Licence Variation

Licence - 20095



BIG ISLAND MINING PTY LTD
ABN 12 112 787 470 ACN 112 787 470
920 MAJORS CREEK
MAJORS CREEK NSW 2622

Attention: Abigail Saunders

Notice Number 1629693

File Number EF13/4088
Date 13-Jun-2023

NOTICE OF VARIATION OF LICENCE NO. 20095

BACKGROUND

- A. BIG ISLAND MINING PTY LTD ("the licensee") is the holder of Environment Protection Licence No. 20095 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of activities at MAJORS CREEK ROAD, MAJORS CREEK, NSW, 2622 ("the premises").
- B. On 25-May-2023 the Environment Protection Authority (EPA) received an application for the variation of the licence.
- C. The EPA has reviewed the variation request and considers it appropriate to remove monitoring point 59 (SW-7) as requested.
- D. The EPA has varied the licence to incorporate above changes.

VARIATION OF LICENCE NO. 20095

- 1. By this notice the EPA varies licence No. 20095. 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:
 - **Point Condition P1.3** has been amended to remove EPA Identification No.59 (SW-7)- Water Quality Monitoring Majors Creek Downstream.

Licence Variation



 Monitoring Conditions M2.3 has been amended to remove monitoring requirements for Point 59 (SW-7) - Water Quality Monitoring Majors Creek Downstream.

Matthew Rizzuto

Acting Manager

Environment Protection Authority

(by Delegation)

INFORMATION ABOUT THIS NOTICE

- This notice is issued under section 58(5) of the Act.
- Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (http://www.epa.nsw.gov.au/prpoeo/index.htm) 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 Variation Summary





This Summary serves merely to highlight changes made to areas of this licence. Changes made to tables within the licence are indicated using underline (for additions) and Strikethrough (for deletions). While changes to conditions are indicated under subheadings such as 'New condition', 'Old condition', 'Replaced by', and ' Removed condition.

The attached licence document contains all the changes made to this licence by the attached variation notice.

2 Discharges to Air and Water and Applications to Land

Location of monitoring/discharge points and areas

Point no	Type description	Location description
-59	Water Quality Monitoring	At the location marked as "SW-7" on the map labelled
	Majors Creek Downstream	"Figure 1.1 Regional Surface Water Monitoring
		Locations" of the "EPL 20095 Sampling Locations for
		Dargues Gold Mine" for the premises dated 16 July 2021
		(EPA reference DOC21/878618)

5 Monitoring and Recording Conditions

Requirement to monitor concentration of pollutants discharged

POINT 48,49,50,51,52,			
Pollutant Name	Unit of Measure	Frequency	Sampling Method
Dissolved Oxygen	milligrams per litre	Monthly	Probe
Dissolved Oxygen	milligrams per litre	Monthly	<u>Probe</u>
pH	рН	Monthly	Probe
<u>pH</u>	рH	Monthly	<u>Probe</u>
Electrical conductivity	microsiemens per centimetre	Monthly	Probe
Electrical conductivity	microsiemens per centimetre	Monthly	<u>Probe</u>

POINT 53,54,55,56,57,

Pollutant Name	Unit of Measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Monthly	Representative sample
Alkalinity (as calcium carbonate)	milligrams per litre	Monthly	Representative sample
Aluminium	micrograms per litre	Monthly	Representative sample
<u>Aluminium</u>	micrograms per litre	Monthly	Representative sample
Arsenic	micrograms per litre	Monthly	Representative sample
<u>Arsenic</u>	micrograms per litre	Monthly	Representative sample

Licence Variation Summary





Cadmium	micrograms per litre	Monthly	Representative sample
<u>Cadmium</u>	micrograms per litre	Monthly	Representative sample
Calcium	milligrams per litre	Monthly	Representative sample
<u>Calcium</u>	milligrams per litre	Monthly	Representative sample
Chloride	milligrams per litre	Monthly	Representative sample
<u>Chloride</u>	milligrams per litre	Monthly	Representative sample
Chromium- (hexavalent)	micrograms per litre	Monthly	Representative sample
<u>Chromium</u> (hexavalent)	micrograms per litre	Monthly	Representative sample
Cobalt	micrograms per litre	Monthly	Representative sample
Cobalt	micrograms per litre	Monthly	Representative sample
Iron	micrograms per litre	Monthly	Representative sample
<u>Iron</u>	micrograms per litre	Monthly	Representative sample
Lead	micrograms per litre	Monthly	Representative sample
<u>Lead</u>	micrograms per litre	Monthly	Representative sample
Magnesium	micrograms per litre	Monthly	Representative sample
<u>Magnesium</u>	micrograms per litre	<u>Monthly</u>	Representative sample
Manganese	micrograms per litre	Monthly	Representative sample
<u>Manganese</u>	micrograms per litre	Monthly	Representative sample
Mercury	micrograms per litre	Monthly	Representative sample
<u>Mercury</u>	micrograms per litre	Monthly	Representative sample
Nickel	micrograms per litre	Monthly	Representative sample
<u>Nickel</u>	micrograms per litre	Monthly	Representative sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	Representative sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	Representative sample
Phosphorus (dissolved reactive)	milligrams per litre	Monthly	Representative sample
Phosphorus (dissolved reactive)	milligrams per litre	<u>Monthly</u>	Representative sample
Phosphorus (total)	milligrams per litre	Monthly	Representative sample
Phosphorus (total)	milligrams per litre	<u>Monthly</u>	Representative sample
Potassium	milligrams per litre	Monthly	Representative sample
<u>Potassium</u>	milligrams per litre	Monthly	Representative sample
Redox potential	millivolts	Monthly	Representative sample
Redox potential	millivolts	Monthly	Representative sample
Sodium	milligrams per litre	Monthly	Representative sample
<u>Sodium</u>	milligrams per litre	Monthly	Representative sample
Sulfate	milligrams per litre	Monthly	Representative sample
<u>Sulfate</u>	milligrams per litre	Monthly	Representative sample

Licence Variation Summary





Temperature	degrees Celsius	Monthly	Probe
<u>Temperature</u>	degrees Celsius	<u>Monthly</u>	Probe
Total Kjeldahl Nitrogen	milligrams per litre	Monthly	Representative sample
<u>Total Kjeldahl</u> <u>Nitrogen</u>	milligrams per litre	Monthly	Representative sample
Zinc	micrograms per litre	Monthly	Representative sample
<u>Zinc</u>	micrograms per litre	<u>Monthly</u>	Representative sample
Total suspended solids	milligrams per litre	Monthly	Representative sample
Total suspended solids	milligrams per litre	Monthly	Representative sample



Licence - 20095

Licence Details	
Number:	20095
Anniversary Date:	01-July

Licensee

BIG ISLAND MINING PTY LTD

920 MAJORS CREEK

MAJORS CREEK NSW 2622

Premises

DARGUES GOLD MINE

MAJORS CREEK ROAD

MAJORS CREEK NSW 2622

Scheduled Activity

Crushing, grinding or separating

Mining for minerals

Fee Based Activity	<u>Scale</u>
Crushing, grinding or separating	> 100000-500000 T annual processing capacity
Mining for minerals	> 100000-500000 T annual production capacity

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



INFO	ORMATION ABOUT THIS LICENCE	
Dic	ctionary	
	esponsibilities of licensee	
	· ariation of licence conditions	
Dui	uration of licence	
Lic	cence review	
Fee	ees and annual return to be sent to the EPA	
Tra	ansfer of licence	{
Pul	ublic register and access to monitoring data	
1	ADMINISTRATIVE CONDITIONS	
A1	What the licence authorises and regulates	
A2		
А3		
2	DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	
P1	Location of monitoring/discharge points and areas	
3	LIMIT CONDITIONS	13
L1	Pollution of waters	1
L2	2 Noise limits	13
L3	B Blasting	1
4	OPERATING CONDITIONS	16
01	1 Activities must be carried out in a competent manner	16
02	2 Maintenance of plant and equipment	1-
О3		
04	4 Effluent application to land	1 (
O5	5 Waste management	1€
5	MONITORING AND RECORDING CONDITIONS	17
M1	1 Monitoring records	17
M2	2 Requirement to monitor concentration of pollutants discharged	·1 7
МЗ	3 Testing methods - concentration limits	1 {
M4	4 Weather monitoring	<u>2</u> (
M5	5 Recording of pollution complaints	20
M6	6 Telephone complaints line	2 2
M7	7 Requirement to monitor volume or mass	<u>2</u> 1
M8	8 Other monitoring and recording conditions	2 1
6	REPORTING CONDITIONS	22



Licenc	ce - 20095	
R1	Annual return documents	<u>2</u> 2
R2	Notification of environmental harm	<u>2</u> 3
R3	Written report	2 3
7	GENERAL CONDITIONS	23
G1	Copy of licence kept at the premises or plant	23
G2	Contact number for incidents and responsible employees	<u>2</u> 4
8 I	POLLUTION STUDIES AND REDUCTION PROGRAMS	24
U1	Ambient Water Quality Assessment for the Receiving Waters of the Compensatory Flow Discharge Point	24
9 9	SPECIAL CONDITIONS	25
E1	Irrigation of Tailings Storage Facility (TSF) water	2 5
DICT	IONARY	26
Con	peral Dictionary	26



Licence - 20095

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 - 20095

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:

BIG ISLAND MINING PTY LTD

920 MAJORS CREEK

MAJORS CREEK NSW 2622

subject to the conditions which follow.



Licence - 20095

1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2.

There are a number stages to the scheduled development works of which the following stages are authorised by this licence:

:.

Note: All construction timeframes commence with notification of recommencement of the project by the Licensee and are general in nature.

Project Month 1 – 14:

- · Ground disturbing activities, including:
 - o Topsoil and subsoil stripping and stockpiling.
 - o Importing of earth materials for ground conditioning and surface preparation.
 - o Excavation and extraction of earth materials for construction and processing.
- Construction of built infrastructure.

Project Month 1 – 3:

- · Construction of surface infrastructure including:
 - o Administration and mine support buildings.
 - o Various workshops and stores sheds.
- Commencement of construction of the Spring Creek Crossing and Waste Rock Emplacement.
- Commencement of underground mining.

Project Month 4 – 14:

- · Construction of the Process Plant.
- Construction of Stage 1 of the Tailings Storage Facility.
- A1.2 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
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T annual processing capacity
Mining for minerals	Mining for minerals	> 100000 - 500000 T annual production capacity



Licence - 20095

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
DARGUES GOLD MINE
MAJORS CREEK ROAD
MAJORS CREEK
NSW 2622
LOT 1 DP 136801, LOT 2 DP 136801, LOT 3 DP 755934, LOT 82 DP 755934, LOT 83 DP 755934, LOT 113 DP 755934, LOT 114 DP 755934, LOT 143 DP 755934, LOT 193 DP 755934, PART LOT 210 DP 755934, LOT 1 DP 986483, LOT 4 DP 986483, LOT 5 DP 986483, LOT 104 DP 1100849, LOT 102 DP 1170553, LOT 103 DP 1170553, LOT 105 DP 1170553, LOT 106 DP 1170553, LOT 104 DP 1180508
DARGUES REEF GOLD MINE. PREMISES ALSO INCLUDES THE FOLLOWING: LOT 2 DP 986483 LOT 3 DP 986483 LOT 102 755934

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; andb) 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 identi-	Type of Monitoring	Type of Discharge	Location Description	
fication no.	Point	Point		



Licence - 20095

38	Dust Deposition Gauge	At the location marked "DD-1" on the map labelled "Figure 1.4 Surrounding Residences and Air Quality Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
39	Dust Deposition Gauge	At the location marked "DD-2" on the map labelled "Figure 1.4 Surrounding Residences and Air Quality Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
40	Dust Deposition Gauge	At the location marked "DD-3" on the map labelled "Figure 1.4 Surrounding Residences and Air Quality Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
41	Dust Deposition Gauge	At the location marked "DD-4" on the map labelled "Figure 1.4 Surrounding Residences and Air Quality Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
42	Dust Deposition Gauge	At the location marked "DD-5" on the map labelled "Figure 1.4 Surrounding Residences and Air Quality Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
89	High volume air sampling	South of the project site boundary at the location marked as "HVAS" on the map "Figure 1.4 Surrounding residences and air quality monitoring locations" of the "EPL Sampling Locations for Dargues Gold Mine" dated 24 August 2022 (DOC22/289272-1)

- 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.			



- 20095		
48	Groundwater Monitoring - Alluvium	At the location marked "DRWB06" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
49	Groundwater Monitoring - Alluvium	At the location marked "DRWB07" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
50	Groundwater Monitoring - Alluvium	At the location marked "DRWB08" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
51	Groundwater Monitoring - Alluvium	At the location marked "DRWB09" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
52	Groundwater Monitoring - Alluvium	At the location marked "DRWB10" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
53	Water Quality Monitoring - Spring Creek Upstream	At the location marked "SW-1" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
54	Water Volume and Quality Monitoring - Spring Creek Onsite	At the location marked "SW-2" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)



- 20095		
55	Water Quality Monitoring - Spring Creek Downstream	At the location marked "SW-3" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
56	Water Volume and Quality Monitoring - Majors Creek Upstream	At the location marked "SW-4" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
57	Water Quality Monitoring - Majors Creek	At the location marked "SW-5" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
58	Water Volume and Quality Monitoring - Majors Creek Downstream	At the location marked "SW-6" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
61	Groundwater Monitoring - Alluvium	At the location marked as "DRWB12" as located in the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
62	Groundwater Monitoring - Granodiorite Aquifer	At the location marked as "DRWB13" as located in the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
74	Water Quality Monitoring - Spillway of Sediment Basin 2	At the location marked "SB02-1" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)



- 20095		
75	Water Quality Monitoring - Spillway of Storm Water Pond 1	At the location marked "SWPO1-1" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
78	Water Quality Monitoring - Waste Rock Emplacement Sediment Basin 1	At the location marked "WRESB01-1" as located on the map labelled "Figure 1.2 Site Surface Water Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
79	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB01A" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
80	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB01B" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
81	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB02A" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
82	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB02B" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)



- 20095		
83	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB03A" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
84	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB03B" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
85	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB04A" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
86	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB04B" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
87	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB05A" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
88	Tailings Storage Facility Monitoring Bore	At the location marked "TSFMB05B" as located on the map labelled "Figure 1.3 Project Site Groundwater Monitoring Locations" of the "EPL 20095 Sampling Locations for Dargues Gold Mine" for the premises dated 16 July 2021 (EPA reference DOC21/878618)
90	Water Quality Monitoring - Tailings Storage Facility	At the location marked "TSF" as located on the map labelled "Figure 1" of the document titled "Dargues Irrigation Monitoring Map" for the premises dated 13 October 2022 (EPA reference DOC22/915548)



Licence - 20095

91	Groundwater monitoring - TSF Irrigation Area	At the location marked "WSDMB01" as located on the map labelled "Figure 1" of the document titled "Dargues Irrigation Monitoring Map" for the premises dated 13 October 2022 (EPA reference DOC22/915548)
92	Groundwater Monitoring - TSF Irrigation Area	At the location marked "WSDMB02" as located on the map labelled "Figure 1" of the document titled "Dargues Irrigation Monitoring Map" for the premises dated 13 October 2022 (EPA reference DOC22/915548)
93	TSF irrigation volume monitoring	At the location marked "Irrigation Area" as located on the map labelled "Figure 1" of the document titled "Dargues Irrigation Monitoring Map" for the premises dated 13 October 2022 (EPA reference DOC22/915548)

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.

Noise/Weather

EPA identi- fication no.	Type of monitoring point	Location description
43	Noise monitoring	Any residential premises
44	Noise monitoring	Majors Creek State Conservation Area (when in use by any person)

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 Noise limits

L2.1 Noise from the premises must not exceed the sound pressure level (noise) limits presented in the Table below. Note that the limits apply to the operation of the project and represent the sound pressure level (noise) contribution, at the nominated receiver locations in the table.

Sound Pressure Level (Noise) Limits (dB(A))



Licence - 20095

Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA1(1 minute)
Any residential premises	35	35	35	45
Majors Creek State Conservation Area (when in use by any person)	35	35	35	45

L2.2 For the purpose of Noise Limit Conditions above:

'Day' is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays;

'Evening' is defined as the period from 6pm to 10pm on any day; and

'Night' is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays.

- L2.3 The noise emission limits identified in the table above apply under meteorological conditions of:
 - a) Wind speeds up to 3 m/s at 10m above ground level; or
 - b) temperature inversion conditions of up to 3 °C/100m and wind speeds up to 2 m/s at 10m above ground level
- L2.4 For the purpose of the Condition L4.3:
 - a) The meteorological data to be used for determining meteorological conditions is the data recorded by the meteorological weather station established at the premises for the purposes of this Environment Protection Licence ("Point 59" as outlined in Weather Monitoring conditions below)
 - b) Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the *New South Wales Industrial Noise Policy* (EPA 2000).

L2.5 **Determining Compliance**

To determine compliance:

- a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located:
- i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
- ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable
- iii) within approximately 50 metres of the boundary of a National Park, Nature Reserve or State Conservation Area.
- b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade.
- c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located:
- i) at the most affected point at a location where there is no dwelling at the location; or
- ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.



Licence - 20095

- L2.6 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.
- L2.7 A breach of this licence will still occur where noise generated from the premises in excess of the appropriate limit is measured:
 - i) at a location other than an area prescribed in part (a) and part (b) of Condition L4.5; and/or
 - ii) at a point other than the most affected point at a location.

L3 Blasting

- L3.1 Surface blasting operations at the premises may only take place between 9.00am and 5.00pm Monday to Friday, excluding public holidays.
 - (Where compelling safety reasons exist, the Authority may permit a blast to occur outside the abovementioned hours. Prior written (or facsimile) request for any such blast must be made to the Authority).
- L3.2 The overpressure level from blasting operations at the premises must not exceed 120 dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L3.3 The overpressure level from blasting operations at the premises must not exceed 115 dB (Lin Peak) for more than 5% of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L3.4 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10 mm/s at any time or 1 mm/s during the Night or at anytime on Sundays or Public Holidays. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L3.5 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5 mm/s during the Day or 2 mm/s during the Evening for more than 5% of the total number of blasts over for each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L3.6 To determine compliance with condition(s) L3.2 to L3.5:
 - a) airblast overpressure and ground vibration must be measured and electronically recorded at the locations marked as "R27", "R29" and "R108" on the map labelled "Figure 1 ENVIRONMENTAL MONITORING LOCATIONS" of the Environmental Management Strategy for the premises dated 3 April 2012 (EPA reference DOC12/14651) for all blasts carried out in or on the premises; and
 - b) Instrumentation used to measure the airblast overpressure and ground vibration must meet the requirements of Australian Standard AS 2187.2-2006.
- L3.7 For the purpose of Blasting Limit Conditions above:
 - 'Day' is defined as the period from 7am to 6pm Monday to Saturday;



Licence - 20095

'Evening' is defined as the period from 6pm to 10pm on any day; and

'Night' is defined as the period from 10pm to 7am Monday to Saturday.

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 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.

O4 Effluent application to land

- O4.1 Effluent application must not occur in a manner that causes surface runoff.
- O4.2 Spray from effluent application must not drift beyond the boundary of the premises.
- O4.3 The quantity of effluent/solids applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent/solids.

For the purpose of this condition, 'effectively utilise' includes the use of the effluent/solids for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.

O5 Waste management

O5.1 The tailings storage facility must have a basal barrier or impermeable liner with an equivalent permeability of 600mm clay of permeability 1x10⁻⁸metres per second.



Licence - 20095

O5.2 The seepage collection pond, leachate collection ponds, processing collection ponds and any other ponds holding contaminated water must have a basal barrier or impermeable liner with an equivalent permeability of 900mm clay of permeability 1x10⁻⁹ metres per second.

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 38,39,40,41,42

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19

POINT 89

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Monthly	AM-18



Licence - 20095

M2.3 Water and/ or Land Monitoring Requirements

POINT 48,49,50,51,52,53,54,55,56,57,58,61,62,79,80,81,82,83,84,85,86,87,88,91,92

Pollutant	Units of measure	Frequency	Sampling Method
Dissolved Oxygen	milligrams per litre	Monthly	Probe
Electrical conductivity	microsiemens per centimetre	Monthly	Probe
рН	рН	Monthly	Probe

POINT 48,49,50,51,52,61,62,79,80,81,82,83,84,85,86,87,88,91,92

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	micrograms per litre	Quarterly	Representative sample
Arsenic	micrograms per litre	Quarterly	Representative sample
Cadmium	micrograms per litre	Quarterly	Representative sample
Calcium	milligrams per litre	Quarterly	Representative sample
Chloride	milligrams per litre	Quarterly	Representative sample
Chromium	micrograms per litre	Quarterly	Representative sample
Cobalt	micrograms per litre	Quarterly	Representative sample
Iron	micrograms per litre	Quarterly	Representative sample
Lead	micrograms per litre	Quarterly	Representative sample
Magnesium	micrograms per litre	Quarterly	Representative sample
Manganese	micrograms per litre	Quarterly	Representative sample
Mercury	micrograms per litre	Quarterly	Representative sample
Nickel	micrograms per litre	Quarterly	Representative sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Quarterly	Representative sample
Phosphorus (dissolved reactive)	milligrams per litre	Quarterly	Representative sample
Phosphorus (total)	milligrams per litre	Quarterly	Representative sample
Potassium	milligrams per litre	Quarterly	Representative sample
Redox potential	millivolts	Quarterly	Representative sample
Sodium	milligrams per litre	Quarterly	Representative sample
Sulfate	milligrams per litre	Quarterly	Representative sample
Temperature	degrees Celsius	Quarterly	Probe
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	Representative sample
Zinc	micrograms per litre	Quarterly	Representative sample

POINT 53,54,55,56,57,58,90

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Monthly	Representative sample
Aluminium	micrograms per litre	Monthly	Representative sample
Arsenic	micrograms per litre	Monthly	Representative sample



Licence - 20095

Cadmium	micrograms per litre	Monthly	Representative sample
Calcium	milligrams per litre	Monthly	Representative sample
Chloride	milligrams per litre	Monthly	Representative sample
Chromium	micrograms per litre	Monthly	Representative sample
(hexavalent)			
Cobalt	micrograms per litre	Monthly	Representative sample
Iron	micrograms per litre	Monthly	Representative sample
Lead	micrograms per litre	Monthly	Representative sample
Magnesium	micrograms per litre	Monthly	Representative sample
Manganese	micrograms per litre	Monthly	Representative sample
Mercury	micrograms per litre	Monthly	Representative sample
Nickel	micrograms per litre	Monthly	Representative sample
Nitrate + nitrite	milligrams per litre	Monthly	Representative sample
(oxidised nitrogen)			
Phosphorus	milligrams per litre	Monthly	Representative sample
(dissolved reactive)			
Phosphorus (total)	milligrams per litre	Monthly	Representative sample
Potassium	milligrams per litre	Monthly	Representative sample
Redox potential	millivolts	Monthly	Representative sample
Sodium	milligrams per litre	Monthly	Representative sample
Sulfate	milligrams per litre	Monthly	Representative sample
Temperature	degrees Celsius	Monthly	Probe
Total Kjeldahl	milligrams per litre	Monthly	Representative sample
Nitrogen			
Total suspended	milligrams per litre	Monthly	Representative sample
solids			
Zinc	micrograms per litre	Monthly	Representative sample

POINT 74,75,78

Pollutant	Units of measure	Frequency	Sampling Method
Electrical conductivity	microsiemens per centimetre	Daily during any discharge	Probe
рН	pH	Daily during any discharge	Probe
TSS	milligrams per litre	Daily during any discharge	Probe
Turbidity	nephelometric turbidity units	Daily during any discharge	Probe

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



Licence - 20095

- 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 2022* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".
- 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 The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in this section.
- M4.2 For each monitoring point specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency opposite in the other columns.

Point 58 - Automated Weather Station

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Air temperature at 2m	°C	Continuous	15 minute	AM-4
Wind direction	0	Continuous	15 minute	AM-2 & AM-4
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4
Sigma theta	0	Continuous	15 minute	AM-2 & AM-4
Rainfall	mm	Continuous	15 minute	AM-4
Relative humidity	%	Continuous	15 minute	AM-4
Air temperature at 10m	°C	Continuous	15 minute	AM-2 & AM-4

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;



Licence - 20095

- 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 after the date of the issue of this licence.

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.

POINT 93

Frequency	Unit of Measure	Sampling Method
Weekly	litres	Special Method 1

M7.2 For the purposes of the table(s) above Special Method 1 means to monitor with a Mechanical flow meter.

M8 Other monitoring and recording conditions

Noise Compliance Monitoring

M8.1 A noise compliance assessment must be submitted to the EPA within three months of commencement of operations at the premises. The assessment shall be prepared by a suitably qualified and experienced acoustic consultant and must assess compliance with noise limits in this licence.



Licence - 20095

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 - 20095

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- 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.
- R2.2 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.

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.



Licence - 20095

- 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 Contact number for incidents and responsible employees

- G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
 - a) respond at all times to incidents relating to the premises; and
 - b) contact the licensee's senior employees or agents authorised at all times to:
 - i) speak on behalf of the licensee; and
 - ii) provide any information or document required under this licence.
- G2.2 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

8 Pollution Studies and Reduction Programs

U1 Ambient Water Quality Assessment for the Receiving Waters of the Compensatory Flow Discharge Point

- U1.1 Part 1 The licensee must prepare an "Ambient Water Quality Assessment for the Receiving Waters of the Compensatory Flow Discharge Point" prior to commissioning of the compensatory flow discharge. The intent of the EPA is to utilise the assessment to develop appropriate water quality performance criteria for compensatory flow discharges to Majors Creek that will achieve environmental objectives and environmental values of Majors Creek.
- U1.2 Part 2 The assessment must include but not be limited to the following matters:
 - Identify the Water Quality Objectives (WQO) for the receiving waters of Majors Creek in accordance with the guideline (http://www.environment.nsw.gov.au/ieo/index.htm) and describe the state of Majors Creek and relate this to the relevant WQO to determine whether the WQO are being achieved. Issues to include in the description of the receiving waters may include: specific human uses such as drinking water off-takes; sensitive ecosystems or species conservation values; historic river flow data where available for the receiving waters and monitoring data collected by the licensee.
 - Undertake water quality monitoring of the receiving waters of Majors Creek across a range of flow variability, seasonal variation and weather conditions to determine ambient concentrations of potential pollutants including total suspended solids and electrical conductivity.
 - Provide details of the compensatory flow that are essential for predicting and assessing impacts to Majors Creek, including the quantity and physio-chemical properties of potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to WQO in the ambient waters (as defined at www.environment.nsw.gov.au/ieo), and using technical criteria derived from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, ANZECC 2000 (ANZECC Guidelines).
 - · Identify the indicators and associated trigger values or criteria for the identified environmental values (sourced from the ANZECC Guidelines).



Licence - 20095

- Outline the nature and degree of impact that any proposed discharges will have on the receiving environment. Impacts should be assessed against the relevant ambient water quality outcomes and there should be a demonstration of how the proposal will be designed and operated to: protect the WQO of Majors Creek where the WQO are currently being achieved; and contribute towards achievement of the WQO over time where they are not currently being achieved.
- Demonstrate how (procedures, controls etc.) water discharged to Majors Creek will ensure the ANZECC Guidelines water quality criteria for relevant chemical and non-chemical parameters (particularly electrical conductivity and total suspended solids) are met at the edge of the initial mixing zone of the discharge.
- The EPA acknowledges all previous ambient water quality data collection and assessment work that has been undertaken by the licensee and considers that the previous work should be utilised in the assessment.
- Recommend discharge limits based on the findings of the assessment.
- U1.3 Part 3 Submit the Ambient Water Quality Assessment to the "Manager, South East Region of the EPA" at PO BOX 622 Queanbeyan 2620 OR Queanbeyan@environment.nsw.gov.au prior to commissioning of the Compensatory Flow Discharge.

9 Special Conditions

E1 Irrigation of Tailings Storage Facility (TSF) water

E1.1 Until 31 October 2023, the Licensee is permitted to irrigate TSF water at the premises' irrigation area.

Note: The intent of this condition is to allow for the irrigation of TSF water as a contingency measure to increase the storage capacity within the TSF.

E1.2 By 30 August 2023, the Licensee must submit a TSF irrigation validation report to the EPA. The purpose of the report is to validate the modelling and assumptions made in the document titled 'Dargues Mine TSF Irrigation Sustainability Assessment' (EPA ref. DOC22/523299). The validation report must utilise the data collected from the water quality monitoring program for the TSF irrigation - EPA monitoring point(s) 90 - 93.

As recommended by the GHD report 24 April 2023, a soil moisture monitoring program and additional metals monitoring must also be implemented to validate the TSF irrigation model.

Note: The EPA intends to use the validation report to inform it's decision about any future irrigation of TSF water.



Licence - 20095

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

Means the Protection of the Environment Operations Act 1997 Act

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

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



Licence - 20095	
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
	To all the will be a second of the desired of the d

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.

TM



Licence - 20095

TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste
Wellhead	Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.

Mr Julian Thompson

Environment Protection Authority

(By Delegation)

Date of this edition: 18-May-2012



End	End Notes				
2	Licence varied by notice	1506973 issued on 25-Jun-2012			
3	Licence fee period change	ed by notice 1506998 on 27-Jun-2012			
4	Licence varied by notice	1515231 issued on 18-Jul-2013			
5	Licence varied by notice	1517039 issued on 13-Sep-2013			
6	Licence varied by notice	1521947 issued on 23-May-2014			
7	Licence varied by notice	1549033 issued on 28-Apr-2017			
8	Licence varied by notice	1564247 issued on 02-May-2018			
9	Licence varied by notice	1568317 issued on 27-Aug-2018			
10	Licence varied by notice	1570903 issued on 16-Nov-2018			
11	Licence varied by notice	1577699 issued on 18-Jun-2019			
12	Licence varied by notice	1588863 issued on 09-Dec-2019			
13	Licence varied by notice	1591280 issued on 12-Mar-2020			
14	Licence varied by notice	1611449 issued on 06-Dec-2021			
15	Licence varied by notice	1618077 issued on 24-Aug-2022			
16	Licence varied by notice	1623000 issued on 28-Oct-2022			
17	Licence varied by notice	1628915 issued on 19-May-2023			