Section 55 Protection of the Environment Operations Act 1997

Environment Protection Licence

Licence Details	
Number:	1389
Anniversary Date:	01-January

Licensee
GOLDEN M TAHMOOR COAL HOLDINGS PTY LTD
PO BOX 1153
UNANDERRA NSW 2526

Premises
TAHMOOR COLLIERY
REMEMBRANCE DRIVE
TAHMOOR NSW 2573

Scheduled Activity (Act)	Licensing Fee Category (Regulation)	Scale
Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production capacity
Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity
Sewage treatment	Sewage treatment processing by small plants	0 - 20 ML annual maximum volume of discharge

Environment Protection Licence

Contact Us

NSW EPA
6 Parramatta Square
10 Darcy Street
PARRAMATTA NSW 2150
Phone: 131 555
Email: info@epa.nsw.gov.au
Locked Bag 5022
PARRAMATTA NSW 2124

Contents

Information about this licence 4
Dictionary 4
Responsibilities of licensee 4
Variation of licence conditions 4
Duration of licence 4
Licence review 4
Fees and information to be sent to the EPA 4
Transfer of licence 5
Public register and access to monitoring data 5
1 Administrative Conditions 6
A1 What the licence authorises and regulates 6
A2 Premises or plant to which this licence applies 6
A3 Information supplied to the EPA 7
2 Discharges to Air and Water and Applications to Land 8
P1 Location of monitoring/discharge points and areas 8
3 Limit Conditions 10
L1 Pollution of waters 10
L2 Concentration limits 10
L3 Volume and mass limits 12
4 Operating Conditions 13
O1 Activities must be carried out in a competent manner 13
O2 Maintenance of plant and equipment 13
O3 Dust 13

5 Monitoring and Recording Conditions 13
M1 Monitoring records 13
M2 Requirement to monitor concentration of pollutants discharged 13
M3 Testing methods - concentration limits 15
M4 Recording of pollution complaints 16
M5 Telephone complaints line 16
M6 Requirement to monitor volume or mass 16
6 Reporting Conditions 17
R1 Compliance, and annual reporting requirements 17
R2 Notification of environmental harm 18
R3 Written report 18
7 General Conditions 19
G1 Copy of licence kept at the premises or plant 19
G2 Signage 19
G3 Other general conditions 19
8 Special conditions 22
E1 Program of Works for Water Treatment at Tahmoor Colliery 22
E2 Toxicity Monitoring 24
E3 Aquatic Health Monitoring Program 25
Dictionary 26
General Dictionary 26

Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and information to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

Usually, the licence fee period is the same as the reporting period.

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

A licence subject to load-based licensing (LBL) requires an Annual Return to be submitted to the EPA, comprising a Statement of Compliance for Load Based Fee Calculation for each assessable pollutant required by the licence. The Annual Return must be submitted by the "due date", as defined in the dictionary at the end of the licence. Refer to the Annual Return reporting requirements under Section 6 "Reporting Conditions".

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

Licensee
GOLDEN M TAHMOOR COAL HOLDINGS PTY LTD
PO BOX 1153
UNANDERRA NSW 2526

subject to the conditions which follow.

1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their Scheduled Activity (Act) classification, Licensing Fee Category (Regulation) classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity (Act)	Licensing Fee Category (Regulation)	Scale
Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production capacity
Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity
Sewage treatment	Sewage treatment processing by small plants	0 - 20 ML annual maximum volume of discharge

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
TAHMOOR COLLIERY
REMEMBRANCE DRIVE
TAHMOOR NSW 2573
LOT 1//DP120968, LOT 13//DP3306, LOT 162//DP1054184, LOT 441//DP751270, PART LOT 248//DP751270, LOT 238//DP751250, LOT 230//DP751250, LOT 235//DP751250, LOT 237//DP751250, LOT 234//DP751250, LOT 233//DP751250, PART LOT 22//DP1128396, PART LOT 2//DP1040783

A2.2

A2.3 Premises Description

Description	Operation
Lot 1 DP 120968	Pit Top
Lot 13 DP 3306	No 1 Shaft
Lot 162 DP 1054184	Pit Top / Refuse Emplacement Area
Lot 441 DP 751270	No 2 Shaft
Lot 230 DP 751250	Refuse Emplacement Area
Lot 233 DP 751250	Refuse Emplacement Area
Lot 234 DP 751250	Refuse Emplacement Area
Lot 235 DP 751250	Refuse Emplacement Area
Lot 237 DP 751250	Refuse Emplacement Area
Lot 238 DP 751250	Refuse Emplacement Area
Lot 248 DP 751250	Refuse Emplacement Area
A portion of Crown Land in Consolidated Coal Lease 716 adjacent to Lot 162	Refuse Emplacement Area
Road reserve within DP 1054184 and DP 751250	Refuse Emplacement Area

A2.4 In addition to the land set out in the premises details table above, this licence also applies to the following land as contained in the following leases, licences and authorisations for which all necessary consents or approvals for mining for coal have been obtained (including any consent or approval required under the Environmental Planning and Assessment Act 1979).

Consolidated Coal Lease 747, Lot 7311 DP 1141025, Lot 7348 DP 1158871

A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:
a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and

b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA Identification Number	Point Type	Point Type Description	Location Description
7	Monitoring	Dust Monitoring	DDG1 located at the gas plant header tank
8	Monitoring	Dust Monitoring	DDG2 located at the top of the bund adjacent to the recycled water treatment plant
9	Monitoring	Dust Monitoring	DDG3 located at the entry to the stockpiles near the helipad
10	Monitoring	Dust Monitoring	DDG4 located at the southern end of the stockpiles
11	Monitoring	Dust Monitoring	DDG7 located at the northern extent of the reject emplacement area
12	Monitoring	Dust Monitoring	DDG8 located at the southern extent of the reject emplacement area
13	Monitoring	PM10 Monitoring	PM10-1 located at the north eastern

			off-site location (Hodgson Grove, Tahmoor)
14	Monitoring	PM10 Monitoring	PM10-2 located at the western off-site location (Olive Lane, Bargo)
15	Monitoring	PM10 Monitoring	PM10-3 located at the southern off-site location (115 Charlie's Point Road, Bargo)

P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

Water and Land

EPA Identification Number	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge to waters Water quality monitoring Volume monitoring	Discharge to waters Water quality monitoring Volume monitoring	Main mine water discharge. Discharge drain located on the property boundary downstream from the mine water final treatment dam (Dam M4). lat. long. -34.248577 150.582997
3		Discharge to waters	Overflow of treated discharge from sedimentation pond. Discharge drain is located at the reject disposal area on the final treatment dam

			(Dam S9). lat. long. -34.249413 150.587283
4		Discharge to waters	Overflow discharge point from stormwater dam (Dam S4). lat. long. -34.255052, 150.580601
5		Discharge to waters	Overflow of treated discharge from coal reject sedimentation pond. Discharge drain is on the leachate dam servicing the southern area of reject area (Dam S8). lat. long -34.252512 150.588763
16	Discharge to Waters	Discharge to Waters	Piped discharge outlet from stormwater dam (Dam S4). lat. long. -34.255278 150.582000

3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.

L2.4 Water and/or Land Concentration Limits

POINT 1

Pollutant	UOM	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
pH	pH				6.5-9.0
Total suspended solids	milligrams per litre				30
Turbidity	nephelometric turbidity units				150
Electrical conductivity	microsiemens per centimetre				2600
Arsenic	micrograms per litre				200
Nickel	micrograms per litre				200
Zinc	micrograms per litre				300
Nitrogen (total)	milligrams per litre				8
Aluminium	micrograms per litre				110
Barium	micrograms per litre				6440
Copper	micrograms per litre				5

Enterococci	colony forming units per 100 millilitres				1700

POINT 16

Pollutant	UOM	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Total suspended solids	milligrams per litre				50
pH	-				6.5 - 9.0

L3 Volume and mass limits

L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
a) liquids discharged to water; or;
b) solids or liquids applied to the area;
must not exceed the volume/mass limit specified for that discharge point or area.

POINT 1

Limits Unit of measure	Volume/Mass Limit
kilolitres per day	15500

Note: The flow rate of the wastes discharged at the authorised discharge points may exceed the volume under wet weather conditions provided that all practical measures are taken to minimise additional pollution caused by wet weather.

"wet weather conditions" means more than ten millimetres of rain falling within a 24 hour period at the premises.

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.
This includes:
a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
a) must be maintained in a proper and efficient condition; and
b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

5 Monitoring and Recording Conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.

M1.2 All records required to be kept by this licence must be:
a) in a legible form, or in a form that can readily be reduced to a legible form;
b) kept for at least 4 years after the monitoring or event to which they relate took place; and
c) produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
a) the date(s) on which the sample was taken;
b) the time(s) at which the sample was collected;
c) the EPA point identification number for the point at which the sample was taken; and
d) the name of the person who collected the sample

M2 Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each

pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

M2.2 Air Monitoring Requirements

POINT 13,14

Pollutant	UOM	Frequency	Sampling Methods
PM10	micrograms per cubic metre	Quarterly	AS/NZS 3580.9.6:2015

POINT 15

Pollutant	UOM	Frequency	Sampling Methods
PM10	micrograms per cubic metre	Monthly	No method specified

POINT 7,8,9,10,11,12

Pollutant	UOM	Frequency	Sampling Methods
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

M2.3 Water and/ or Land Monitoring Requirements

POINT 1

Pollutant	UOM	Frequency	Sampling Methods
Aluminium (dissolved)	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Arsenic (dissolved)	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Barium (dissolved)	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Bicarbonate alkalinity	milligrams per litre	Once a month (min. of 4 weeks)	Grab sample
Conductivity	microsiemens per centimetre	Once a month (min. of 4 weeks)	Grab sample

Copper (dissolved)	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Enterococci	colony forming units per 100 millilitres	Once a month (min. of 4 weeks)	Grab sample
Nickel (dissolved)	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Nitrogen (total)	milligrams per litre	Once a month (min. of 4 weeks)	Grab sample
pH	pH	Once a month (min. of 4 weeks)	Grab sample
Total suspended solids	milligrams per litre	Once a month (min. of 4 weeks)	Grab sample
Turbidity	nephelometric turbidity units	Once a month (min. of 4 weeks)	Grab sample
Zinc (dissolved)	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample

POINT 16

Pollutant	UOM	Frequency	Sampling Methods
pH	-	Monthly during discharge	Grab sample
Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample

M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2022* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Recording of pollution complaints

M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M4.2 The record must include details of the following:
a) the date and time of the complaint;
b) the method by which the complaint was made;
c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
d) the nature of the complaint;
e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
f) if no action was taken by the licensee, the reasons why no action was taken.

M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M5 Telephone complaints line

M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

M6 Requirement to monitor volume or mass

M6.1 For each discharge point or utilisation area specified below, the licensee must monitor:
a) the volume of liquids discharged to water or applied to the area;
b) the mass of solids applied to the area;
c) the mass of pollutants emitted to the air;
at the frequency and using the method and units of measure, specified below.

POINT 1

Frequency	Monitoring unit of measure	Monitoring method

Continuous	kilolitres per day	Level sensor and continuous logger

6 Reporting Conditions

R1 Compliance, and annual reporting requirements

Compliance with licence conditions

R1.1 The licensee must supply the EPA, via the EPA's online digital portal, the following details of any non-compliance with the conditions of the licence within 21 days after the licensee becomes aware of the non-compliance:

a. the date the licensee became aware of the non-compliance;
b. the date(s) the non-compliance occurred, including if the non-compliance is continuing;
c. whether the non-compliance relates to air, water/land, noise or waste matters (if applicable);
d. whether the non-compliance relates to a pollution incident;
e. the licence condition(s) not complied with;
f. a summary of particulars of the non-compliance, including (if known):
    i. the location where the non-compliance occurred;
    ii. the duration of the non-compliance;
    iii. if the non-compliance is continuing, the suspected end date of the non-compliance;
g. the cause or suspected cause of the non-compliance;
h. any action taken, or proposed to be taken, to mitigate the effects of the non-compliance; and
i. any action taken, or proposed to be taken, to prevent a recurrence of the non-compliance.

R1.2 The EPA may make a written request for further details in relation to each non-compliance reported in accordance with Condition R1.1. The licensee must provide such further details to the EPA, via the EPA's online digital portal, within the time specified in the request.

R1.3 Condition R1.1 does not apply where a non-compliance with a licence condition has been identified by the EPA as part of an EPA environmental compliance audit.

Reporting transition arrangements

R1.4 By 05 August 2026, the licensee must supply to the EPA, via the EPA's online digital portal the details required in Condition R1.1 for any non-compliance with the conditions of the licence that occurred:

i. after the date the licensee supplied their last Statement of Compliance - Licence Conditions to the EPA, and
ii. before the date of the notice of variation of licence that added this condition to this Licence.

Pollution monitoring data summary

R1.5 If the licensee undertakes monitoring as a result of a licence condition, the licensee must supply to the EPA a summary of the results of the pollution monitoring data in respect of each reporting period. The summary must be provided as a Microsoft Excel file, formatted with the following column headings:

a. EPA point identification number;
b. pollutant;
c. unit of measure;
d. number of samples required;
e. number of samples collected and analysed;
f. lowest sample value;
g. mean of sample values; and
h. highest sample value.

The pollution monitoring data summary for the reporting period must be supplied to the EPA via the EPA's online digital portal by the "due date", as defined in the dictionary at the end of this licence.

R2 Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
a) where this licence applies to premises, an event has occurred at the premises; or
b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:
a) the cause, time and duration of the event;
b) the type, volume and concentration of every pollutant discharged as a result of the event;
c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence

of such an event; and
g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

7 General Conditions

G1 Copy of licence kept at the premises or plant

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

G2 Signage

G2.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the EPA point identification number.

G3 Other general conditions

G3.1 **Completed Programs**

Program	Description	Completed Date
PRP 1 - Mine Water Discharge Quality Monitoring	Mine Water Discharge quality monitoring. To assess the impact of mine water discharges on Bargo River and to assist in developing limit conditions	6/08/2003
PRP 2 - Assessment of Discharge Volume	To provide information regarding the discharge volume monitoring methodology. To provide accurate estimates of waste waters discharged from licensed discharge points.	6/03/2003
PRP 3 - Ecological Impact of Minewater Discharge (Part 1)	The aim of this PRP is to determine if any ecologically significant impact on the surface waters receiving the treated mine waters discharged from point 1 is	31/08/2004

	occurring in the Bargo River and Nepean River. PRP requires a report to be prepared. Water quality monitoring shows impacts in the Bargo River caused by mine water discharges. This PRP will endeavour to detect any significant impacts and if so may lead to PRP improvements on discharges	
PRP 4 - Ecological Impact of Minewater Discharge (Part 2)	Investigate and report on any ecologically significant impact on the surface waters in the Bargo and Nepean Rivers receiving the treated mine waters discharged from Point 1.	31/03/2005
PRP 5 - Mine Water Discharges (LDP1)	Improve the quality of mine water discharged into the Bargo River Catchment, increase the reuse of mine water, and minimise the use of potable water in mine operations.	31/08/2005
PRP 6 - Chemicals and Liquid Waste Storage	Ensure materials are stored at the premises in a way which contains leaks and spills and minimises odour and dust generation	30/04/2005
PRP 7 - Water Management Plan	Protect and minimise the impact on the Bargo River by preparing a Water Management Plan which outlines options to improve on site water management and reduce the pollutant loads discharged from the site.	31/08/2005
PRP 9 - Materials Storage	To ensure materials are stored at the premises in a way which contains leaks and spills and minimises odour and dust generation.	30/06/2006

PRP 10 - Implementation of Pilot Project for Minewater Treatment	Investigation and testing of treatment technology to reduce pH and conductivity of discharges from Discharge Point 1.	30/06/2006
PRP 11 - Improved Surface Water Management	Implement improvements to surface water management resulting from an investigation required by PRP 7 of this licence and to carry out additional investigations into improving discharge water quality at discharge Points 2, 4 & 5.	30/06/2006
PRP 12 - Noise Assessment Survey	Determine if premises can meet the requirements of the INP to eliminate public concern caused by machinery operations at night.	31/03/2007
PRP 13 - 2 Stage Noise Investigation and Mitigation Program	Previous investigations have established noise assessment goals for the premises and identified works to reduce noise from the source - two reports to be submitted 1: 15 Dec 2008; 2: 31 Jan 2009.	31/01/2009
PRP 14 - Noise Mitigation Program	Implementation of the measures submitted in letter dated 2 July 2009. Report notifying of completion to be submitted.	31/12/2009
PRP 15 - Improvement of Stormwater Management	Improve the capture and treatment of stormwater generated on site.	30/09/2011
PRP 16 - Noise Survey Review and Assessment	Investigate the impacts of noise from operations on surrounding residences.	30/05/2011
PRP 17 - Review of Noise Mitigation Works	Review previous noise investigations and noise reduction works to determine what can be implemented.	29/07/2011

PRP 18 - Feasible and Reasonable Noise Mitigation Works	Implement any identified noise mitigation works identified in PRP 17.	29/09/2011
PRP 19: Assessment of Soil and Groundwater Contamination	Assessment of Soil and Groundwater Contamination in the vicinity of the Waste Oil Tank and the underground storage tanks. Determine the nature and extent of the soil and groundwater contamination.	31/07/2011
PRP 20 - Water Recycling Plant	Install a recycled water plant to reduce potable water consumption	30/06/2012
PRP 21 - Consolidate mine discharges to LDP1	Consolidate mine discharge by connecting S4 Dam (LDP4) to discharge via LDP1	27/05/2013
PRP22 - Mine Water Treatment Plant	Install a water treatment plant to reduce arsenic, nickel and zinc in mine discharge water from Licensed Discharge Point 1	30/09/2015
PRP 23 - Aquatic Monitoring Program	Conduct aquatic health monitoring to formalise specific trigger values for electrical conductivity in the Bargo River and for mine discharge water	30/09/2016
PRP 24 - Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions	28/09/2012

8 Special conditions

E1 Program of Works for Water Treatment at Tahmoor Colliery

E1.1 *Installation of a water treatment plant at Tahmoor Colliery*

The licensee must install a water treatment plant to reduce the concentration of pollutants released from licence discharge point 1.

The plant must be designed to meet the concentration values specified in table 2.

A pilot water treatment plant must be installed and fully tested by the date listed in table 1. (Completed December 2021).

Subject to review of the pilot water treatment plant, commissioning of the main water treatment plant must be undertaken by the date listed in table 1.

Table 1 - Due Date for Operation of Water Treatment Plant

Date	Pilot Plant	Main Plant
Due Date	31-Dec-21	31-Dec-23

Table 2 - Concentration of Pollutants - Point 1

Pollutant	Unit of Measure	100 Percentile
pH		6.5 - 8.0
Electrical Conductivity	uS/cm	350
Bicarbonate Alkalinity (as CaCo3)	milligrams per litre	185
Aluminium (dissolved)	micrograms per litre	55
Barium (dissolved)	micrograms per litre	700
Copper (dissolved)	micrograms per litre	1.4
Nickel (dissolved)	micrograms per litre	11
Zinc (dissolved)	micrograms per litre	8
Total Nitrogen	micrograms per litre	250
Arsenic (dissolved)	micrograms per litre	24

Note: 1. New limits for the concentration of substances discharged from licence discharge point 1 will replace the interim concentration limits in condition L2.4 after the due date for the final plant.

2. *The limits will be based on the actual measured performance of the installed equipment when operated in a proper and efficient manner. The EPA will consider recommendations made by the licensee in relation to statistical parameters for the limits.*
3. The water treatment plant must be operated and maintained to achieve a 90% availability during the reporting period when input water is available.

E2 Toxicity Monitoring

E2.1 The toxicity of water discharged from point 1 must be assessed in accordance with the methods in the following table.

Monitoring must begin in the quarter before the commencement of operation of the final water treatment plant specified in condition E1.1.

Monitoring must be undertaken for a period of 2 years following commencement of operation of the water treatment plant unless otherwise approved by the EPA. The licensee may apply to the EPA for amendment to the program after a year of data has been collected.

A report must be submitted to the EPA containing the results of monitoring and an assessment of the results against the criteria in the table below. The report must be submitted to the EPA within 3 months of completion of monitoring.

Species	Sampling Method	Sampling Frequency	Assessment Criteria
Ceriodaphnia dubia	Chronic toxicityUS EPA Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition (2002), EPA-821-R-02-013.)	Quarterly(minimum of 80-day intervals)	EC10 reproduction >100% sample
Melenotaenia duboulayi (Crimson spotted rainbowfish)orMelanotaenia splendida (Eastern Rainbowfish)	96-hour larval imbalance testUS EPA (2002). Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine	Quarterly(minimum of 80-day intervals)	EC10 reproduction > 100% sample

	Organisms. 5 ed. EPA-821-R-02-012. Washington DC, USA.		

E3 Aquatic Health Monitoring Program

E3.1 The licensee must prepare an aquatic health monitoring program to identify changes in the aquatic health of the Bargo River following commissioning of the final water treatment plant required by condition E1.1. The monitoring program must include at least the following:

- quantitative sampling and anlysis of macroinvertebrates;
- in-stream and laboratory water quality testing;
- river flow monitoring;
- assessment of data using a before after control impact (BACI) sampling design; and
- interim reports to be submitted to the EPA.

A copy of the monitoring program must be submitted to the EPA by 30 June 2021.

(Completed June 2021)

Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2022
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2022
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2022
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
due date	Means: i) not later than 60 days after the end of each reporting period; or ii) in the case of a transferring licence - not later than 60 days after the date the transfer was granted.
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means the Environment Protection Authority of New South Wales.
EPA Online digital portal	Means eConnect EPA
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
Licensing Fee Category (Regulation)	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2022.
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2022

local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 of the Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
Percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution incident	Has the same meaning as in the Protection of the Environment Operations Act 1997
Pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.

restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste
wellhead	Has the same meaning as in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2022

Sherryn Cabardo-Oclarit
Unit Head Regulatory & Compliance Support
ENVIRONMENT PROTECTION AUTHORITY NSW

End Notes

Licence transferred through application POEO-4041 approved on 08-10-2026

Licence varied by notice POEO-2778, issued on 09-06-2026

Licence varied by notice POEO-2778, issued on 09-06-2026

Licence varied by notice 1638072 issued on 28-Jun-2024

Licence varied by notice 1617616 issued on 23-Aug-2022

Licence varied by notice 1610997 issued on 13-Sep-2021

Licence varied by notice 1593223 issued on 02-Dec-2020

Licence varied by notice 1568264 issued on 13-Aug-2018

Licence varied by notice 1546013 issued on 20-Nov-2017

Licence varied by notice 1529610 issued on 05-May-2015

Licence varied by notice 1521576 issued on 07-May-2014

Licence varied by notice 1518844 issued on 20-Dec-2013

Licence varied by notice 1513211 issued on 28-Aug-2013

Licence varied by notice 1512251 issued on 22-Feb-2013

Licence varied by notice 1510998 issued on 10-Jan-2013

Licence varied by notice 1509149 issued on 28-Sep-2012

Licence varied by notice 1506090 issued on 16-May-2012

Licence fee period changed by notice 1503784 on 01-May-2012

Licence varied by notice 1503311 issued on 13-Dec-2011

Licence varied by notice 1502304 issued on 07-Dec-2011

Licence varied by notice 1127344, issued on 19-Apr-2011, which came into effect on 19-Apr-2011.

Licence varied by notice 1125198, issued on 04-Mar-2011, which came into effect on 04-Mar-2011.

Licence varied by notice 1124505, issued on 14-Feb-2011, which came into effect on 14-Feb-2011.

Licence varied by notice 1116860, issued on 08-Jul-2010, which came into effect on 08-Jul-2010.

Licence varied by notice 1109971, issued on 24-Dec-2009, which came into effect on 24-Dec-2009.

Licence varied by notice 1104375, issued on 02-Nov-2009, which came into effect on 02-Nov-2009.

Licence varied by notice 1093157, issued on 14-Nov-2008, which came into effect on 14-Nov-2008.

Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>

Licence varied by notice 1085201, issued on 01-May-2008, which came into effect on 01-May-2008.

Licence varied by notice 1069092, issued on 18-May-2007, which came into effect on 18-May-2007.

Licence varied by notice 1065429, issued on 16-Nov-2006, which came into effect on 16-Nov-2006.

Licence varied by notice 1061465, issued on 11-Jul-2006, which came into effect on 11-Jul-2006.

Licence varied by change to DEC Region allocation, issued on 16-Mar-2006, which came into effect on 16-Mar-2006.

Licence varied by notice 1048525, issued on 15-Dec-2005, which came into effect on 09-Jan-2006.

Licence varied by notice 1046263, issued on 03-May-2005, which came into effect on 28-May-2005.

Licence varied by notice 1042381, issued on 18-Feb-2005, which came into effect on 15-Mar-2005.

Licence varied by change to EPA region, issued on 05-Nov-2004, which came into effect on 05-Nov-2004.

Licence varied by notice 1038252, issued on 05-Jul-2004, which came into effect on 30-Jul-2004.

Licence varied by notice 1035242, issued on 11-May-2004, which came into effect on 05-Jun-2004.

Licence varied by notice 1029878, issued on 15-Sep-2003, which came into effect on 15-Sep-2003.

Licence varied by correction to EPA Sub Region data record, issued on 17-Sep-2002, which came into effect on 17-Sep-2002.

Licence varied by notice 1009086, issued on 07-Mar-2002, which came into effect on 01-Apr-2002.