Environment Protection Licence

Licence - 1389

Licence Details	
Number:	1389
Anniversary Date:	01-January

Licensee
TAHMOOR COAL PTY LTD
PO BOX 100
TAHMOOR NSW 2573

Premises
TAHMOOR COLLIERY
REMEMBRANCE DRIVE
TAHMOOR NSW 2573

Scheduled Activity
Coal works
Mining for coal
Sewage treatment

Fee Based Activity	Scale
Coal works	> 2000000-5000000 T annual handing capacity
Mining for coal	> 2000000-3500000 T annual production capacity
Sewage treatment processing by small plants	0-20 ML annual maximum volume of discharge

Region
Metropolitan - Illawarra
Level 3, NSW Govt Offices, 84 Crown Street WOLLONGONG NSW 2500
Phone: (02) 4224 4100
Fax: (02) 4224 4110
PO Box 513
WOLLONGONG EAST NSW 2520

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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 annual return to be sent to the EPA

For each licence fee period you must pay:

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

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The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

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

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:

TAHMOOR COAL PTY LTD
PO BOX 100
TAHMOOR NSW 2573

subject to the conditions which follow.

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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 classification, fee-based activity 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	Fee Based Activity	Scale
Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity
Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production 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 13 DP 3306, LOT 1 DP 120968, LOT 230 DP 751250, LOT 233 DP 751250, LOT 234 DP 751250, LOT 235 DP 751250, LOT 237 DP 751250, LOT 238 DP 751250, PART LOT 248 DP 751270, LOT 441 DP 751270, LOT 162 DP 1054184

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
One unidentified crown land portion included in Consolidated Coal Lease 716 adjacent to Lot 162	Refuse Emplacement Area
Road Reserve within DP 1054184 and DP 751250	Refuse Emplacement Area

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 no.	Type of Monitoring Point	Type of Discharge Point	Location Description
7	Dust Monitoring		DDG1 located at the gas plant header tank
8	Dust Monitoring		DDG2 located at the top of the bund adjacent to the recycled water treatment plant
9	Dust Monitoring		DDG3 located at the entry to the stockpiles near the helipad
10	Dust Monitoring		DDG4 located at the southern end of the stockpiles

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11	Dust Monitoring	DDG7 located at the northern extent of the reject emplacement area
12	Dust Monitoring	DDG8 located at the southern extent of the reject emplacement area
13	PM10 Monitoring	PM10-1 located at the north eastern off-site location (Hodgson Grove, Tahmoor)
14	PM10 Monitoring	PM10-2 located at the western off-site location (Olive Lane, Bargo)
15	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 no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Main mine water discharge. Discharge drain located on the property boundary down stream from the mine water final treatment dam (Dam M4) and labelled as Lic.No.1 on Tahmoor Colliery's Location Plan N3320 dated March 1997.
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) and labelled as Lic.No.3 on Tahmoor Colliery's Location Plan N3320 dated March 1997.
4		Discharge to waters	Overflow of treated discharge from sedimentation pond. Discharge is from REA dam located on eastern side of main southern railway (Dam S4) on Tahmoor Colliery's Location Plan dated 15/04/2013 (EPA Ref DOC13/31369).

5	Discharge to waters	Overflow of treated discharge from coal reject sedimenation pond. Discharge drain is on the leachate dam servicing the southern area of reject area (Dam S8) labelled Lic. No. 5 on Tahmoor's Colliery's Location Plan N3320 dated March 1997.

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	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Arsenic	micrograms per litre				200
Electrical conductivity	microsiemens per centimetre				2600
Nickel	micrograms per litre				200
Oil and Grease	milligrams per litre				10

pH	pH	6.5-9.0
Total suspended solids	milligrams per litre	30
Turbidity	nephelometric turbidity units	150
Zinc	milligrams per litre	300

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	Unit of Measure	Volume/Mass Limit
1	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 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 7,8,9,10,11,12

Pollutant	Units of measure	Frequency	Sampling Method
Insoluble solids	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003

POINT 13,14

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Quarterly	AS/NZS 3580.9.6:2003

POINT 15

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Monthly	No method specified

M2.3 Water and/ or Land Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Arsenic	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Conductivity	microsiemens per centimetre	Once a month (min. of 4 weeks)	Grab sample
Nickel	micrograms per litre	Once a month (min. of 4 weeks)	Grab sample
Oil and Grease	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	micrograms per litre	Once a month (min. of 4 weeks)	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 2010* 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	Unit of Measure	Sampling Method
Continuous	kilolitres per day	Level sensor and continuous logger

6 Reporting Conditions

R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:
a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
a) the licence holder; or
b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

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 the incident occurred.

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	06-August-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.	06-March-2003

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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 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	31-August-2004
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-March-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-August-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-April-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-August-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-June-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-June-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-June-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-March-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-January-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-December-2009
PRP 15 - Improvement of Stormwater Management	Improve the capture and treatment of stormwater generated on site.	30-September-2011

PRP 16 - Noise Survey Review and Assessment	Investigate the impacts of noise from operations on surrounding residences.	30-May-2011
PRP 17 - Review of Noise Mitigation Works	Review previous noise investigations and noise reduction works to determine what can be implemented.	29-July-2011
PRP 18 - Feasible and Reasonable Noise Mitigation Works	Implement any identified noise mitigation works identified in PRP 17.	29-September-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-July-2011
PRP 20 - Water Recycling Plant	Install a recycled water plant to reduce potable water consumption	30-June-2012
PRP 21 - Consolidate mine discharges to LDP1	Consolidate mine discharge by connecting S4 Dam (LDP4) to discharge via LDP1	27-May-2013
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-September-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-September-2012

8 Pollution Studies and Reduction Programs

U1 PRP22 - Mine Water Treatment Plant

U1.1 Stage 1 - Installation of Water Treatment Plant

The Licensee must install a water treatment plant to reduce the concentrations of arsenic, nickel and zinc in mine water released from licensed discharge point 1.

The treatment process must reduce concentrations of arsenic, nickel and zinc to levels below the default 95%ile trigger values for protection of aquatic ecosystems specified in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000) as measured or estimated in the Bargo River downstream of the confluence with Tea Tree Hollow.

In the period between the issuing of this Pollution Reduction Program and the completion of the treatment plant, Tahmoor's discharge from Licensed Discharge Point 1 will be subject to interim discharge limits as described in Section L3 of this licence.

By the due date the licensee must submit a report confirming the installation and commissioning of the plant.

Due Date: 30 September 2015 - Completed

Stage 2 - Recommissioning of Water Treatment Plant

The licensee must submit a report confirming the re-commissioning of the water treatment plant by the due date.

The report must contain a summary of water quality achieved by the treatment plant and demonstrate that ANZECC 2000 trigger values for arsenic, nickel and zinc are being achieved in the Bargo River as specified in Stage 1.

Due Date: 30 November 2018

U2 PRP 26 - Aquatic Health Monitoring Program

U2.1 The Licensee must conduct an Aquatic Health Monitoring Program in Tea Tree Hollow and the Bargo River.

The objective of the Aquatic Health Monitoring Program is to determine the effects of the discharge of mine water through Licensed Discharge Point 1 (LDP1) on Tea Tree Hollow and the Bargo River.

The Aquatic Health Monitoring Program must be conducted following re-commissioning of the water treatment plant required by PRP 22.

The licensee must submit a copy of the Aquatic Health Monitoring Program investigation report to the EPA by the due date.
Due Date: 9 months following completion of PRP 22

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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 2009
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.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
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
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 Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
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

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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 Environmen t 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
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
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 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 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 mo nths. 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*.

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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

Ms Debbie Maddison

Environment Protection Authority

(By Delegation)

Date of this edition: 17-October-2000

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End Notes

1	Licence varied by notice 1009086, issued on 07-Mar-2002, which came into effect on 01-Apr-2002.
2	Licence varied by correction to EPA Sub Region data record, issued on 17-Sep-2002, which came into effect on 17-Sep-2002.
3	Licence varied by notice 1029878, issued on 15-Sep-2003, which came into effect on 15-Sep-2003.
4	Licence varied by notice 1035242, issued on 11-May-2004, which came into effect on 05-Jun-2004.
5	Licence varied by notice 1038252, issued on 05-Jul-2004, which came into effect on 30-Jul-2004.
6	Licence varied by change to EPA region, issued on 05-Nov-2004, which came into effect on 05-Nov-2004.
7	Licence varied by notice 1042381, issued on 18-Feb-2005, which came into effect on 15-Mar-2005.
8	Licence varied by notice 1046263, issued on 03-May-2005, which came into effect on 28-May-2005.
9	Licence varied by notice 1048525, issued on 15-Dec-2005, which came into effect on 09-Jan-2006.
10	Licence varied by change to DEC Region allocation, issued on 16-Mar-2006, which came into effect on 16-Mar-2006.
11	Licence varied by notice 1061465, issued on 11-Jul-2006, which came into effect on 11-Jul-2006.
12	Licence varied by notice 1065429, issued on 16-Nov-2006, which came into effect on 16-Nov-2006.
13	Licence varied by notice 1069092, issued on 18-May-2007, which came into effect on 18-May-2007.
14	Licence varied by notice 1085201, issued on 01-May-2008, which came into effect on 01-May-2008.
15	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
16	Licence varied by notice 1093157, issued on 14-Nov-2008, which came into effect on 14-Nov-2008.
17	Licence varied by notice 1104375, issued on 02-Nov-2009, which came into effect on 02-Nov-2009.

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18	Licence varied by notice 1109971, issued on 24-Dec-2009, which came into effect on 24-Dec-2009.
19	Licence varied by notice 1116860, issued on 08-Jul-2010, which came into effect on 08-Jul-2010.
20	Licence varied by notice 1124505, issued on 14-Feb-2011, which came into effect on 14-Feb-2011.
21	Licence varied by notice 1125198, issued on 04-Mar-2011, which came into effect on 04-Mar-2011.
22	Licence varied by notice 1127344, issued on 19-Apr-2011, which came into effect on 19-Apr-2011.
23	Licence varied by notice 1502304 issued on 07-Dec-2011
24	Licence varied by notice 1503311 issued on 13-Dec-2011
25	Licence fee period changed by notice 1503784 on 01-May-2012
26	Licence varied by notice 1506090 issued on 16-May-2012
27	Licence varied by notice 1509149 issued on 28-Sep-2012
28	Licence varied by notice 1510998 issued on 10-Jan-2013
29	Licence varied by notice 1512251 issued on 22-Feb-2013
30	Licence varied by notice 1513211 issued on 28-Aug-2013
31	Licence varied by notice 1518844 issued on 20-Dec-2013
32	Licence varied by notice 1521576 issued on 07-May-2014
33	Licence varied by notice 1529610 issued on 05-May-2015
34	Licence varied by notice 1546013 issued on 20-Nov-2017
35	Licence varied by notice 1568264 issued on 13-Aug-2018