

Environment Protection Licence

Licence - 20169

Licence Details	
Number:	20169
Anniversary Date:	23-October

Licensee
TOMINGLEY GOLD OPERATIONS PTY LTD
PO BOX 59
PEAK HILL NSW 2869

Premises
TOMINGLEY GOLD MINE
TOMINGLEY WEST ROAD
TOMINGLEY NSW 2869

Scheduled Activity
Crushing, grinding or separating
Mineral processing
Mining for minerals

Fee Based Activity	Scale
Crushing, grinding or separating	> 500000-2000000 T annual processing capacity
Mineral processing	> 500000-2000000 T annual processing capacity
Mining for minerals	> 500000-2000000 T annual production capacity

Region
Central West
L102, 346 PANORAMA AVENUE
BATHURST NSW 2795
Phone: (02) 6333 3800
Fax: (02) 6333 3809
PO Box 1388
BATHURST NSW 2795



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Information about this licence

Dictionary

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

Responsibilities of licensee

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

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

Variation of licence conditions

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

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

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

Duration of licence

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

Licence review

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

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

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

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

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

Transfer of licence

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

Public register and access to monitoring data

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

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

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

This licence is issued to:

TOMINGLEY GOLD OPERATIONS PTY LTD
PO BOX 59
PEAK HILL NSW 2869

subject to the conditions which follow.

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1 Administrative Conditions

A1 What the licence authorises and regulates

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

There are Initial site works: Establishment of the processing plant, tailings storage facility and ancillary infrastructure including water pipeline, internal roads, offices and workshops. stages to the scheduled development works of which the following stages are authorised by this licence:

Construction of access road around caloma 2 pit, construction of drains and drain re-alignment and construction of Sediment Basin 4 and 7 (SP4 and SP7) to north of Caloma Central Drain (GR 614691, 6393621). Refer Trim: DOC16/377995.

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	> 500000 - 2000000 T annual processing capacity
Mineral processing	Mineral processing	> 500000 - 2000000 T annual processing capacity
Mining for minerals	Mining for minerals	> 500000 - 2000000 T annual production capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
TOMINGLEY GOLD MINE
TOMINGLEY WEST ROAD
TOMINGLEY
NSW 2869
PART LOT 1 DP 254193, LOT 103 DP 755110, LOT 104 DP 755110, LOT 105 DP 755110, LOT 112 DP 755110, PART LOT 122 DP 755110, LOT 160 DP 755110, LOT 161 DP 755110, LOT 162 DP 755110, LOT 163 DP 755110, LOT 1 DP 1151198, PART LOT 2 DP 1151198, PART LOT 3 DP 1151198

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A3 Information supplied to the EPA

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

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

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

Air

EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Meteorological Weather Station		Onsite Tomingley Gold Operations

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

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

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
2	Discharge and monitoring to tailing storage facility.	Discharge and monitoring to tailing storage facility.	Located South of the Process and Raw water dams, as shown on Map titled "Water Monitoring Locations", DOC13/35050.

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3		Discharge to Process Water Dam	Process Water Dam, South of processing plant. Shown as 'Process water pond' on map titled "Plant Area Design and Setout Plan" provided in the Water Management Plan DOC13/35050.
4	Sediment Basin 1 (SP1)	Sediment Basin 1 (SP1)	North West corner of the Tailings Storage Facility, as shown on map titled "Water Monitoring Locations", DOC13/35050.
5	Sediment Basin 2 (SP2)	Sediment Basin 2 (SP2)	South West corner of the Tailings Storage Facility, as shown on map titled "Water Monitoring Locations", DOC13/35050
6	Sediment Basin 3 (SP3)	Sediment Basin 3 (SP3)	South West of Wyoming One Pit, as shown on map titled "Water Monitoring Locations", DOC13/35050
7	Sediment Basin 4 (SP4)	Sediment Basin 4 (SP4)	South West corner of Waste Rock Emplacement 3, as shown on map titled "Water Monitoring Locations", DOC13/35050
8	Sediment Basin 5 (SP5)	Sediment Basin 5 (SP5)	North West corner of Waste Rock Emplacement 3, between topsoil dumps, as shown on map titled "Water Monitoring Locations", DOC13/35050
9	Groundwater Monitoring Bore (WYMB01)		Groundwater monitoring bore located East of McNivens Lane, south of mine site, as shown on map titled "Water Monitoring Locations", DOC13/35050
10	Groundwater Monitoring Bore (WYMB02)		East side of Wyoming Pit 1, as shown on map titled "Water Monitoring Locations", DOC13/35050
11	Groundwater Monitoring Point (WYMB03)		Western side Newell Highway, North East of Waste Rock Emplacement 2, as shown on map titled "Water Monitoring Locations", DOC13/35050
12	Groundwater Monitoring Bore (WYMB04)		North East side of Waste Rock Emplacement 2, as shown on map titled "Water Monitoring Locations", DOC13/35050
13	Groundwater Monitoring Bore (WYMB06)		Eastern side Newell Highway, North of WYMB01, as shown on map titled "Water Monitoring Locations", DOC13/35050
14	Groundwater Monitoring Point (WYMB10)		North West corner of mine site, South of Tomingley West Road, as shown on map titled "Water Monitoring Locations", DOC13/35050

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15	Groundwater Monitoring Location (GDCMB01)		North West corner of mine site, near WYMB10, as shown on map titled "Water Monitoring Locations", DOC13/35050
16	Surface Water Monitoring (SW1)		West of township of Tomingley, downstream of Gundong Creek diversion, as shown on map titled "Water Monitoring Locations", DOC13/35050.
17	Surface Water Monitoring (SW2)		West of mine site and Tailings Storage Facility, upstream of Gundong Creek Diversion, as shown on map titled "Water Monitoring Locations", DOC13/35050.
18	Sediment Basin 7 (SB7)	Sediment Basin 7 (SB7)	Sediment Basin 7 (SB7) located north of caloma central drain as shown on Map titled "General Arrangements" (as per drawing no. 22-18274-C003 in Erosion and Sediment Control Plan). DOC16/377995
19	Discharge and monitoring to Wyoming Central Dam	Discharge and monitoring to Wyoming Central Dam	Wyoming Central Dam located north of Wyoming One Pit as shown on plan titled "Wyoming Central Dam Upgrade General Arrangement - Drawing number 32-1790400-C101" dated 7 September 2016 (TRIM ref DOC16/543077-03).

P1.4 Note: The monitoring requirements may be modified by the EPA subject to ongoing review of licence conditions and monitoring results.

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 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.

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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\.

L2.4 Water and/or Land Concentration Limits

POINT 2

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Cyanide (weak acid dissociable)	milligrams per litre		20		30

POINT 4,5,6,7,8,18

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Arsenic	milligrams per litre				0.024
Cadmium	milligrams per litre				0.0002
Copper	milligrams per litre				0.0014
Electrical conductivity	microsiemens per centimetre				350
Lead	milligrams per litre				0.0034
Nickel	milligrams per litre				0.011
Nitrogen (total)	micrograms per litre				250
pH	pH				6.5- 8.5
Phosphorus (total)	micrograms per litre				20
Total suspended solids	milligrams per litre				50
Zinc	milligrams per litre				0.008

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POINT 19

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Cyanide (weak acid dissociable)	milligrams per litre		20		30

L3 Waste

L3.1 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	General or Specific exempted waste	Waste that meets all the conditions of a Resource Recovery Exemption under clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption	NA

L4 Noise limits

L4.1 *Limit Conditions*

Until 30 June 2019, noise generated at the premises must not exceed the noise limits in the table below.

The location groups referred to in the tables below are indicated in Project Approval 05-0199, schedule 3 condition 3 and 3A respectively. (Trim Reference DOC16/338008).

Location and Noise Assessment Group	Day LAeq (15 minute)	Evening LAeq (15 minute)	Night LAeq (15 minute)	Night LA1 (1 minute)
NAG A, R1, R4, R6	36	36	36	45
NAG A, R5	37	37	37	45

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NAG A, All other receivers	35	35	35	45
NAG B, All receivers	36	36	36	45
NAG C, R3	49	40	40	45
NAG C, R27	46	38	38	45
NAG C, R28	46	39	39	45
NAG C, R29	48	40	40	45
NAG C, R33	46	39	39	45
NAG C, R41	46	38	38	45
NAG C, All other receivers	46	37	37	45
NAG D, R23, R32	43	39	39	46
NAG D, All other receivers	43	38	38	46
All other residential receivers	35	35	35	45

L4.2 From 30 June 2019, unless agreed otherwise by the Secretary, the proponent shall ensure that the noise generated by the project does not exceed the criteria in table below at any residence on privately owned land (except for the land identified in Table 1 of project approval 05-0199)

Location and Noise Assessment Group	Day LAeq (15 minute)	Evening LAeq (15 minute)	Night LAeq (15 minute)	Night LA1(1 minute)
NAG A, All receivers	35	35	35	45
NAG B, All receivers	36	35	35	45
NAG C, All receivers	45	35	35	45
NAG D, All receivers	43	38	36	45

Note: Refer to Table 2 and Table 2A in Project Approval 05-0199, schedule 3, condition 3 and 3A, respectively for noise locations. However, these criteria do not apply if the Proponent has an agreement with the relevant owner(s) of these residences/ land to generate higher noise levels, and the Proponent has advised the Department of Planning and Infrastructure and EPA in writing of the terms of this agreement.

L4.3 For the purpose of condition L3.1;

- 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 6pm to 10pm.

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

- L4.4 The noise limits set out in condition L3.1 apply under all meteorological conditions except for the following:
- a) Wind speeds greater than 3 metres/second at 10 metres above ground level.
 - b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
 - c) Stability category G temperature inversion conditions.

- L4.5 For the purposes of condition L3.3:
Data recorded by a meteorological station installed on site must be used to determine meteorological conditions; and
Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

- L4.6 To determine compliance:
- a) with the Leq(15 minute) noise limits in condition L3.1, the noise measurement equipment must be located:
 - approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
 - 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
 - within approximately 50 metres of the boundary of a National Park or a Nature Reserve.
 - b) with the LA1(1 minute) noise limits in condition L3.1, the noise measurement equipment must be located within 1 metre of a dwelling façade.
 - c) with the noise limits in condition L3.1 the noise measurement equipment must be located,
 - at the most affected point at a location where there is no dwelling at the location; or
 - at the most affected point within an area at a location prescribed by conditions L3.5(a) or L3.5(b).

- L4.7 A non-compliance of condition L3.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:
- at a location other than an area prescribed by conditions L3.5(a) and L3.5(b); and/or
 - at a point other than the most affected point at a location.

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L4.8 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.

L5 Blasting

L5.1 The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent 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

L5.2 The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. 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.

L5.3 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent 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.

L5.4 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. 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.

L5.5 Surface blasting at the premises may only take place between 9:00am - 5pm Monday to Saturday. Blasting is not permitted on Sundays or Public Holidays.

L5.6 Underground blasting at the premises is permitted at anytime.

L5.7 Blasting outside of the hours specified in condition L5.5 can only take place with the written approval of the EPA.

L5.8 The blasting limits do not apply if the Proponent has a written agreement with the relevant landowner, and has advised the Department of Planning and Environment and EPA in writing of the terms of this agreement.

L5.9 Surface blasting at the premises is limited to a maximum of 3 blasts per day, unless an additional blast is required following a blast misfire.
This condition does not apply to blasts that generate ground vibration of 0.5mm/s or less at any residence on privately owned land, or blasts required to ensure the safety of the site or its workers.

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L6 Potentially offensive odour

L6.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environmental protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

L6.2 No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.

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.

O3.2 All dust control equipment must be operable at all times with the exception of shutdowns required for maintenance.

O3.3 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

O4 Other operating conditions

O4.1 Bunding Requirements

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All above ground storage facilities containing flammable and combustible liquids must be banded in accordance with Australian Standard AS 1940-2004.

O4.2 A minimum of 500mm freeboard must be maintained on the Tailings Storage Facility at all times.

O4.3 A minimum of 500mm freeboard must be maintained on the process water dam at all times.

O4.4 Stormwater/Sediment - Construction Phase

A stormwater management scheme must be prepared for all aspects of the construction phase of the development and must be implemented. Implementation of the scheme must mitigate the impacts of stormwater runoff from and within the premises during the construction. The scheme should be consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the scheme should be consistent with the guidance contained in Managing Urban Stormwater: Control Handbook (available from the EPA)

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 Water and/ or Land Monitoring Requirements

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Pollutant	Units of measure	Frequency	Sampling Method
Cyanide (weak acid dissociable)	milligrams per litre	Daily during any discharge	Grab sample

POINT 4,5,6,7,8,18

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Special Frequency 1	Grab sample
Arsenic	milligrams per litre	Special Frequency 1	Grab sample
Boron	milligrams per litre	Special Frequency 1	Grab sample
Cadmium	milligrams per litre	Special Frequency 1	Grab sample
Chromium	milligrams per litre	Special Frequency 1	Grab sample
Copper	milligrams per litre	Special Frequency 1	Grab sample
Cyanide (total)	milligrams per litre	Special Frequency 1	Grab sample
Cyanide (weak acid dissociable)	milligrams per litre	Special Frequency 1	Grab sample
Electrical conductivity	microsiemens per centimetre	Special Frequency 1	In situ
Lead	milligrams per litre	Special Frequency 1	Grab sample
Mercury	milligrams per litre	Special Frequency 1	Grab sample
Molybdenum	milligrams per litre	Special Frequency 1	Grab sample
Nickel	milligrams per litre	Special Frequency 1	Grab sample
Nitrogen (total)	micrograms per litre	Special Frequency 1	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	In situ
Phosphorus (total)	micrograms per litre	Special Frequency 1	Grab sample
Selenium	milligrams per litre	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Zinc	milligrams per litre	Special Frequency 1	Grab sample

POINT 9,10,11,12,13,14,15

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Quarterly	Grab sample
Ammonia	milligrams per litre	Quarterly	Grab sample
Arsenic	milligrams per litre	Quarterly	Grab sample
Bicarbonate	milligrams per litre	Quarterly	Grab sample
Cadmium	milligrams per litre	Quarterly	Grab sample
Calcium (dissolved)	milligrams per litre	Quarterly	Grab sample
Carbonate	milligrams per litre	Quarterly	Grab sample
Chloride	milligrams per litre	Quarterly	Grab sample
Chromium	milligrams per litre	Quarterly	Grab sample
Copper	milligrams per litre	Quarterly	Grab sample
Cyanide (free)	milligrams per litre	Quarterly	Grab sample

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Cyanide (total)	milligrams per litre	Quarterly	Grab sample
Cyanide (weak acid dissociable)	milligrams per litre	Quarterly	Grab sample
Electrical conductivity	microsiemens per centimetre	Quarterly	In situ
Hardness (as calcium carbonate)	milligrams per litre	Quarterly	Grab sample
Lead	milligrams per litre	Quarterly	Grab sample
Magnesium (dissolved)	milligrams per litre	Quarterly	Grab sample
Mercury	milligrams per litre	Quarterly	Grab sample
Nickel	milligrams per litre	Quarterly	Grab sample
Nitrate	milligrams per litre	Quarterly	Grab sample
pH	pH	Quarterly	In situ
Phosphate	milligrams per litre	Quarterly	Grab sample
Potassium (dissolved)	milligrams per litre	Quarterly	Grab sample
Sodium (dissolved)	milligrams per litre	Quarterly	Grab sample
Standing Water Level	metres	Quarterly	In situ
Sulfate	milligrams per litre	Quarterly	Grab sample
Total dissolved solids	milligrams per litre	Quarterly	Grab sample
Total Iron	milligrams per litre	Quarterly	Grab sample
Total suspended solids	milligrams per litre	Quarterly	Grab sample
Zinc	milligrams per litre	Quarterly	Grab sample

POINT 16,17

Pollutant	Units of measure	Frequency	Sampling Method
Arsenic (total)	milligrams per litre	Special Frequency 1	Grab sample
Cadmium	milligrams per litre	Special Frequency 1	Grab sample
Copper	milligrams per litre	Special Frequency 1	Grab sample
Cyanide (total)	milligrams per litre	Special Frequency 1	Grab sample
Electrical conductivity	microsiemens per centimetre	Special Frequency 1	In situ
Lead	milligrams per litre	Special Frequency 1	Grab sample
Nickel	milligrams per litre	Special Frequency 1	Grab sample
Nitrogen (total)	micrograms per litre	Special Frequency 1	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	In situ
Phosphorus (total)	micrograms per litre	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Zinc	milligrams per litre	Special Frequency 1	Grab sample

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Pollutant	Units of measure	Frequency	Sampling Method
Cyanide (weak acid dissociable)	milligrams per litre	Daily during any discharge	Grab sample

M2.3 For the purpose of the Table above

Special Frequency 1 = During Discharge

M3 Testing methods - concentration limits

M3.1 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 Environmental monitoring

M4.1 *To assess compliance with Condition L3.1, attended noise monitoring must be undertaken in accordance with Conditions L3.5 and:*

- a) at each one of the locations listed in Condition L3.1;
- b) occur annually in a reporting period;
- c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of:
 - 1.5 hours during the day;
 - 30 minutes during the evening; and
 - 1 hour during the night.
- d) occur for three consecutive operating days.

M5 Weather monitoring

M5.1 For each point specified in the table below 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, specified opposite in the other columns.

Weather - Monitoring Point 1 - Weather Station on the mine site

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4

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Wind direction @ 10 metres	Degrees	Continuous	15 minute	AM-2 & AM-4
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4
Additional requirements -Siting -Measurement				AM-1 & AM-4 AM-2 & AM-4

M6 Recording of pollution complaints

- M6.1 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.
- M6.2 The record must include details of the following:
- the date and time of the complaint;
 - the method by which the complaint was made;
 - any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - the nature of the complaint;
 - the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - if no action was taken by the licensee, the reasons why no action was taken.
- M6.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M6.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M7 Telephone complaints line

- M7.1 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.
- M7.2 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.
- M7.3 The preceding two conditions do not apply until 3 months after the date of the issue of this licence.

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:

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

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

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

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

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

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

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

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

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

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

R2 Notification of environmental harm

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

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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 the incident occurred.

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.

R4 Other reporting conditions

R4.1 Noise Monitoring Report

A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the yearly monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include:

- a) an assessment of compliance with noise limits presented in Condition L3.1; and

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b) an outline of any management actions taken within the monitoring period to address any exceedences of the limits contained in Condition L3.1.

R4.2 Reporting Fauna Deaths or Injury

The licensee must report any incident of death or injury (including bogging or miring) of fauna (avian or terrestrial) associated with the Tailing Impoundment or tailings runoff dam by telephoning the EPA's Pollution Line 131 555 as soon as the licensee becomes aware of the incident.

The licensee must provide written details of the notification with respect of the above condition to the EPA within 7 days of the date which the incident occurred

7 General Conditions

G1 Copy of licence kept at the premises or plant

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

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

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

G2 Signage

G2.1 The location of each Monitoring and Discharge point must be clearly marked by signs that indicate the point identification number used in this licence and be located as close as practical to the point.

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Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
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

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flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
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
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

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

Mr Bradley Tanswell

Environment Protection Authority

(By Delegation)

Date of this edition: 23-October-2012

End Notes

2	Licence varied by notice	1516206 issued on 04-Sep-2013
3	Licence varied by notice	1544045 issued on 02-Sep-2016
4	Licence varied by notice	1550223 issued on 20-Mar-2017
5	Licence format updated on	08-Oct-2018
6	Licence varied by notice	1574057 issued on 07-Jan-2019