Section 58(5) Protection of the Environment Operations Act 1997

## **Licence Variation**

Licence - 11457



## HUNTER VALLEY ENERGY COAL PTY LTD 500 THOMAS MITCHELL DRIVE MUSWELLBROOK NSW 2333

Attention: Mr James Nixon

Notice Number	1618758
File Number	EF13/3102
Date	08-Dec-2022

## **NOTICE OF VARIATION OF LICENCE NO. 11457**

### BACKGROUND

- A. HUNTER VALLEY ENERGY COAL PTY LTD (HVEC) holds Environment Protection Licence No. 11457 (the Licence) issued under the *Protection of the Environment Operations Act 1997* (the Act). The Licence authorises the carrying out of activities at THOMAS MITCHELL DRIVE, MUSWELLBROOK, NSW, 2333 (the Premises).
- B. On 9 May 2022 the Environment Protection Authority (EPA) received an application for the variation of the Licence (the Variation).
- C. The Variation sought to allow the disposal of HVEC's own heavy-plant waste tyres within overburden emplacement areas within the pit at the Premises.
- D. On 10 June 2022, the EPA issued HVEC with a Section 60 Notice to supply further information (Notice 1619623). Additional information was required from HVEC about the disposal of the heavy-plant waste tyres at the Premises, including but not limited to -
  - Consideration to higher order users of the waste;
  - The waste classification of each waste proposed to be disposed at the Premises. The classification must be made in accordance with the NSW Waste Classification Guidelines;
  - That other disposal pathways have been considered and that onsite disposal is appropriate and the preferred option; and
  - Consideration into pollution caused or likely to be caused by the carrying out of the activity and the likely impact of that pollution on the environment; practical measures that will be taken to prevent, control, abate or mitigate that pollution, and protection the environment from harm as a result of that pollution; and
  - Consideration to the minimum standards for landfills in the Environmental Guidelines: Solid Waste Landfills (second edition 2016).
- E. On 10 October 2022, HVEC submitted a response to Notice 1619623 and further supporting information

Section 58(5) Protection of the Environment Operations Act 1997

**Licence Variation** 



on 11 November 2022.

- F. On 1 December 2022, the EPA provided HVEC with a draft licence variation and received comments from HVEC on 7 December 2022.
- G. The EPA has considered the comments from HVEC and now issues Notice of Variation of Licence No. 1618758 as final.

## VARIATION OF LICENCE NO. 11457

- 1. By this notice the EPA varies licence No. 11457. The attached licence document contains all variations that are made to the licence by this notice.
- 2. The following variations have been made to the licence:
  - Condition P1.3 Monitoring Point 26 has been created to identify potential leaching from heavy-plant waste tyres.
  - Condition L4.2 The addition of this condition limits the amount of heavy-plant waste tyres disposed of at the Premises.
  - Condition L4.3 The addition of this condition limits the amount of heavy-plant waste tyres stockpiled at the Premises.
  - Condition O6.1 The addition of this condition allows the disposal of heavy-plant waste tyres.
  - Condition O6.2 The addition of this condition relates to the stockpiling of heavy-plant waste tyres at the Premises.
  - Condition R5.7 The addition of this condition requires the Licensee to submit an annual report relating to the disposal of heavy-plant waste tyres.
  - Condition E3 The addition of this condition requires the Licensee to conduct a two yearly review of available heavy-plant waste tyre recycling options.
  - Condition M6.3 This condition is removed as it is redundant.
  - Conditions P1.5 and P1.6 These conditions have been removed and replaced as a note at the start of condition P1.
    - Condition U1 This condition is removed as it is redundant.
  - Condition U2 -

This condition is removed as it is redundant.

.....

Karen Gallagher Unit Head <u>Environment Protection Authority</u>

(by Delegation)

## INFORMATION ABOUT THIS NOTICE

• This notice is issued under section 58(5) of the Act.

## **Licence Variation**



 Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<u>http://www.epa.nsw.gov.au/prpoeo/index.htm</u>) in accordance with section 308 of the Act.

## Appeals against this decision

• You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

#### When this notice begins to operate

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.
- If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).

Licence - 11457

Licence Details Number: Anniversary Date:

11457 31-August

### Licensee

HUNTER VALLEY ENERGY COAL PTY LTD

**500 THOMAS MITCHELL DRIVE** 

MUSWELLBROOK NSW 2333

#### Premises

MT ARTHUR COAL

THOMAS MITCHELL DRIVE

MUSWELLBROOK NSW 2333

### **Scheduled Activity**

Coal works

Mining for coal

### Fee Based Activity

Coal works

Mining for coal

## Contact Us

NSW EPA 4 Parramatta Square 12 Darcy Street PARRAMATTA NSW 2150 Phone: 131 555 Email: info@epa.nsw.gov.au

Locked Bag 5022

PARRAMATTA NSW 2124

Environment Protection	n Authority - NSW
Licence version date:	8-Dec-2022

Scale
> 5000000 T annual handing capacity
> 5000000 T annual production capacity





Licence - 11457

INFO	DRMATION ABOUT THIS LICENCE	
Dict	tionary	4
Res	sponsibilities of licensee	4
Var	riation of licence conditions	4
Dur	ration of licence	4
Lice	ence review	4
Fee	es and annual return to be sent to the EPA	4
	ansfer of licence	
Pub	blic 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	
2	DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	
P1	Location of monitoring/discharge points and areas	7
3	LIMIT CONDITIONS	
L1	Pollution of waters	9
L2	Concentration limits	8
L3	Volume and mass limits	
L4	Waste	10
L5	Noise limits	11
L6	Blasting	
4	OPERATING CONDITIONS	
01	Activities must be carried out in a competent manner	13
02		
03		
04		
05		
06		
07		
5	MONITORING AND RECORDING CONDITIONS	
M1		
M2		
M3		
M4		



Licen	ce - 11457	
M5	Recording of pollution complaints	48
M6	Telephone complaints line	18
M7	Requirement to monitor volume or mass	19
M8	Blasting	19
M9	Other monitoring and recording conditions	19
M1(	D Noise monitoring	20
6	REPORTING CONDITIONS	21
R1	Annual return documents	21
R2	Notification of environmental harm	<u>22</u>
R3	Written report	
R4	Other notifications	23
R5	Other reporting conditions	<u>2</u> 3
7 (	GENERAL CONDITIONS	24
G1	Copy of licence kept at the premises or plant	24
G2	Other general conditions	
8 1	POLLUTION STUDIES AND REDUCTION PROGRAMS	25
U1	Entrance Road Upgrade	<del>2</del> 5
U2	Whites Creek Upgrade	26
U3	McDonald Pit Upgrade	26
U4	Saddlers Creek Area Upgrade	26
9 5	SPECIAL CONDITIONS	27
E1	Hunter River Salinity Trading Scheme	
E2	Spontaneous Combustion Control Program	<del>2</del> 7
E3	Waste Tyre Recycling Review	28
E4	Heavy-Plant Waste Tyre Reduction Program	
DICTI	ONARY	30
Gene	eral Dictionary	30

Licence - 11457



## 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).



Licence - 11457

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:

HUNTER VALLEY ENERGY COAL PTY LTD

500 THOMAS MITCHELL DRIVE

MUSWELLBROOK NSW 2333

subject to the conditions which follow.



Licence - 11457

## 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	> 5000000 T annual handing capacity
Mining for coal	Mining for coal	> 5000000 T annual production capacity

Note: In relation to this licence, the licensee must comply with:

a) the activity scale limits imposed by this licence;

b) the activity scale limits which apply for the reporting period specified in this licence; and

c) the activity scale limits imposed by other legal instruments, such as approvals currently in force under the *Environmental Planning and Assessment Act 1979*.

## A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details	
MT ARTHUR COAL	
THOMAS MITCHELL DRIVE	
MUSWELLBROOK	
NSW 2333	
PREMISED DEFINED BY PLAN TITLED "EPA - PLAN OF PREMISES" DRAWING NO. ENV-0013 DATED 29/10/2020 (DOC21/91573-2) AND SHAPE FILES (DOC21/91573-1).	in brief in

## 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



Licence - 11457

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

- Note: For the purposes of Condition P1.1, P1.3 and P1.4, Figure 1 refers to the plan titled "EPA Plan of Premises Monitoring Points" dated 17/12/19 EPA Reference DOC19/1103289. Note: The datum for grid references in the Licence is the Geodetic Datum of Australia 1994 (GDA94), Zone 56.
- 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 identi-	Type of Monitoring	Type of Discharge	Location Description
fication no.	Point	Point	
11	Particulate Matter		Air quality monitoring at coordinates
	Monitoring - PM10		294417, 6423491 (Easting, Northing) shown
			as DC10 on Figure 1.
12	Particulate Matter		Air quality monitoring at coordinates
	Monitoring - PM10		297086, 6424918 (Easting, Northing) shown
			as DC11 on Figure 1.
13	Particulate Matter		Air quality monitoring at coordinates
	Monitoring - PM10		300873, 6415287 (Easting, Northing) shown
			as DC12 on Figure 1.
14	Particulate Matter		Air quality monitoring at coordinates
	Monitoring - PM10		303157, 6419087 (Easting, Northing) shown
			as DC13 on Figure 1.

- 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 Identi- Type of Monitoring	Point Type of Discharge	Point Location Description	
fication no.			

Licence - 11457

6	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)	Discharge and monitoring at weir structure downstream of outlet pipe from storage dam at coordinates 298190, 6424890 (Easting, Northing), shown as SW28 on Figure 1.
15	Volumetric monitoring Water quality monitoring Discharge to utilisation	Volumetric monitoring Water quality monitoring Discharge to utilisation	Discharge and monitoring of STP discharge to effluent pond utilisation area at coordinates 301257,
	area	area	6420449 (Easting, Northing), shown as LP15 on Figure 1.
26	Mine Water Storage		Mine water storage dam at coordinates 294158, 6442283 (Easting, Northing).

P1.4 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

EPA identi- fication no.	Type of monitoring point	Location description
7	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitoring at coordinates 301609, 6426025 (Easting, Northing), shown as BP04 on Figure 1.
8	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitoring at coordinates 299170, 6426437 (Easting, Northing), shown as BP07 on Figure 1.
10	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitoring at coordinates 304233, 6422344 (Easting, Northing), shown as BP11 on Figure 1.
16	Noise monitoring	Noise monitoring at coordinates 304285, 6421976 (Easting, Northing), shown as NP04 on Figure 1.
17	Noise monitoring	Noise monitoring at coordinates 299169, 6426451 (Easting, Northing), shown as NP07 on Figure 1.
18	Noise monitoring	Noise monitoring at coordinates 301592, 6425956 (Easting, Northing), shown as NP10 on Figure 1.
19	Noise monitoring	Noise monitoring at coordinates 305525, 6422260 (Easting, Northing), shown as NP12 on Figure 1.
20	Noise monitoring	Noise monitoring at coordinates 292409, 6409175 (Easting, Northing), shown as NP13 on Figure 1.
21	Noise monitoring	Noise monitoring at coordinates 289305, 6423365 (Easting, Northing), shown as NP14 on Figure 1.
22	Noise monitoring	Noise monitoring at coordinates 290285, 6422256 (Easting, Northing), shown as NP15 on Figure 1.

#### Noise/Weather





Licence - 11457

23	Noise monitoring	Noise monitoring at coordinates 299747,
		6426810 (Easting, Northing), shown as
24	Meteorological Station	NP16 on Figure 1.
<b>-</b>		Meteorological monitoring at coordinates
		301202, 6420154 (Easting, Northing),
25	A 1 1 1	shown as WS09 on Figure 1.
20	Air blast overpressure & ground vibration peak	Blast monitoring at coordinates 293042,
	particle velocity monitoring	6421799 (Easting, Northing), shown as
		BP09B on Figure 1.

## 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 6

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
рН	рН				6.5 - 9.0
Total suspended solids	milligrams per litre				120



Licence - 11457

## 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	
6	megalitres per day	450	

### L4 Waste

L4.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Treated Effluent	Receipt of treated effluent from Muswellbrook Sewage Treatment Plant.	As specified in each particular resource recovery exemption	The Licensee must comply with the Effluent Exemption 2014.
NA	General or Specific exempted waste			NA
J120	Waste oil/hydrocarbons mixtures/emulsions in water			No more than 68,000 Litres to be stored at the premises at any time.

- L4.2 The licensee must not cause, permit or allow the disposal of more than 1,100 heavy-plant waste tyres within any Annual Return reporting period.
- L4.3 The licensee is permitted to stockpile up to 300 heavy-plant waste tyres at any one time.
- Note: The limits at condition L4.2 and condition L4.3 do not come into effect until 1 January 2025.
- L4.4 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.
- L4.5 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.



Licence - 11457

## L4.6 All waste oil used in blasting operations at the premises must meet the following quality limits:

Parameter	Units of Measure	Limit	Test Method
Flash Point	deg C	not less then 65	EPA 1010 or ASTM D93-11
Polychlorinated biphenyls	ppm	less than 2	ASTM D6160-98 (2009) a EPA 8082.A
Lead	ppm	less than 100	ASTM D5185 US EPA method 3031, 3051A or 3052 (digestion method) and 6010C (analysis method)
Moisture	%/L	less than 2	EPA Method 9000 or ASTM D4928-11
Chromium	ppm	less than 10	ASTM D5185 US EPA method 3031, 3051A or 3052 (digestion method) and 6010C (analysis method)
Glycol	%/L	less than 0.2%	ASTM D4291
Polyaromatic hydrocarbons	ppm	less than 1000	US EPA 3580A (Extraction method); US EPA 8270D (Analysis method)
Cadmium	ppm	less than 2	ASTM D5185 US EPA method 3031, 3051A or 3052 (digestion method) and 6010C (analysis method)
Arsenic	ppm	less than 5	ASTM D5185 US EPA method 3031, 3051A or 3052 (digestion method) and 6010C (analysis method)
Particulate diameter	micrometres	less than 25	ASTM D4055-04 (2009) and substitute 0.8 micrometre membrane filter for a 25 micrometre membrane filter.

## L5 Noise limits

L5.1 Noise generated at the premises must not exceed the noise limits presented in the table below.

Residences referenced in this table are from Project Approval 09\_0062 and summarised in EPA Re DOC19/1103289.

LOCATION Day I A				
	eq (15 Evenir	ig LAeq (15 Night LAe	eq (15 Night LA1 (1	
- Constant of the second s				
	) dBA minute	e) dBA minute) d	BA Minute) dBA	



Licence - 11457

ice -	11457				
	EPA Point 16	37	40	38	45
	EPA Point 17	41	40	39	45
	EPA Point 18	39	39	39	45
	EPA Point 19	41	40	39	45
	EPA Point 20	35	35	35	45
	EPA Point 21	37	36	35	45
	EPA Point 22	37	36	35	45
	EPA Point 23	39	38	37	45

## L5.2 For the purposes of Condition L5.1:

a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,

b) Evening is defined as the period from 6pm to 10pm, and

c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

L5.3 The noise limits set out in condition L5.1 apply under all meteorological conditions except for the following as noted in Appendix 10 of Project Approval 09\_0062:

a) during periods of rain or hail;

b) average wind speed at microphone height greater than 5 metres/second;

c) wind speeds greater than 3 metres/second at 10 metres above the ground level;

d) temperature inversion conditions greater than 3 degrees Celsius/100 m, or alternatively stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or

e) stability category G temperature inversion conditions.

L5.4 For the purposes of condition L5.3, data recorded by the meteorological station at EPA Identification Point 24 must be used to determine meteorological conditions with the exception of calculating temperature differential for stability category which may use data from additional meteorological stations.

## L6 Blasting

- L6.1 Blasting in or on the premises must only be carried out between 8am and 5pm, Monday to Saturday inclusive. Blasting in or on the premises must not take place on Sundays or Public Holidays, or at any other time without the prior approval of the EPA.
- L6.2 The airblast overpressure level from blasting operations in or on the premises must not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; at either monitoring point 7, 8, 10 or 25 in Condition P1.4.
- L6.3 The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; at either monitoring point 7, 8, 10 or 25 in Condition P1.4
- L6.4 The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not



Licence - 11457

exceed:

5 mm/second for more than 5% of the total number of blasts during each reporting period; at either monitoring point 7, 8, 10 or 25 in Condition P1.4.

L6.5 The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
 10 mm/second at any time;

at either monitoring point 7, 8, 10 or 25 in Condition P1.4.

L6.6 Offensive blast fume must not be emitted from the premises.

Definition:

Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:

1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or 2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.

## 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; andb) must be operated in a proper and efficient manner.
- O2.2 The licensee is responsible for the correct operation of the sewage treatment system on their premises.
- O2.3 Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.
- O2.4 The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.



#### Licence - 11457

- O2.5 The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.4.
- O2.6 The licensee must prepare a sewage treatment system maintenance program. The program must include:
   a) Certification from the system provider that the sewage treatment system is operating within its capacity;
   b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and

c) Provide written records of each quarterly inspection.

## O3 Dust

- O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- O3.2 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.
- O3.3 All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

### O4 Effluent application to land

- O4.1 Waste water utilisation areas must effectively utilise the waste water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste water application may be required by the EPA.
- O4.2 The licensee must ensure that sprays or mists from irrigation do not drift beyond the boundary of the effluent discharge utilisation area and that no ponding occurs.

### O5 Processes and management

- O5.1 The licensee must ensure that any liquid and/or non liquid waste generated at the premises is assessed and classified in accordance with the EPA Waste Classification Guidelines as in force from time to time.
- O5.2 The licensee must ensure that waste identified for recycling is stored separately from other waste.

### O6 Waste management

O6.1 The licensee is authorised to dispose of heavy-plant tyre waste generated on the premises in overburden emplacement areas.



Licence - 11457

The licensee must:

a) Ensure that heavy-plant waste tyres are re-used on the premises as much as practical;

b) Ensure that any surplus heavy-plant waste tyres can be emplaced by being spread out within the overburden emplacement areas and buried as deep as practical, but, covered by at least 20 metres of inert material beneath any final rehabilitated surfaces;

c) Place heavy-plant waste tyres at least 10 metres away from coarse reject material or tailings emplacement area;

d) Ensure that any heavy-plant waste tyres are place above the existing water table;

e) Not emplace any heavy-plant waste tyres in a position that compromises the stability of the final rehabilitated landform;

f) Not place any heavy-plant waste tyres near heated material or potentially acid forming materials; and

g) Not place any heavy-plant waste tyres in an area likely to leach to any watercourse.

- O6.2 Stockpiles of any heavy-plant waste tyres stored at the premises awaiting disposal must:
  - a) Be less than 3.7 metres in height;
  - b) Not cover an area of more than 200 square metres; and
  - c) Not be located within 10 metres of any other flammable or combustible materials.

## O7 Other operating conditions

O7.1 All above-ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.

## 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:

#### Licence - 11457

- 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:

NSU

M2.2 Air Monitoring Requirements

#### POINT 11,12,13,14

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Continuous	AM-22

### M2.3 Water and/ or Land Monitoring Requirements

#### POINT 6

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm
рН	рН	Daily during any discharge	Representative sample
Total suspended solids	milligrams per litre	Daily during any discharge	Representative sample

#### POINT 15

Pollutant	Units of measure	Frequency	Sampling Method
Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample

#### POINT 26

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	micrograms per litre	Quarterly	Grab sample
Benzene	micrograms per litre	Quarterly	Grab sample



#### Licence - 11457

Cadmium	micrograms per litre	Quarterly	Grab sample
Iron	micrograms per litre	Quarterly	Grab sample
Lead	micrograms per litre	Quarterly	Grab sample
Manganese	micrograms per litre	Quarterly	Grab sample
Mercury	micrograms per litre	Quarterly	Grab sample
Zinc	micrograms per litre	Quarterly	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.

- Note: The *Protection of the Environment Operations (Clean Air) Regulation 2021* 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".
- 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.

## M4 Weather monitoring

M4.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.



Licence - 11457

#### POINT 24

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Sigma Theta	AM-2 & AM-4	Degrees	15 minutes	Continuous
Rainfall	AM-4	millimetres	15 minutes	Continuous
Temperature at 10 metres	AM-4	degrees Celsius	15 minutes	Continuous
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	15 minutes	Continuous
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	15 minutes	Continuous
Relative humidity	AM-4	percent	15 minutes	Continuous

## M5 Recording of pollution complaints

- M5.1 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.
- M5.2 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.
- M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

### M6 Telephone complaints line

- M6.1 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.
- M6.2 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.
- M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.



Licence - 11457

## M7 Requirement to monitor volume or mass

- M7.1 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.

	POI	ΝT	6
--	-----	----	---

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	megalitres per day	Weir structure and level sensor
POINT 15		
Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	Flow meter and continuous logger

## M8 Blasting

M8.1 To determine compliance with conditions L6.2 and L6.3:

a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 7, 8, 10 and 25 for the parameters specified in Column 1 of the table below; and
b) The licensee must use the until of measure, sampling method, and sample at the frequency specified opposite in the other columns.

Parameter	Units of Measure	Frequency	Sampling Method
Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS
Ground Vibration Peak	millimetres/second	All Blasts	2187.2-2006 Australian Standard AS
Particle Velocity			2187.2-2006

## M9 Other monitoring and recording conditions HRSTS Monitoring

- M9.1 The Licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 6 available to the "Service Coordinator" within one hour of those measurements being taken and makes them available in the format specified in the report titled "Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification Rev V1.0 Released 4 October 2018" as published by WaterNSW.
- M9.2 The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.
- M9.3 The licensee must mark monitoring point(s) 5 & 6, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a



Licence - 11457

monitoring point for the Hunter River Salinity Trading Scheme.

### Waste Oil Monitoring Requirements

M9.4 The Licensee must ensure that each delivery of waste oil received at the premises is subject to statistically valid sampling and analysis to assess whether the waste oil complies with the limits detailed in Condition L4.4 of this Licence.

The analysis of waste oil must be conducted strictly in accordance with the testing methods specified in Condition L4.4 of this Licence.

### **Requirement to Monitor Particulate Matter**

M9.5 The Licensee must record the average PM<sub>10</sub> concentration at Monitoring Points 11, 12, 13 and 14 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.

### M10 Noise monitoring

M10.1 To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.

#### POINT 16,17,18,19,20,21,22,23

Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period
Night	Monthly	15 minutes	1 operation day

- M10.2 To assess compliance with condition L5.1, attended noise monitoring must be undertaken in accordance with Conditions L5.2 to L5.4:
  - a) at the EPA points identified in P1.4;
  - b) occur every calendar month in a reporting period; and
  - c) occur during one night time period for a minimum of 15 minutes at each location from a).
- M10.3 For the purposes of compliance monitoring and determining the noise generated at the premises the modification factors in section 4 of the Industrial Noise Policy (EPA, 2000) must be applied, as appropriate, to the noise levels measured by noise monitoring equipment.
- M10.4 Where required in writing by the EPA, the Licensee must carry out attended monitoring at sensitive receivers in addition the monitoring required by Condition M10.2.



Licence - 11457

## 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 notification that the Annual Return is due.

- 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.



#### Licence - 11457

- R1.8 The licensee must supply annually a Blast Monitoring Report with the Annual Return, which must include the following information relating to each blast carried out within the premises during the respective reporting period:
  - a) the date and time of the blast;
  - b) the location of the blast;
  - c) the blast monitoring results at each blast monitoring station; and
  - d) an explanation for any missing blast monitoring readings.

## R2 Notification of environmental harm

- 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.
- 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.

## 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.

Licence - 11457



## R4 Other notifications

### **Blast Exceedance Notification**

R4.1 The Licensee must report any exceedance of licence blasting limits to the EPA Hunter at info@epa.nsw.gov.au as soon as practicable after the exceedance becomes known to the Licensee or to one of the Licensee's employees or agents.

### **Noise Exceedance Notification**

R4.2 The Licensee must report any exceedance of licence noise limits to the EPA Hunter at <u>info@epa.nsw.gov.au</u> as soon as practicable after the exceedance becomes know to the Licensee or to one of the Licensee's employees or agents

### **Notification of Pollution of Waters**

- R4.3 The Licensee must notify the EPA by telephoning the Environment Line service on 131 555 immediately after the Licensee becomes aware of any contravention or potential contravention of Condition L1 of the Licence.
- R4.4 The Licensee must provide written details of the notification required by conditions R.1 to R.3 to the EPA Director Hunter at <u>info@epa.nsw.gov.au</u> within 7 days of the date of the notification.

## R5 Other reporting conditions HRSTS Reporting

R5.1 The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA's regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.

### Spontaneous Combustion Control Program Reporting

- R5.2 The monthly summaries, monthly assessments and maps prepared under the spontaneous combustion control program must be submitted to the EPA in the form of a 6 monthly report. The licensee must forward a copy of each 6 monthly report to the regional office of the EPA no later than two (2) months after the 6 monthly period being reported.
- R5.3 The monthly summaries, assessments and maps must be retained by the licensee for not less than four (4) years following the month under review. The records must be kept in a legible form and must be made available to any authorised officer of the EPA on request.

### Waste Oil Reporting

R5.4 The Licensee must supply the following information with the Annual Return:a) The number of deliveries and the total quanity of waste oil received at the premises during the reporting

#### Licence - 11457

period;

b) The results of all waste oil testing conducted in accordance with the conditions of this licence during the reporting period;

c) The total amount of waste oil used in blasting operations during the reporting period.

#### Sewage Treatment System Records

- R5.5 The sewage treatment system maintenance program required by Condition O2.6 must be submitted annually to the EPA with the Annual Return.
- R5.6 The licensee must retain a copy of each report required by Condition O2.5 for 3 years from the date each record is made.

### Heavy-Plant Waste Tyre Disposal Report

- R5.7 The Licensee must provide the EPA with an Annual Heavy-Plant Waste Tyre Disposal Report. The Report must be submitted with the licence Annual Return each year and must include a plan of the disposed heavy-plant waste tyres on the premises for the period that includes:
  - 1. Each tyre serial number;
  - 2. Supplier of each tyre;
  - 3. Date tyre delivered to site;
  - 4. Disposal date of each tyre;
  - 5. Co-ordinates (easting and northings) of the location of each tyre emplacement burial extent;
  - 6. The Real Level (RL) in metres AHD of each tyre emplacement location;
  - 7. The number of tyres buried in/within each emplacement location; and
  - 8. The cumulative total number of tyres disposed of at the premises each year

## 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 Other general conditions

G2.1 Completed Programs



#### Licence - 11457

Program	Description	Completed Date
Coal Mine Particulate Matter Control Best Practice	Site specific determination of particulate matter control against best management practice.	13-February-2012
Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.	15-August-2014
Particulate Matter Control Best Practice Implementation - Disturbing and Handling Overburden Under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.	15-August-2014
Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden.	30-July-2014
Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed land	23-January-2017
Review of mine water transfer pipelines	The Licensee must undertake a review of mine water transfer pipelines at the premises to assess the risk of pollution of waters and identify any actions or works that can be implemented as reasonable and feasible to reduce the risk.	24-September-2021
Enviro Dam Upgrade	Decommission and tag out redundant lines. - Relocate pipelines to within Enviro Dam catchment where possible - pipelines to be floated over / sunk across water storage. Potential Pipeline sleeving, bunding or similar controls over clean water diversion. West of clean water diversions, pipelines are to be fully contained within a bunded trace.	07-December-2022
Main Dam Upgrade	Relocate pipelines inside of Main Dam catchment (south of bund or through base of storage). Pipeline hydraulics to confirm impacts due to changes in head, an allowance has been made for upgrades pumping if required.	07-December-2022

## 8 Pollution Studies and Reduction Programs

## U1 Entrance Road Upgrade

U1.1 By no later than 31 March 2023 the licensee must in accordance with the recommendations of the Report entitled "Mt Arthur Coal – Mine Water Pipeline Pollution Risk Study – Mine Water Pipeline Containment Risk" dated 22 September 2021 authored by Tim Evans of Engeny Water Management Consultants, in the area

NSU

Licence - 11457

defined as the Entrance Road in Figure 5.1:

a) Construct bunding to the downstream (eastern) side of the pipeline to direct burst flows to an existing small, adjacent dam, or

b) Decommission the line and install a new replacement pipeline to the west completely within the catchment of the existing mine water management system, or

c) Implement effective alternative controls to achieve pipeline burst containment ensuring that the same target risk level following the improvement is achieved.

c) The dam referenced in part a) above must be assessed against the proposed design criteria and expanded if required.

## U2 Whites Creek Upgrade

U2.1 By no later than 31 March 2023 the licensee must in accordance with the recommendations of the Report entitled "Mt Arthur Coal – Mine Water Pipeline Pollution Risk Study – Mine Water Pipeline Containment Risk" dated 22 September 2021 authored by Tim Evans of Engeny Water Management Consultants, in the area defined as White's Creek in Figure 5.1:

a) Divert an appropriate portion of the upper reaches of Whites Creek Diversion to the Premises' "Dirty Water Dam" north of where the diversion is culverted through the noise bund, or

b) Implement effective alternative controls to achieve pipeline burst containment ensuring that the same target risk level following the improvement is achieved.

c) The realignment referenced in a) above will consist of blocking-off the existing diversion channel, and construction a new 300m length of channel reporting west to the Dirty Water Dam.

## U3 McDonald Pit Upgrade

U3.1 By no later than 30 September 2023 the licensee must in accordance with the recommendations of the Report entitled "Mt Arthur Coal – Mine Water Pipeline Pollution Risk Study – Mine Water Pipeline Containment Risk" dated 22 September 2021 authored by Tim Evans of Engeny Water Management Consultants, in the area defined as the McDonald's Pit area in Figure 5.1:

a) Construct a new sediment control facility to control sediment laden runoff from the out of pit dump on the Premises.

b) The facility referenced in a) above is to be constructed so as to act as a secondary containment for the pipelines in this area.

c) If required following completion of the works in a) above, realignment of all high risk pipelines (2 in total) to ensure they are situated north of the drainage controls is to be completed, or

d) Implement effective alternative controls to achieve pipeline burst containment ensuring that the same target risk level following the improvement is achieved.

## U4 Saddlers Creek Area Upgrade

U4.1 By no later than 30 September 2023 the licensee must in accordance with the recommendations of the Report entitled "Mt Arthur Coal – Mine Water Pipeline Pollution Risk Study – Mine Water Pipeline Containment Risk" dated 22 September 2021 authored by Tim Evans of Engeny Water Management Consultants, in the area defined as Saddler's Creek Area in Figure 5.1:

a) Relocate all pipelines (3 in total) in between the areas known as Drayton Void to Saddler's South Pit



Licence - 11457

Catchment to ensure secondary containment of the pipelines is achieved.

b) The final route for the relocated pipelines referenced in a) above is to be determined during the detailed design phase and any other viable alternatives should also be considered, or

c) Implement effective alternative controls to achieve pipeline burst containment ensuring that the same target risk level following the improvement is achieved.

d) Should a crossing of Saddlers Creek be required, for a) or b) above, the pipelines will require sleeving across the creek with burst flows directed to dedicated storage(s).

## 9 Special Conditions

## E1 Hunter River Salinity Trading Scheme

- E1.1 This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2009.*
- E1.2 For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.
- E1.3 The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)":

## H = V / RRT

Where:

*H* is the hourly volume discharge limit (in megalitres per hour);

*V* is the licence holder's volume discharge limit for the block (in megalitres) calculated in accordance with clause 23 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation (2002); and

**RRT** is the difference between the discharge stop and start times shown on the river register for that block (in hours)

*Note 1:* The intent of this condition is to prevent spikes of saline water in the Hunter River as a result of discharges of less than the duration permitted by the river register.

*Note 2:* A river register is issued by the Service Co-ordinator and allows participants of the Hunter River Salinity Trading Scheme (HRSTS) to discharge saline to the Hunter River during a discharge period.

## E2 Spontaneous Combustion Control Program

E2.1 Carbonaceous material that is prone to self heating and which is not extracted as run of mine coal must be selectively removed and purposely disposed of in such a manner that will prevent the development of



Licence - 11457

spontaneous combustion at the disposal site.

E2.2 The licensee must implement a Spontaneous Combustion Control Program which must include but not be limited to the following:

(a) A monthly summary of actions and procedures undertaken to prevent the development or to control the spread of spontaneous combustion at the premises;

(b) An assessment of the effectiveness of the actions and procedures undertaken each month in preventing the development and control of the spread of spontaneous combustion at the premises;

(c) Mapping of the approximate location of the areas subject to spontaneous combustion at the premises. Mapping may be completed by either, monthly ground survey or 6 monthly aerial thermal imagery. The map must show the respective areas in square metres of each area affected and must include a key to show the relative intensity of the heatings

## E3 Waste Tyre Recycling Review

E3.1 The licensee must undertake a review of available recycling options for end-of-life heavy-plant waste tyres at least every 2 years and provide a report to the EPA that contains, but is not limited to, the following:

a) Analysis of the current capacity of recycling facilities that can accept end-of-life heavy-plant waste tyres for processing in NSW and other neighbouring states;

b) Evidence of enquiries made by the licensee in the previous 24 months to actively seek recycling options for end-of-life heavy-plant waste tyres generated at the premises;

c) Analysis of any pre-treatment options that can be performed at the premises to reduce the costs associated with the transporting and recycling of end-of-life heavy-plant waste tyres;

d) Analysis of the specific costs to the licensee associated with the transport and delivery/acceptance of site generated end-of-life heavy-plant waste tyres at the nearest capable recycling facilities;

e) The current costs associated with the continued on-site burial of end-of-life heavy-plant waste tyres; and

f) A full cost benefit analysis of continued on-site burial of end-of-life heavy-plant waste tyres compared to their transport from the Premises and their recycling/processing.

E3.2 The licensee is required to submit the Waste Tyre Recycling Review by 31 December 2023 to the EPA at info@epa.nsw.gov.au.

## E4 Heavy-Plant Waste Tyre Reduction Program

E4.1 The licensee is permitted to undertake a two-year heavy-plant waste tyre reduction program to dispose of surplus heavy-plant waste tyres stored at the premises.

- Disposal of surplus heavy-plant waste tyres must be undertaken in accordance with condition 06.1;

- Stockpiles of surplus heavy-plant waste tyres must be managed in accordance with condition O6.2; and



Licence - 11457

- Reporting of surplus heavy-plant waste tyres must be undertaken in accordance with condition R5.7.

All surplus heavy-plant waste tyres must be disposed by 31 December 2024.

Licence - 11457

## 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
АМ	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 <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
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

NSU Statements



Licence - 11457

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 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
ТМ	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.

Licence - 11457

S Junio	5000	
NSU		••••

Means total suspended particles
Means total suspended solids
Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
Means any area shown as a utilisation area on a map submitted with the application for this licence
Has the same meaning as in the Protection of the Environment Operations Act 1997
Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non- putrescible), special waste or hazardous waste
Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.

Mr Mitchell Bennett

**Environment Protection Authority** 

(By Delegation) Date of this edition:

09-October-2001

Licence - 11457



## **End Notes**

- 1 Licence varied by notice 1033345, issued on 23-Dec-2003, which came into effect on 17-Jan-2004.
- 2 Licence varied by notice 1034224, issued on 29-Mar-2004, which came into effect on 23-Apr-2004.
- 3 Licence varied by notice 1039546, issued on 31-Aug-2004, which came into effect on 25-Sep-2004.
- 4 Licence varied by notice 1041057, issued on 28-Oct-2004, which came into effect on 22-Nov-2004.
- 5 Licence varied by notice 1047821, issued on 05-Jul-2005, which came into effect on 30-Jul-2005.
- 6 Licence fee period changed by notice 1078948 approved on .
- 7 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 8 Licence varied by notice 1097728, issued on 12-Nov-2009, which came into effect on 12-Nov-2009.

9	Licence varied by notice	1500568 issued on 08-Aug-2011
10	Licence varied by notice	1508974 issued on 21-Mar-2013
11	Licence varied by notice	1516107 issued on 05-Sep-2013
12	Licence varied by notice	1522184 issued on 30-Oct-2014
13	Licence varied by notice	1526528 issued on 14-Jan-2015
14	Licence varied by notice	1527897 issued on 05-Feb-2015
15	Licence varied by notice	1529785 issued on 09-Apr-2015
16	Licence varied by notice	1547149 issued on 20-Dec-2016
17	Licence varied by notice	1548186 issued on 19-May-2017
18	Licence varied by notice	1553710 issued on 24-Aug-2017
19	Licence varied by notice	1569901 issued on 17-Oct-2018
20	Licence varied by notice	1575720 issued on 30-Jul-2020
21	Licence varied by notice	1605888 issued on 01-Mar-2021
22	Licence varied by notice	1608347 issued on 26-Apr-2021
23	Licence varied by notice	1613003 issued on 18-Oct-2021
24	Licence varied by notice	1617689 issued on 07-Apr-2022

Section 55 Protection of the Environment Operations Act 1997

## **Environment Protection Licence**

Licence - 11457

Licence varied by notice 1618135 issued on 13-Apr-2022 25



....

	A A AND		emises Boundary Coordinates	Premises Boundary Coo	ordinates
	and the second of the second of the second s		rner Easting Northing	Corner Easting	Northing
			30296,541.06,423,988.231298,456.26,424,803.1	1 299,001.6 2 299,776.3	6,425,006 6,424,420
	33		32 298,175.1 6,424,855.4	3 303,187.1	6,420,447
	37 24	Note of the	33 298,178.8 6,424,901.8	4 303,428.2	6,420,222
	ML 1757 31 94		34 298,459.7 6,424,804.6	5 303,436.0	6,419,092
			A Contraction	6 303,445.1 7 302,733.4	6,417,799 6,416,260
the start sha				8 301,456.8	6,416,056
The second secon	30			9 300,974.3	6,416,163
29			A STATE OF THE STATE	10 300,952.3	6,413,505
				<u>11</u> <u>300,447.8</u>	6,413,578
	la la seconda de la second		and the second s	12         300,448.4           13         296,667.5	6,412,928 6,412,852
28				14 295,868.2	6,414,205
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			15 295,269.5	6,413,902
				16 295,417.7	6,414,671
				17 295,365.6	6,414,944
27			a second states and states	18294,626.019294,493.8	6,416,036 6,417,890
				20 294,400.9	6,419,175
26				21 294,609.3	6,419,527
				22 294,949.7	6,420,278
				23 294,794.7	6,420,395
				24         294,070.9           25         294,281.4	6,421,20 6,421,20
				26 294,281.4 26 294,158.9	6,421,208
				27 294,580.2	6,422,62
25		W MARINA MARINA MARINA		28 295,362.7	6,423,31
				29 296,175.7	6,423,82
				and the set	Anne
			Millissing the St		in Contra
430				4	AL AND
1358 20					11125
				5	18 BAC
		030340340777777777777777777777777777777			Non-fri
					74
10	1854 ( <i>111114) 115</i> 115 115 115 115 115 115 115 115 11		a de la compañía de l		
	NAME AND			6	
			11111111111111111111111111111111111111		
			39/19/19/19/19/19/19/19/19/19/19/19/19/19		Mar I
	A437	86 1948			
			1000 1000 1000 1000 1000 1000 1000 100		
			///////////////////////////////////////	MM Asses	
				A Constanting	the start
				JAN SPA	
				A server	- Alasha
8		Marine Marine Marine Marine	8		
			CARE AND SHE / S	a . The second second	Contra Contra
		M	1739	RACE CONTRACTOR	
			and the second		
				P & A A	20
					Trank.
	un and an				. 18 -10
ML1593					100 Mar
16			Sewage Treatment P		1.
			Corner         Easting           1         301,437.5	Northing 6,419,801.3	
	Mana Mana Marina Ma		2 301,416.6	6,419,780.4	A STATE
			3 301,302.8	6,419,823.2	1.
15			4 301,311.1	6,419,865.0	- may -
			5 301,324.7	6,419,867.1	
the second se	///////////////////////////////////////	STATIS LATERATION AND AND AND AND AND AND AND AND AND AN	6 <u>301,383.2</u> 7 <u>301,423.9</u>	6,419,850.4	





## SEWAGE TREATMENT PLANT



FIXED FACILITIES, AND MAJOR PLANT



MT ARTHUR COAL PREMISES BOUNDARY

I, Jake Alan Robins, Identification Number 9092 A surveyor registered under the Surveying and Spatial Information Act 2002, certify that: Surveying procedures, accuracy and plan preparation, have been carried out pursuant to the standards required by the Survey and Drafting Directions(Mines) 2020 and Surveying and Spatial Information Regulation 2017





## Mt Arthur Coal Pty Limited

A.C.N. 000 181 902 A.B.N. 83 000 181 902

Thomas Mitchell Drive Muswellbrook 2333

## **EPA - PLAN OF PREMISES**

A Same	Drawn:	JR	Drawing No:	ENV-0021
	Department:	SURVEY	Scale @A3	1:40000
the second	Date:	05/12/2022	Page	1 of 2

All Coordinates MGA2020 Zone56



NP13

NP10

NP12

NP10

NP12

305525.5

6425957.4 EPL11457 Licence Point 18 - Attended Noise Monitoring 6422261.4 EPL11457 Licence Point 19 - Attended Noise Monitoring

<b>3</b> -		PARA PATRICIA	NP13	NP13	292409.5	6409176.4	EPL11457 Li	cence Point 20 - At	tended Noise Monitori	ng	- 0
		ALL ALL	NP14	NP14	289305.5	6423366.4	EPL11457 Li	cence Point 21 - At	tended Noise Monitori	ng	
13			NP15	NP15	290285.5	6422257.4	EPL11457 Li	cence Point 22 - At	tended Noise Monitori	ng	
2.00				NP16	299747.4	6426811.4	EPL11457 Li	cence Point 23 - At	tended Noise Monitori	ng	
	Cal-sugar			SW28	298190.5		1		nter River Salinity Trac	ding Scheme Monite	oring Point
				WS09	301202.5			cence Point 24 - W			
				BP09B	293042.0				rblast Overpressure (		nd Vibration (mm/s))
and a state				SW16	298708.6	6424746.4	EPL11457 Li	cence Point 26 – M	line Water Storage Da	IM	
							4				
		SEWAGE TREATMENT PLANT FIXED FACILITIES, AND MAJO	R PLANT	I, Jake Alan Robins, A surveyor register Spatial Information Surveying procedu preparation, have b to the standards re	rveying and y that: d plan pursuant irvey and	BHP	Mt Arthur Coal Pty Limited A.C.N. 000 181 902 A.B.N. 83 000 181 902 Thomas Mitchell Drive Muswellbrook 2333				
		MT ARTHUR COAL PREMISES E	Drafting Directions(Mines) 2020 and Surveying and Spatial Information Regulation 2017 Signed 05/12/2022				EPA - PLAN OF PREMISES MONITORING POINTS				
	$\square$	MONITORING POINT					· · · ·	Drawn:	JR	Drawing No:	ENV-0021
	I						1	Department:	SURVEY	Scale @A3	1:60000
	All Coordinates MGA2020 Zone56							Date:	05/12/2022	Page	2 of 2

301592.4