conducted as a result of a complaint indicates an exceedance of the air quality levels detailed in conditions B2 and B3, the holder must:
  - a) address the complaint through the use of appropriate dispute resolution if required; and
  - b) implement appropriate dust abatement measures.
- B10 The results of PM10, dust deposition and meteorological monitoring must be reported to the administering authority on request.
- B11 If requested, the results of PM10, dust deposition and meteorological monitoring must be made available for use in any air quality monitoring network in the region operated independently of mining activities.

#### Model Evaluation

- Following one full year of data collection (after the commencement of mining activities) in accordance with an approved Ambient Dust Monitoring Program the holder shall undertake a model validation study to review PM10 and dust deposition levels to assess compliance with the dust impact predictions made in the document entitled "Alpha Coal Mine Project Air Quality Assessment Report Model Refinements (post consultation update) (URS, May 2012)" and with the ambient air quality levels specified in Conditions B2 and B3. The model validation study shall be undertaken in accordance with NSW DECC Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DECC, 2005), or other relevant guideline specified by the administering authority.
- Within 28 days of conducting the dust validation study referred to under condition B12 of this approval, the holder shall provide a copy of the report to the administering authority. If the dust validation study identifies additional exceedances at any nuisance sensitive place to those stated in the ambient air quality levels stated in this environmental authority, the holder shall detail what additional measures would be implemented to further mitigate dust impacts. The holder shall clearly indicate who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be assessed and reported to the administering authority.

#### **Dust Management Plan**

- B14 The holder must develop and implement a Dust Management Plan to outline measures to minimise and manage any impacts from the operation of the project on local air quality. The Dust Management Plan shall include, but not necessarily be limited to:
  - a) identification of all major sources of dust emissions that may occur as result of the operation of the project;
  - description of the procedures to manage the dust emissions from the sources identified;
  - c) collection of air quality and meteorological data at location and using the methods described in condition B5;
  - d) identification of adverse meteorological conditions likely to produce elevated levels of PM10 at a nuisance sensitive place due to the mining activities;
  - e) development of a method for using weather forecasting data for on-site dust management;
  - integration of the dust control strategy with the weather forecast data feed that would activate the timely management of dust control in addition to the best practice dust control measures during the adverse meteorological conditions;
  - g) protocols for regular maintenance of plant and equipment, to minimise the potential for fugitive dust emissions; and
  - h) description of procedures to be undertaken if any non-compliance is detected.



#### **Dust Control**

- B15 The holder must design, construct, commission, operate and maintain the project in a manner that minimises the emission of dust from the site including wind blown and traffic generated dust.
- B16 The holder must design, construct, operate and maintain the project in a manner that minimises the potential generation of fugitive dust emission from plant and equipment.
- For the purpose of avoiding any release of dust or particulate matter from the approved place which could cause an environmental nuisance, the following measures must be taken:
  - a) stockpiles must be maintained using all reasonable and practicable measures to minimise the
    release of wind blown dust or particulate matter to the atmosphere to ensure compliance with air
    quality levels detailed in condition B2 and B3;
  - trafficable areas must be maintained using all reasonable and practicable measures to minimise the release of windblown dust or traffic generated dust to the atmosphere to ensure compliance with air quality levels detailed in condition B2 and B3;
  - raw material preparation plants and external transfer conveyors must be operated and maintained using all reasonable and practicable measures to minimise the release of wind blown dust or particulate matter to the atmosphere to ensure compliance with air quality levels detailed in condition B2 and B3; and
  - d) dust mitigation measures must be implemented at all other dust emission sources.

#### **Odour Nuisance**

- B18 The release of noxicus or offensive odour(s) or any other noxicus or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any nuisance-sensitive place.
- When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any nuisance sensitive place, and the results must be notified to the administering authority within 14 days of their receipt by the holder.
- B20 If the administering authority determines that the odour released constitutes an environmental nuisance, then the environmental authority holder must:
  - a) address the complaint including the use of appropriate dispute resolution if required; and
  - immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

#### Meteorological Monitoring

- B21 The environmental authority holder must establish and maintain a permanent automatic meteorological station to continuously measure and record wind speed, wind direction, temperature, relative humidity and rainfall intensity.
  - NOTE: it is possible for environmental authority holders to utilise relevant and available weather monitoring information collected by other parties as reference data for the purpose of this condition.
- B22 The holder must record, compile and keep all monitoring records obtained from the automatic meteorological station.



#### Schedule C: Water

#### Release of Contaminants

C1 Contaminants that will or have the potential to cause serious or material environmental harm must not be released directly or indirectly to any waters except as permitted under the conditions of this environmental authority.

#### Discharge of Mine Affected Water

Unless otherwise permitted under the conditions of this environmental authority, the release of mine affected water to waters must only occur from the release points specified in *Table 3: Mine Affected Water Release Points*, *Sources and Receiving Waters* and depicted in *Figure 2: Mine Affected Water Release Points* attached to this environmental authority.

Table 3: Mine Affected Water Release Points, Sources and Receiving Waters

Release Point (RP)	Northing (GDA94)	Easting (GDA94)	Contaminant Source and Location	Monitoring Point	Receiving waters description
RP1	7421246N	447833E	Sediment Dam SD1a	Outlet works direct into Lagoon Creek – from release point.	Lagoon Creek
RP2	7426055N	448273E	Sediment Dam SD2b	Outlet works direct into Lagoon Creek – from release point.	Lagoon Creek
RP3	7434017N	448698E	Sediment Dam SD4b	Outlet works direct into Lagoon Creek – from release point.	Lagoon Creek
RP4	7442446N	449801E	Sediment Dam SD6b	Outlet works direct into Lagoon Creek – from release point.	Lagoon Creek
RP5	7429529N	449501E	Environment Dam 1 (MIA Runoff Containment Dam)	Spillway	Lagoon Creek
RP6	7429529N	449501E	Environment Dam 1 (MIA Runoff Containment Dam)	Outlet works direct into Lagoon Creek – from release point.	Lagoon Creek
RP7	7431115N	449364E	Environment Dam 2 (CHPP Runoff containment dam)	Spillway	Lagoon Creek
RP8	7431115N	449364E	Environment Dam 2 (CHPP Runoff containment dam)	Outlet works direct into Lagoon Creek – from release point.	Lagoon Creek
RP9	7430295N	452551E	Tailings Storage Facility Decant Dam	Spillway	Lagoon Creek
RP10	7430295N	452551E	Tailings Storage Facility Decant Dam	Outlet works direct into Lagoon Creek – from release point	Lagoon Creek
RP11	7430295N	452551E	Brine Dam	Spillway	Lagoon Creek

C3 The release of mine affected water to internal water management infrastructure that is installed and operated in accordance with a water management plan that complies with conditions C33 to C38 inclusive is permitted.



C4 The release of mine affected water to waters in accordance with condition C2 must not exceed the release limits stated in *Table 4: Mine Affected Water Release Limits*, when measured at the monitoring points specified in *Table 3: Mine Affected Water Release Points*, *Sources and Receiving Waters*, for each quality characteristic.

Table 4: Mine Affected Water Release Limits

Quality Characteristic	Release Limit	Monitoring Frequency
Electrical conductivity (µS/cm)	Release limits specified in Table 6 for variable flow criteria.	Continuously
pH (pH Unit)	6.5 (minimum) 9.0 (maximum)	Continuously
Suspended Solids (mg/L)	387	Monitoring to be commenced within 2 hours of commencement of the release, and then at 24 hours thereafter.
Sulphate (SO <sub>4</sub> <sup>2-</sup> ) (mg/L)	Release limits specified in Table 6 for variable flow criteria.	Monitoring to be commenced within 2 hours of commencement of the release, and then at 24 hours thereafter.

- C5 The release of mine affected water to waters from the release points must be monitored at the locations specified in *Table 3: Mine Affected Water Release Points, Sources and Receiving Waters* for each quality characteristic and at the frequency specified in *Table 4: Mine Affected Water Release Limits* and *Table 5: Release Contaminant Trigger Investigation Levels*.
- C6 If quality characteristics of the release exceed any of the trigger levels specified in Table 5: Release Contaminant Trigger Investigation Levels during a release event, the environmental authority holder must compare the downstream results in the receiving waters to the trigger values specified in Table 5: Release Contaminant Trigger Investigation Levels and:
  - a) where the trigger values are not exceeded then no action is to be taken; or
  - b) where the down stream results exceed the trigger values specified in *Table 5: Release Contaminant Trigger Investigation Levels* for any quality characteristics, compare the results of the downstream site to the data from background monitoring sites and:
    - i. If the result is less than the background monitoring site data, then no action is to be taken; or
    - ii. If the result is greater than the background monitoring site data, complete an investigation into the potential for environmental harm and provide a written report to the administering authority in the next annual return, outlining:
      - details of the investigations carried out; and
      - actions taken to prevent environmental harm.

NOTE: Where an exceedance of a trigger level has occurred and is being investigated, in accordance with C6 b) ii. Of this condition, no further reporting is required for subsequent trigger events for that quality characteristic.

C7 If an exceedance in accordance with condition C6 b) ii. Is identified, the holder of the authority must notify the administering authority within 14 days of receiving the result.