

Environmental authority EPML00350213

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit¹ number: EPML00350213

Environmental authority takes effect on 23 January 2015

The anniversary date of the environmental authority is 1 September

Environmental authority holder

Name	Registered address
New Oakleigh Coal Pty Ltd	3/22 Magnolia Drive BROOKWATER QLD 4300

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
<i>Environmental Protection Regulation 2008, Schedule 2A:</i> ERA 13 Mining black coal	ML4568 ML4584 ML4675 ML4683 ML4698 ML4699 ML50175

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

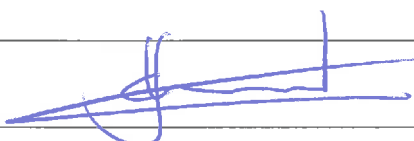
An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

23 January 2015

Date

Chris Loveday
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Schedule A: General	
Condition number	Condition
Final Assurance	
A1	Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority. <i>NOTE: The calculation of financial assurance for condition A1 must be in accordance with the administering authority's financial assurance guideline "Financial Assurance under the Environmental Protection Act 1994" (EM1010) and may include a performance discount. The amount is defined as the maximum cost of rehabilitation for each year as defined in the current Plan of Operations and calculated using the formula: (Financial Assurance = Maximum Annual Rehabilitation Cost X Percentage Required)</i>
A2	The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely. <i>NOTE: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined with this environmental authority.</i>



Maintenance of Measures, Plant and Equipment	
A3	The holder must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and b) maintain such measures, plant and equipment in a proper condition; and c) operate such measures , plant and equipment in a proper manner.
Monitoring	
A4	Record, compile and keep for a minimum of five years all monitoring results required by this environmental authority and make available for inspection all or any of these records upon request by the administering authority.
A5	Where monitoring is a requirement of this authority, ensure that a competent person(s) conducts all monitoring.
Storage and handling of Flammable and Combustible Liquids	
A6	Spillage of all chemicals and fuels must be contained within an on- site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.9 of AS 1940 – <i>Storage and handling of Flammable and Combustible Liquids</i> of 1993 (or more recent edition).
Definitions	
A7	Words and phrases used throughout this environmental authority are Schedule I – Definitions . Where a definition for term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the <i>Environmental Protection Act 1994</i> , its Regulations and Environmental Protection Policies must be used.
Schedule B: Air	
Condition number	Condition
Dust nuisance	
B1	Subject to conditions B2 and B3 , the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance, at any sensitive place.
B2	When requested by the administering authority, dust and particulate 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 sensitive place, and the results must be notified within 14 days to the administering authority following completion of monitoring.



B3	If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of B1: a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 <i>Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method of 1991</i>; and b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM₁₀) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a sensitive place downwind of the operational land, when monitored in accordance with: i) Particulate matter – Determination of suspended particulate PM10 high- volume sample with size – selective inlet – Gravimetric method, when monitored in accordance with AS 3580.9.6 <i>Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM (sub) 10 high volume sampler with size – selective inlet – Gravimetric method of 1990</i>; or ii) Any alternative method of sampling PM10, which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority. NOTE: You must propose which monitoring method is appropriate in accordance with condition B3 a) or B3 b), or both.
B4	If monitoring indicates exceedence of the relevant limits in condition B3, then the environmental authority holder must: a) Negotiate in good faith with the maker of the complaint in order to find a solution to the exceedence acceptable to all parties. Negotiations in good faith may include reference to appropriate dispute resolution by third parties provided the make of the complaint and the holder agree to such dispute resolution; and/or b) If good faith negotiations pursuant to "a" hereof are attempted but are not resolved to the satisfaction of both the holder and the maker of the complaint, or if no good faith negotiations are undertaken pursuant to "a" hereof, immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

Schedule C: Water				
Condition number	Condition			
Release to Waters				
C1	End of pipe release limits for storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C – Table 1 and Comply with the contaminant limits defined in Schedule C – Table 2 .			
	Schedule C – Table 1 (End of Pipe Monitoring Locations and Frequency)			
	Monitoring point	Easting (AMG)	Northing (AMG)	Monitoring frequency
	OW9	458172	6944377	“Discharge event”
	OW21	457421	6944058	“Discharge event”
	NOTE: This does not apply to tailings dams			
C2	Schedule C –Table 2 (End of Pipe Monitoring Contaminant Release Limits)			
	Parameter	Units	Minimum	Maximum
	pH	pH units	6.5	9.0
	Conductivity	µS/cm	-	1500
	Total Suspended Solids	mg/L	-	50
	All reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.			
Schedule D – Noise and Vibration				
Condition number	Condition			
Noise Nuisance				
D1	Subject to conditions D2 and D3 , noise from the mining activity must not cause an environmental nuisance, at any noise sensitive place.			
D2	When requested by the Administering Authority, noise 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 noise sensitive place, and the results must be notified within 14 days to the administering authority following completion of monitoring.			

D3	If the environmental authority holder can provide evidence through monitoring that the limits defined in Schedule D – Table 1 and Schedule D – Table 2 inclusive are not being exceeded then the holder is not in breach of condition D1. Monitoring must include a) L_A, max adj. T; b) L_A, max adj, T; c) dB (Lin) Peak; d) the level and frequency of occurrence of impulsive or tonal noise; e) atmospheric conditions including wind speed and direction; and f) location, date and time of recording
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Schedule D – Table 1 (Noise limits – ‘Noise sensitive place’)

Noise level dB(A) measured as	Noise measured at a ‘Noise sensitive place’					
	Average hourly A - weighted sound pressure levels, L_{Ar} , 1 hour					
	Monday to Saturday			Sundays and Public holidays		
	7am-6pm	6am-10pm	10pm-7am	9am-6pm	6pm-10pm	10pm-9am
L_{Ar} , 1 hour	50	45	40	50	45	40

Schedule D - Table 2 (Airblast Overpressure Level – ‘Noise sensitive place’)

Noise parameter	Monday to Friday 9am – 5pm
	Saturday 9am – 1pm
Air blast overpressure level (db[Lin] Peak)	115 dB (80 th percentile)
Air blast overpressure level (db[Lin] Peak)	120 dB (maximum)

*Blasting not permitted on public holidays

D4	If monitoring indicates exceedence of the limits in Schedule D – Table 1 and Schedule D – Table 2, then the environmental authority holder must: a) Negotiate in good faith with the maker of the complaint in order to find a solution to the exceedence acceptable to all parties. Negotiations in good faith may include reference to appropriate dispute resolution by third parties , provided the maker of the complaint and the holder agree to such dispute resolution; and/or b) If good faith negotiations pursuant to "a" hereof are attempted but are not resolved to the satisfaction of both the holder and the maker of the complaint or if no good faith negotiations are undertaken pursuant to "a" hereof immediately implement noise abatement measures so that emissions of noise from the activity do not result in further environmental nuisance.
D5	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's <i>Noise Measurement Manual</i> .
Vibration Nuisance	
D6	Subject to conditions D7 and D8 vibration from the mining activity must not cause an environmental nuisance, at any sensitive place.
D7	For each blast event, vibration monitoring must be conducted at a point adjacent to the closest noise sensitive place(s) or another place as requested by the administering authority.
D8	If the environmental holder can provide evidence through monitoring that the limits defined in Schedule D – Table 3 are not being exceeded then the holder is not in breach of D6. Monitoring must include: a) location of the blasts/s within the mining area (including which bench level); and b) atmospheric conditions including temperature, relative humidity and wind speed and direction; and c) location, date and time of recording.

Schedule D – Table 3 (Vibration limits –'Sensitive place')

Vibration parameter	Vibration measured at a sensitive place
	Monday to Friday 9 am – 5pm*
	Saturday 9 am – 1pm
'Sensitive Place'	5 mm/s peak particle velocity

*Blasting not permitted on public holidays



D9	If monitoring indicates exceedence of the relevant limits in Schedule D – Table 3, then the environmental authority holder must: a) address any complaint including the use of appropriate dispute resolution if required ; or b) as soon as practicable or at the direction of the administering authority, implement vibration abatement measures so that vibration from the activity does not result in further exceedence.
Schedule E - Waste	
Condition number	Condition
Storage of Tyres	
E1	Tyres stored awaiting disposal or transport for take-back and, recycling, or waste-to-energy options – should be stockpiled in volumes less than 3m in height and 200m ³ in area and at least 10m from any other tyre storage area.
E2	All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10m radius of the scrap tyre storage area.
Disposal of Tyres	
E3	Avoidance – when negotiating purchase agreements with new tyre suppliers, the holder of this environmental authority must wherever possible seek take back clauses to maximise freight back loading opportunities.
E4	Recycling – the holder of this environmental authority must wherever possible endeavour to recycle scrap tyres on site and locally through use in impact absorbing surfaces, bitumen and road construction, pastoral and agricultural use and civil engineering applications.
E5	The holder of this environmental authority must wherever possible also use existing opportunities in Queensland to recover the intrinsic energy value of used tyres through waste- to- energy options.
E6	If the above strategies cannot be employed, disposing of scarp tyres in spoil in placements is acceptable, provided tyres are placed as deep in the spoil as reasonably practicable but not directly on the pit floor.
E7	Scrap tyres disposed of within the operational land must not impede saturated aquifers or compromise the stability of the consolidated land form.
Off Site Movement	
E8	Regulated waste must only be removed from the licensed place by a person that can legally transport this waste under the <i>Environmental Protection Act 1994</i> .



E9	Regulated waste must only be removed to a place that can legally accept this waste under the <i>Environmental Protection Act 1994</i> .
Notification of Improper Disposal of Regulated Waste	
E10	If the holder of this environmental authority becomes aware that person has removed waste from the licensed place and disposed of the waste in a manner which is not authorised by this environmental authority or improper or unlawful, then the holder of this environmental authority must, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.
Schedule F- Land Management	
Condition number	Condition
Rehabilitation Landform Criteria	
F1	All areas significantly disturbed by mining activities must be rehabilitated to the final land description as defined in Schedule F – Table 1 and as shown in figure 5 of the project Environmental Management Overview Strategy (EMOS).

Schedule F – Table 1 (Final Land Use and Rehabilitation Approval Schedule)

Tenure ID	Disturbance type	Disturbance area	Post-mine land description	Post mine land capability classification	Analogue site Identification
ML50175	void	19	Residual void	VIII	n/a
all tenures	Recontoured spoil	361	Grazing	III-VIII	Lot 566 on CH3 1740
		30	native ecosystem	VIII	Refer condition F3 - 2
All tenures	Sediment and water supply dams	2	sediment and water supply dams	VIII	n/a

F2	Progressive rehabilitation must commence when areas become available within the operational land.
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Grazing Pasture Outcome	
F3	Areas which are to be progressively rehabilitated to grazing pasture must comply with the following outcomes; a) Generate a self-sustaining vegetation with foliage protective cover, species composition and species distribution comparable to analogue site Lot 566 on CH31740; and b) All area disturbed by mining activities must be rehabilitated to the landform design criteria defined in Schedule F – Table 2; and c) Landforms are stable with rates of erosion comparable to analogue sites; and d) A measure of productivity (e.g. sustainable dry matter production, stock live weight gain) are comparable to analogue site Lot 566 on CH31740.
F4	Areas which are to be progressively rehabilitated to grazing pasture must comply with the acceptance criteria as defined by the Report titled <i>Investigation of Rehabilitation Area and Proposal for Acceptance Criteria – Grazing Outcome August 2004</i> (received on 20 June 2005) for the New Oakleigh Mine that was prepared by the BTEQ to meet the outcomes in condition F3 and the landform design criteria in Schedule F – Table 2.
Native Ecosystem Outcome	
F5	Area which are to be progressively rehabilitated to native ecosystem must comply with the following outcomes; a) a self-sustaining native ecosystem has been established and species composition and distribution is comparable with that of analogue sites to be determined by the study detailed in F6; and b) all area distributed by mining activities must be rehabilitated to the landform design criteria defined in Schedule F – Table 2; and c) landforms have been reshaped as closes as practicable to the aspect orientation appropriate to the climax community; and d) species composition does not include new genetic material from native species outside the local area.



Schedule F – Table 2 (Landform Design)

Slope range (%)	Projective Surface area (Ha)	Maximum distance between erosion control devices (m)
40	5	13
30	7	23
20	10	50
15	20	13
10	22	220
5	26	520
3	28	900

F6	Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in F5 and landform design criteria in Schedule F – Table 2 within 24 months of the granting of ML50175 .
Residual Void Outcome	
F7	Residual voids must not cause any environmental harm to land, surface waters or any ground water aquifer, other than the environmental harm caused solely by the existence of a residual void itself, and subject to any other condition of this environmental authority.
F8	Complete investigation into residual voids and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in condition F7 within 12 months of the grant of ML50175 .
Endangered Regional Ecosystems	
F9	There must be no mining activities conducted in or within 50 metres of any Category B Environmentally Sensitive Area (except for conducting land management practices such as fire and weed management).
Schedule G - Light	
G1	Subject to condition G1 , the emission of light resulting from the mining activity must not cause an environmental nuisance at any sensitive place.



G2	When requested by the administering authority, an assessment of the light nuisance must be undertaken within a reasonable and practicable time frame 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 sensitive place, and the results must be notified within 14 days to the administering authority following completion of the assessment.
G3	If the assessment indicates condition G3 is not being met then the environmental authority holder must: a) Negotiate in good faith with the maker of the complaint in order to find a solution to the exceedence acceptable to all parties. Negotiations in good faith may include reference to appropriate dispute resolution by third parties, provided the maker of the complaint and the holder agree to such dispute resolution; and/or b) If good faith negotiations pursuant to "a" hereof are attempted but are not resolved to the satisfaction of both the holder and the maker of complaint, or if no good faith negotiations are undertaken pursuant to "a" hereof, immediately implement light abatement measures so that emissions of light from the activity do not result in further environmental nuisance.
Schedule H – Community	
Complaint Response	
H1	All complaints received must be recorded including details of complaint, reasons for the complaint investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.



H2	A community consultation and awareness program as detailed in the project EMOS must be undertaken.
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Schedule I – Interpretation

“EMOS” means the environmental management overview strategy report titled Environmental management Overview Strategy New Oakleigh Coal Mine ML4568, ML4584, ML4675, ML4683, ML4698, ML4699 and ML50175 April 2002.

Although legally the environmental authority is the enforceable document, not the EMOS, if there was any need for interpretation of the conditions, then the interpretation should be in the context of the EMOS.

Definitions

“acceptance criteria” means the measures by which the actions implemented to rehabilitate the land are deemed to be complete (same as completion criteria).

“administering authority” means the Department of Environment and Heritage Protection or its successor.

“airblast overpressure” means energy transmitted from the blast site within the atmosphere in the form of pressure waves. The maximum excess pressure in this wave, above ambient pressure is the peak airblast overpressure measured in decibels linear (dB).

“ambient (or total) noise” at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.



“ARD” mean acid rock drainage and refers to the low pH, high heavy metal pollutant typical of sulphidic mine wastes, and most commonly associated with the production of ferrous iron and sulphuric acid through the oxidation of sulphide minerals.

“authority” means site specific environmental authority (resource activity) under the *Environmental Protection Act 1994*,

“blasting” means the use of explosive materials to fracture-

- (a) rock, coal and other minerals for later recovery; or
- (b) Structural components or other items to facilitate removal from a site or for reuse.

“climax community” flora and fauna communities have attained a stable biological diversity and have reached equilibrium with the surrounding ecosystems.

“commercial place” mean a place used as an office or business or commercial purposes, other than a place within the boundaries of the operational land.

“competent person” means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

“discharge event” means any flow of water through monitoring points OW9 and OW10 where the water level rises 10cm above the lowest point of the watercourse.

“environmental authority holder” means the holder of this environmental authority.

“flow event” means any flow of water in Western Creek at Ow11 where the water level rises 20cm above the lowest point of the watercourse.

“LA 10, adj 10” means the A- weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10-minute measurement period, using Fast response.

“LA 1, adj, 10 mins” means the A - weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10- minute measurement period, using Fast response.

“LA, max adj, T” means the average maximum A - weighted sound pressure level, adjusted for noise character and measured over any 10 minute period using Fast response.

“LAr, 1 hour” means the rating level measured over any one hour period defined as:

- a) $L_{Ar, 1 \text{ hour}} = L_{Aeq, 1 \text{ hour}} + K1 + K2$ where

“K1” means the tone adjustment applicable to any one hour measurement period.

“K2” means the impulse adjustment applicable to any one hour measurement period.



"L Aeq, 1 hour" means the time- average A – weighted sound pressure level over any one hour measurement period.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere

"land capability" as defined in the DME 1995 *Technical Guidelines for the Environmental management of the exploration and Mining in Queensland*.

"land suitability" as defined in the DME 1995 *Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland*.

"land use" term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

"Leachate" means a liquid that has passed through or emerged from, or is likely to have passes through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

"noxious" means harmful or injurious to health or physical well-being, other than trivial harm.

"offensive" means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

"peak particle velocity (ppv)" means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

"protected area" means-

- a) a protected area under the *Nature Conservation Act 1992*; or
- b) a marine park under the *Marine Parks Act 1992*; or
- c) a World heritage Area.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively OR a staged approach to rehabilitation as mining operations are ongoing.

"rehabilitation" the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

"representative" means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

"self-sustaining" means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

“sensitive place” means:

- a) a dwelling , resident allotment, mobile home or caravan park, residential marina or other residential premises; or
- b) a motel, hotel, or hostel; or
- c) a medical centre or hospital; or
- d) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- e) a public park or gardens; or
- f) a place used as a workplace, an office or for business or commercial purposes which is not a part of the mining activity and does not include employees accommodation or public records.

“stable” means geotechnical stability of the rehabilitated landform where instability related to the excessive settlement and subsidence caused by consolidation/ settlement of the wastes deposited and sliding/slumping instability has ceased.

“waters” includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural, bed and bank of any waters, dams, non-tidal waters(including the sea), and any underground water, any part- thereof.



