

# Environment Protection Licence

Licence - 21266

## Licence Details

Number:	21266
Anniversary Date:	09-May

## Licensee

SNOWY HYDRO LIMITED

PO BOX 332

COOMA NSW 2630

## Premises

SNOWY 2.0 PUMPED HYDRO POWER STATION TALBINGO  
AND TANTANGARA

KOSCIUSZKO NATIONAL PARK AND ROCK FOREST

KOSCIUSZKO NSW 2642

## Scheduled Activity

Electricity generation

## Fee Based Activity

## Scale

Generation of electrical power otherwise than from coal, diesel or gas

> 4000 GWh annual generating  
capacity

## Contact Us

NSW EPA

6 Parramatta Square

10 Darcy Street

PARRAMATTA NSW 2150

Phone: 131 555

Email: [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au)

Locked Bag 5022

PARRAMATTA NSW 2124



# Environment Protection Licence

Licence - 21266

<b>INFORMATION ABOUT THIS LICENCE</b>	4
Dictionary	4
Responsibilities of licensee	4
Variation of licence conditions	4
Duration of licence	4
Licence review	4
Fees and annual return to be sent to the EPA	4
Transfer of licence	5
Public register and access to monitoring data	5
<b>1 ADMINISTRATIVE CONDITIONS</b>	<b>6</b>
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	7
A3 Other activities	8
A4 Information supplied to the EPA	8
<b>2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</b>	<b>8</b>
P1 Location of monitoring/discharge points and areas	8
<b>3 LIMIT CONDITIONS</b>	<b>15</b>
L1 Pollution of waters	15
L2 Concentration limits	15
L3 Volume and mass limits	16
<b>4 OPERATING CONDITIONS</b>	<b>17</b>
O1 Activities must be carried out in a competent manner	17
O2 Maintenance of plant and equipment	17
O3 Dust	17
O4 Waste management	17
O5 Other operating conditions	17
<b>5 MONITORING AND RECORDING CONDITIONS</b>	<b>18</b>
M1 Monitoring records	18
M2 Requirement to monitor concentration of pollutants discharged	19
M3 Testing methods - concentration limits	21
M4 Recording of pollution complaints	21
M5 Telephone complaints line	21
M6 Requirement to monitor volume or mass	21
<b>6 REPORTING CONDITIONS</b>	<b>22</b>
R1 Annual return documents	22



# Environment Protection Licence

Licence - 21266

R2	Notification of environmental harm	23
R3	Written report	23
R4	Other reporting conditions	24
<b>7</b>	<b>GENERAL CONDITIONS</b>	<b>25</b>
G1	Copy of licence kept at the premises or plant	25
G2	Other general conditions	25
<b>8</b>	<b>POLLUTION STUDIES AND REDUCTION PROGRAMS</b>	<b>25</b>
U1	Assessment of Water Reuse and Basin Maintenance Activities	25
<b>9</b>	<b>SPECIAL CONDITIONS</b>	<b>27</b>
E1	Lining requirements for the Ravine Bay, Tantangara and Rock Forest Permanent Spoil Emplacement Areas	27
E2	Capping Requirements for the Ravine Bay, Tantangara and Rock Forest Permanent Spoil Emplacement Areas	27
E3	Nitrogen Management Plan	27
E4	Reservoir discharge limit validation and nutrient loading monitoring program	28
	<b>DICTIONARY</b>	<b>29</b>
	General Dictionary	29

# Environment Protection Licence

---

Licence - 21266

## 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).



# Environment Protection Licence

Licence - 21266

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:

<b>SNOWY HYDRO LIMITED</b>
<b>PO BOX 332</b>
<b>COOMA NSW 2630</b>

subject to the conditions which follow.

# Environment Protection Licence

Licence - 21266

## 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:

Main Works - Electricity Generation.

A1.2 There are seven (7) main stages to the scheduled development works listed in A1.3 at the premises listed in A2.

A1.3 Prior to commencing each stage to the scheduled development works (or subsection of that stage), the licensee must receive written notification from the EPA that it has no objection to the commencement of works. A note has been placed next to all stages or subsections that have commenced for transparency. The stages and their subsections are:

1. Process and sewage treatment plants (including diffuser installation):
  - a. Lobs Hole (commenced)
  - b. Tantangara (commenced)
  - c. Marica (commenced)
  
2. Construction facilities and internal access:
  - a. Talbingo portal and construction support area (commenced)
  - b. Lobs Hole main yard (commenced)
  - c. ECVT portal (including cable yard and substations) (commenced)
  - d. MAT portal and construction support area (commenced)
  - e. Marica construction support areas (commenced)
  - f. Tantangara portal and construction support areas (commenced)
  
3. Tunnelling and subsurface works:
  - a. Talbingo adit and tailrace tunnel (commenced)
  - b. MAT (commenced)
  - c. ECVT (commenced)
  - d. Tailrace surge tank (commenced)
  - e. Headrace surge tank (commenced)
  - f. Headrace tunnel (commenced)
  - g. Tantangara adit (commenced)
  - h. Marica adit (commenced)
  
4. Reservoir works:
  - a. Talbingo water intake and associated structures (commenced)
  - b. Talbingo barge launch
  - c. Tantangara water intake and associated structures (commenced)
  - d. Tantangara barge launch
  
5. Spoil emplacement areas:
  - a. Ravine Bay (commenced)
  - b. GFO1 (commenced)

# Environment Protection Licence

Licence - 21266

- c. Lobs Hole (commenced)
- d. Tantangara (commenced)
- e. Rock Forest (commenced)

## 6. Communication lines:

- a. MAT portal to Marica to Snowy Mountains Highway (commenced)
- b. Snowy Mountains Highway to Tantangara Reservoir (commenced)
- c. Tantangara Reservoir to Tantangara Road
- d. Link Road
- e. Link Road to Cabramurra

## 7. Road and bridge works:

- a. Lobs Hole Road North (commenced)
- b. Ravine Road (commenced)
- c. Tantangara Road (commenced)
- d. Marica Road West (commenced)
- e. Marica Trail (commenced)

A1.4 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
Electricity generation	Generation of electrical power otherwise than from coal, diesel or gas	> 4000 GWh annual generating capacity

## A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
SNOWY 2.0 PUMPED HYDRO POWER STATION TALBINGO AND TANTANGARA
KOSCIUSZKO NATIONAL PARK AND ROCK FOREST
KOSCIUSZKO
NSW 2642
PREMISES DEFINED BY: SNOWY 2.0 MAIN WORKS INFRASTRUCTURE APPROVAL CSSI 9687 (20 MAY 2020): APPENDIX 1 – SCHEDULE OF LAND.

# Environment Protection Licence

Licence - 21266

## A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Ancillary Activity
Chemical Storage
Concrete Batching
Extractive Activities
Process Water Treatment
Road Construction and Maintenance
Sewage Treatment

## A4 Information supplied to the EPA

A4.1 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:

- 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
- 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 For the purpose of the monitoring/discharge points tables below, "the Plan" refers to the plan titled 'Snowy Hydro 2.0 EPL Premises Plan' Version A, dated October 2024 and provided to the EPA on 6 December 2024 (DOC24/1008555).
- 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
------------------------	--------------------------	-------------------------	----------------------

# Environment Protection Licence

Licence - 21266

1	Groundwater LOBS HOLE	Groundwater at Wallace Creek Bridge, west of ECVT portal, labelled EPL1 in "the Plan".
2	Groundwater LOBS HOLE	Groundwater at Wallace Creek Bridge, west of ECVT portal, labelled EPL2 in "the Plan".
4	Groundwater LOBS HOLE	Groundwater at Lobs Hole Portal Access, west of MAT portal, labelled EPL4 in "the Plan"
5	Surface Water LOBS HOLE	Yarrangobilly River, upstream of the exploratory tunnel and construction pad, labelled EPL5 in "the Plan".
6	Surface Water LOBS HOLE	Wallaces Creek, upstream of the confluence of Yarrangobilly River and Wallaces Creek, labelled EPL6 in "the Plan".
8	Surface Water LOBS HOLE	Yarrangobilly River, downstream of Lick Hole Gully labelled EPL8 in "the Plan".
9	Surface Water LOBS HOLE	Yarrangobilly River, downstream of the accommodation camp and upstream of Talbingo Reservoir labelled EPL9 in "the Plan".
10	Surface Water TALBINGO	Talbingo Reservoir, upstream of Lobs Hole STP/WTP diffuser outlet and water intake point labelled EPL10 in "the Plan".
11	Surface Water TALBINGO	Talbingo Reservoir, downstream of Lobs Hole STP/WTP diffuser outlet labelled EPL11 in "the Plan".
12	Surface Water LOBS HOLE	Yarrangobilly River, immediately downstream of portal pad labelled EPL12 in "the Plan".
14	Surface Water LOBS HOLE	Yarrangobilly River, upstream of MY/LHG PSE labelled EPL14 in "the Plan".
15	Surface Water LOBS HOLE	Yarrangobilly River, downstream of road construction areas labelled EPL15 in "the Plan".
16	Surface Water LOBS HOLE	Yarrangobilly River, downstream of road construction areas labelled EPL16 in "the Plan".
24	Surface Water LOBS HOLE	Yarrangobilly River unnamed tributary, downslope of GFO1 PSE, labelled EPL24 in "the Plan".
25	Groundwater LOBS HOLE	Groundwater downgradient of MAT portal, labelled EPL25 in "the Plan".
26	Surface Water MARICA	Eucumbene River, downstream of Marica Road, labelled EPL26 in "the Plan".
27	Surface Water MARICA	Eucumbene River, upstream of Marica Road, labelled EPL27 in "the Plan".

# Environment Protection Licence

Licence - 21266

28	Surface Water TANTANGARA	Tantangara Reservoir, upstream in the mouth of the Murrumbidgee River. Variable location dependent on tide and reservoir levels. Labelled EPL28 in "the Plan".
29	Surface Water TANTANGARA	Tantangara Reservoir, downstream of works area and upstream of lower Murrumbidgee River, labelled as EPL29 in "the Plan".
30	Surface Water TANTANGARA	Kellys Plain Creek, downstream of accommodation camp and laydown areas, labelled EPL30 in "the Plan".
31	Surface Water TANTANGARA	Kellys Plain Creek, upstream of accommodation camp and laydown areas, labelled EPL31 in "the Plan".
32	Surface Water TANTANGARA	Tantangara Intake, downstream of construction works, labelled EPL32 in "the Plan".
33	Surface Water TANTANGARA	Murrumbidgee River, downstream of Tantangara reservoir outlet labelled EPL33 in "the Plan".
34	Surface Water TANTANGARA	Nungar Creek, upstream of Tantangara Road labelled EPL34 in "the Plan".
35	Surface Water TANTANGARA	Nungar Creek, downstream of Tantangara Road labelled EPL35 in "the Plan".
36	Surface Water ROCK FOREST	Camerons Creek, upstream of works in Rock Forest, labelled EPL36 in "the Plan".
37	Surface Water ROCK FOREST	Camerons Creek, downstream of works in Rock Forest, labelled EPL37 in "the Plan".
38	Surface Water TANTANGARA	Tantangara Reservoir, between emplacement area and ancillary facilities for emplacement activities. Variable location dependent on tide and reservoir levels. Labelled EPL38 in "the Plan".
39	Surface Water TANTANGARA	Confluence of Nungar Creek and Tantangara Reservoir, upstream of Tantangara construction works. Variable location dependent on tide and reservoir levels. Labelled EPL39 in "the Plan".
40	Surface Water TANTANGARA	Confluence of the upper Murrumbidgee River and Tantangara Reservoir, upstream of works. Variable location dependent on tide and reservoir levels. Labelled EPL40 in "the Plan".

# Environment Protection Licence

Licence - 21266

41	Reverse Osmosis Plant TALBINGO		Lobs Hole Reverse Osmosis Plant Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Talbingo Reservoir. Labelled EPL41 in "the Plan".
42		Discharge to waters TALBINGO	Diffuser outlet discharging into Talbingo Reservoir from Lobs Hole STP/WTP, labelled EPL42 in "the Plan".
43	Volume outflow TALBINGO		Lobs Hole STP/WTP Final Volume Monitoring Point, downstream of final treatment, prior to discharge to Talbingo Reservoir. Labelled EPL43 in "the Plan".
46		Discharge to waters TANTANGARA	Diffuser outlet discharging into Tantangara Reservoir from Tantangara STP/PWTP, labelled EPL46 in "the Plan".
50	Reverse Osmosis Plant TANTANGARA		Tantangara Reverse Osmosis Plant final effluent quality and volume monitoring point, downstream of final treatment, prior to discharge to Tantangara reservoir. Labelled EPL50 in "the Plan".
51	Surface Water TANTANGARA		Tantangara Reservoir, downstream of Tantangara STP/WTP diffuser outlet. Labelled EPL51 in "the Plan".
52	Surface Water LOBS HOLE		Talbingo Reservoir, upstream of GF01 emplacement area GFO1 Leachate Basin, labelled EPL52 in "the Plan".
55	Surface Water LOBS HOLE		Yarrangobilly River, downstream of GF01 emplacement area, labelled EPL55 in "the Plan".
56	Groundwater LOBS HOLE		Groundwater upgradient (E) of GF01 emplacement area, labelled EPL56 in "the Plan".
57	Groundwater LOBS HOLE		Groundwater upgradient (W) of GF01 emplacement area, labelled EPL57 in "the Plan".
58	Groundwater LOBS HOLE		Groundwater downgradient of GF01 emplacement area, labelled EPL58 in "the Plan".
59	Surface Water TANTANGARA		Tantangara Leachate Basin Tan-SW-SB1, labelled EPL59 in "the Plan".
60	Surface Water TANTANGARA		Tantangara Leachate Basin Tan-SW-SB2, labelled EPL60 in "the Plan".
61	Surface Water TANTANGARA		Tantangara Leachate Basin Tan-SW-SB3, labelled EPL61 in "the Plan".
62	Surface Water TANTANGARA		Tantangara Leachate Basin Tan-SW-SB4, labelled EPL62 in "the Plan".

# Environment Protection Licence

Licence - 21266

63	Surface Water TANTANGARA	Tantangara Leachate Basin Tan-SW-SB5, labelled EPL63 in "the Plan".
64	Groundwater MARICA	Groundwater downgradient of the Marica TSE, labelled EPL64 in "the Plan".
65	Groundwater MARICA	Groundwater downgradient of the Marica TSE, labelled EPL65 in "the Plan".
66	Groundwater MARICA	Groundwater downgradient of the Marica TSE, labelled EPL66 in "the Plan".
67	Surface Water TANTANGARA	Nungar Creek downstream west from Tantangara emplacement area, labelled EPL67 in "the Plan".
68	Groundwater TANTANGARA	Groundwater downgradient (E) of Tantangara emplacement area, labelled EPL68 in "the Plan".
69	Groundwater TANTANGARA	Groundwater downgradient (W) of Tantangara emplacement area, labelled EPL69 in "the Plan".
70	Groundwater TANTANGARA	Groundwater upgradient of Tantangara emplacement area, labelled EPL70 in "the Plan".
71	Surface Water MARICA	Surface water downstream of Marica emplacement area, labelled EPL71 in "the Plan".
72	Groundwater MARICA	Groundwater upgradient of Marica emplacement area, labelled EPL72 in "the Plan".
76	Surface Water ROCK FOREST	Rock Forest Leachate Basin, labelled EPL76 in "the Plan".
80	Groundwater LICK HOLE GULLY	Groundwater upgradient of Lick Hole Gully, labelled EPL80 in "the Plan".
81	Groundwater LICK HOLE GULLY	Groundwater downgradient of Lick Hole Gully, labelled EPL81 in "the Plan".
82	Groundwater MAIN YARD	Groundwater upgradient of Main Yard emplacement area, labelled EPL82 in "the Plan".
83	Groundwater MAIN YARD	Groundwater downgradient of Main Yard emplacement area, labelled EPL83 in "the Plan".
84	Surface Water MAIN YARD	Main Yard leachate basin F8, labelled EPL84 in "the Plan".
85	Surface Water MAIN YARD	Main Yard leachate basin MY07, labelled EPL85 in "the Plan".
86	Surface Water LICK HOLE GULLY	Lick Hole Gully leachate basin LHG01, labelled EPL86 in "the Plan".
87	Groundwater MAIN YARD	Groundwater downgradient of Main Yard emplacement area, labelled EPL87 in "the Plan".

# Environment Protection Licence

Licence - 21266

88	Groundwater MAIN YARD	Groundwater downgradient from Main Yard emplacement area, labelled EPL88 in "the Plan".
89	Groundwater LICK HOLE GULLY	Groundwater downgradient of MY/LHG emplacement area, labelled EPL89 in "the Plan".
90	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL90 in "the Plan".
91	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL91 in "the Plan".
92	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL92 in "the Plan".
93	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL93 in "the Plan".
94	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL94 in "the Plan".
95	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL95 in "the Plan".
97	Groundwater GF01	Groundwater downgradient of GF01 emplacement area, labelled EPL97 in "the Plan".
98	Surface Water GF01	Rock blanket diversion outlet at GF01 Leachate Basin, labelled EPL98 in "the Plan".
99	Surface Water MARICA	Marica Leachate basin - Turkey's Nest, labelled EPL99 in "the Plan".
100	Surface Water MARICA	Marica Lower Leachate Basin USS Shaft, labelled EPL100 in "the Plan".
101	Surface Water MARICA	Marica Leachate Basin Spoil Pad, labelled EPL101 in "the Plan".
103	Groundwater TANTANGARA	Groundwater upgradient (W) of Tantangara emplacement area, labelled EPL103 in "the Plan".
104	Groundwater TANTANGARA	Groundwater downgradient (E) of Tantangara emplacement area, labelled EPL104 in "the Plan".
105	Groundwater TANTANGARA	Groundwater downgradient (W) of Tantangara emplacement area, labelled EPL105 in "the Plan".
106	Surface Water RAVINE BAY	Ravine Bay Leachate basin 1, labelled EPL106 in "the Plan".
107	Surface Water RAVINE BAY	Talbingo Reservoir, upstream monitoring of Ravine Bay emplacement area, labelled EPL107 in "the Plan".
108	Surface Water RAVINE BAY	Ravine Bay emplacement area (centre of PSE) within Talbingo Reservoir, labelled EPL108 in "the Plan".

# Environment Protection Licence

Licence - 21266

109	Surface Water RAVINE BAY	Talbingo Reservoir, upstream of Ravine Bay emplacement area, labelled EPL109 in "the Plan".
110	Surface Water RAVINE BAY	Drainage line, upstream of Ravine Bay emplacement area, labelled EPL110 in "the Plan".
113	Groundwater RAVINE BAY	Groundwater upgradient (E) of Ravine Bay emplacement area, labelled EPL113 in "the Plan".
114	Groundwater RAVINE BAY	Groundwater upgradient (W) of Ravine Bay emplacement area, labelled EPL114 in "the Plan".
115	Groundwater RAVINE BAY	Groundwater downgradient (E) of Ravine Bay emplacement area, labelled EPL115 in "the Plan".
116	Groundwater RAVINE BAY	Groundwater downgradient (W) of Ravine Bay emplacement area, labelled EPL116 in "the Plan".
117	Groundwater RAVINE BAY	Groundwater downgradient of the Ravine Bay emplacement area, labelled EPL117 in "the Plan".
118	Surface Water RAVINE BAY	Ravine Bay Leachate basin 2, labelled EPL118 in "the Plan".
119	Surface Water RAVINE BAY	Ravine Bay Leachate basin 3, labelled EPL119 in "the Plan".
120	Surface Water RAVINE BAY	Ravine Bay Leachate basin 4, labelled EPL120 in "the Plan".
122	Surface Water GFO1	Drainage Line downstream of GF01, upgradient of confluence with Talbingo Reservoir labelled EPL122 in "the Plan".
123	Groundwater ROCK FOREST	Groundwater upgradient (W) of the Rock Forest PSE labelled EPL123 in "the Plan".
124	Groundwater ROCK FOREST	Groundwater upgradient (NE) of the Rock Forest PSE labelled EPL124 in "the Plan".
125	Groundwater ROCK FOREST	Groundwater downgradient (S) of the Rock Forest PSE labelled EPL125 in "the Plan".
126	Groundwater ROCK FOREST	Groundwater downgradient (SE) of the Rock Forest PSE labelled EPL126 in "the Plan".
127	Groundwater ROCK FOREST	Groundwater downgradient of the Rock Forest PSE labelled EPL127 in "the Plan".
128	Surface Water RAVINE BAY	Ephemeral Creek line, downstream Ravine Bay emplacement area, north of the New Access Roadway, labelled EPL128 in the "Plan".
129	Monitoring Bouy TANTANGARA	Monitoring Bouy vertical depth profiler in Tantangara reservoir, labelled EPL129 in the "Plan".
130	Monitoring Bouy TALBINGO	Monitoring Bouy vertical depth profiler in Talbingo reservoir, labelled EPL130 in the "Plan".

# Environment Protection Licence

Licence - 21266

## 3 Limit Conditions

### L1 Pollution of waters

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

### L2 Concentration limits

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

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

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

L2.4 Water and/or Land Concentration Limits

#### POINT 41,50

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
BOD	milligrams per litre		3.5		5

#### POINT 41

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Electrical conductivity	microsiemens per centimetre				700

#### POINT 41,50

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Faecal Coliforms	colony forming units per 100 millilitres		10		100

# Environment Protection Licence

Licence - 21266

Nitrogen (ammonia)	milligrams per litre	1.0	2
Nitrogen (total)	milligrams per litre	1.5	3
Oil and Grease	milligrams per litre	2	5
pH	pH		6.5-8.5
Phosphorus (total)	milligrams per litre	0.3	0.5
Total suspended solids	milligrams per litre	5	10

## POINT 50

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Electrical conductivity	microsiemens per centimetre				200

L2.5 Concentration Limits for Total Nitrogen, Ammonia, Total Phosphorus and Biochemical Oxygen Demand are only valid for a trial period of until 31 December 2026.

## L3 Volume and mass limits

L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:

- liquids discharged to water; or
- solids or liquids applied to the area;

must not exceed the volume/mass limit specified for that discharge point or area.

Point	Unit of Measure	Volume/Mass Limit
43,50	megalitres per day	4.32

L3.2 For each discharge point or utilisation area specified below (by a point number), the flow rate of:

- liquids discharged to water; or
- solids or liquids applied to the area;

must not exceed the flow rate specified by that discharge point or area.

Point	Unit of Measurement	Flow rate
43, 50	litres per second	50 litres per second

# Environment Protection Licence

---

Licence - 21266

## 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 minimises or prevents the emission of dust from the premises.

### O4 Waste management

O4.1 The licensee must assess, classify and manage any waste generated at the premises in accordance with the Waste Classification Guidelines 2014 and the Act. Waste must be transported to a place that can lawfully accept that waste.

O4.2 Spoil material generated at the Premises can be transported on public roads between parts of the Premises providing that the material is not stored or placed outside of the Premises at any time. The transport of this waste must comply with the Protection of the Environment Operations (Waste) Regulation 2014.

### O5 Other operating conditions

#### Spoil Characterisation

O5.1 The Licensee must ensure that all samples collected for spoil characterisation are:

- a. representative of the material currently being extracted from the specific area of the tunnel;
- b. representative of the material contained in the 10m advance (currently defined block);
- c. is not skewed by veins; and
- d. corresponds to the material placed on the emplacement area.

#### Spoil Treatment

# Environment Protection Licence

Licence - 21266

- O5.2 All treatment of spoil including but not limited to the temporary storage of spoil, and treatment of Potentially Acid Forming (PAF) material and material at risk of resulting in Acid Mine Drainage or Neutral Mine Drainage, must be undertaken in a manner that:
- achieves permanent neutralisation of the material;
  - prevents pollution of waters; and
  - prevents contamination of land.
- O5.3 The Licensee must validate that all treated spoil material meets the requirements of condition O5.2.

## Spoil Emplacement

- O5.4 All spoil material must be emplaced in a manner that minimises air flow capacity and maximises neutralisation.

## Spoil Leachate Management

- O5.5 The Licensee must:
- implement and maintain a leachate detection procedure that provides practical guidance for the detection of leachate from the emplacement areas at the Premises
  - review the leachate detection procedure(s) at least every 12 months to ensure it still meets the requirements of point a) above
- O5.6 Within 2 weeks of developing or updating any leachate detection procedure, the Licensee must inform the EPA about any changes made to [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au).

## Spoil Management Contingencies

- O5.7 The Licensee must maintain and implement a contingency plan in the event that characterisation, treatment, emplacement or leachate management does not meet the appropriate thresholds within the QAQC plan.

## 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:
- in a legible form, or in a form that can readily be reduced to a legible form;
  - kept for at least 4 years after the monitoring or event to which they relate took place; and
  - 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:
- the date(s) on which the sample was taken;
  - the time(s) at which the sample was collected;

# Environment Protection Licence

Licence - 21266

- 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

#### POINT 1,2,4,25

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	micrograms per litre	Quarterly	Grab sample
Copper (dissolved)	micrograms per litre	Quarterly	Grab sample
Dissolved Oxygen	percent saturation	Quarterly	In situ
Electrical conductivity	microsiemens per centimetre	Quarterly	In situ
Iron (dissolved)	micrograms per litre	Quarterly	Grab sample
Lead (dissolved)	micrograms per litre	Quarterly	Grab sample
Manganese (dissolved)	micrograms per litre	Quarterly	Grab sample
Nickel (dissolved)	micrograms per litre	Quarterly	Grab sample
Nitrate	micrograms per litre	Quarterly	Grab sample
Nitrite	micrograms per litre	Quarterly	Grab sample
Nitrogen (total)	micrograms per litre	Quarterly	Grab sample
Oxidation Reduction Potential	millivolts	Quarterly	In situ
Reactive Phosphorus	micrograms per litre	Quarterly	Grab sample
Turbidity	nephelometric turbidity units	Quarterly	In situ
Zinc (dissolved)	micrograms per litre	Quarterly	Grab sample

#### POINT 5,6,8,9,10,11,12,14,15,16,24,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,50,51,52,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,76,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,97,98,99,100,101,103,104,105,106,107,108,109,110,113,114,115,116,117,118,119,120,121,123,124,125,126,127

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	micrograms per litre	Monthly	Grab sample
Aluminium (total)	micrograms per litre	Monthly	Grab sample
Ammonia	micrograms per litre	Monthly	Grab sample
Arsenic (dissolved)	micrograms per litre	Monthly	Grab sample

# Environment Protection Licence

Licence - 21266

Calcium	micrograms per litre	Monthly	Grab sample
Chromium (dissolved)	micrograms per litre	Monthly	Grab sample
Chromium (total)	micrograms per litre	Monthly	Grab sample
Copper (dissolved)	micrograms per litre	Monthly	Grab sample
Cyanide (total)	micrograms per litre	Monthly	Grab sample
Dissolved organic carbon	milligrams per litre	Monthly	Grab sample
Dissolved Oxygen	percent saturation	Monthly	In situ
Electrical conductivity	microsiemens per centimetre	Monthly	In situ
Hardness (as calcium carbonate)	milligrams per litre	Monthly	Grab sample
Iron (dissolved)	micrograms per litre	Monthly	Grab sample
Lead (dissolved)	micrograms per litre	Monthly	Grab sample
Magnesium	micrograms per litre	Monthly	Grab sample
Manganese (dissolved)	micrograms per litre	Monthly	Grab sample
Nickel (dissolved)	micrograms per litre	Monthly	Grab sample
Nitrate	micrograms per litre	Monthly	Grab sample
Nitrite	micrograms per litre	Monthly	Grab sample
Nitrogen (total)	micrograms per litre	Monthly	Grab sample
Oil and Grease	milligrams per litre	Monthly	Grab sample
Oxidation Reduction Potential	millivolts	Monthly	In situ
pH	pH	Monthly	In situ
Phosphorus (total)	micrograms per litre	Monthly	Grab sample
Reactive Phosphorus	micrograms per litre	Monthly	Grab sample
Total Iron	micrograms per litre	Monthly	Grab sample
Total Kjeldahl Nitrogen	micrograms per litre	Monthly	Grab sample
Total manganese	micrograms per litre	Monthly	Grab sample
Total suspended solids	milligrams per litre	Monthly	Grab sample
Turbidity	nephelometric turbidity units	Monthly	In situ
Zinc (dissolved)	micrograms per litre	Monthly	Grab sample

**POINT 5,6,8,9,10,11,12,14,15,16,24,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,50,51,52,55,59,60,61,62,63,67,71,76,84,85,86,98,99,100,101,106,107,108,109,110,118,119,120,122**

Pollutant	Units of measure	Frequency	Sampling Method
Chlorophyll a	micrograms per litre	Monthly	Grab sample
Temperature	degrees Celsius	Monthly	In situ

**POINT 10,11,28,41,50,51**

Pollutant	Units of measure	Frequency	Sampling Method
BOD	milligrams per litre	Monthly	Grab sample

# Environment Protection Licence

Licence - 21266

Faecal Coliforms	colony forming units per 100 millilitres	Monthly	Grab sample
------------------	--	---------	-------------

## 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.
- M3.2 Condition M3.1 also applies to the monitoring of any points identified in Condition M2.2

## M4 Recording of pollution complaints

- M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M4.2 The record must include details of the following:
- 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.
- M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

## M5 Telephone complaints line

- M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M5.3 The preceding two conditions do not apply until immediately from the date of the issue of this licence.

## M6 Requirement to monitor volume or mass

# Environment Protection Licence

Licence - 21266

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

POINT 43,50

Frequency	Unit of Measure	Sampling Method
Continuous	megalitres per day	Ultrasonic flow meter

Note: The licensee may use a mechanical flow meter to monitor volume in the event of an ultrasonic flow meter failure.

## 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:

- a Statement of Compliance,
- a Monitoring and Complaints Summary,
- a Statement of Compliance - Licence Conditions,
- a Statement of Compliance - Load based Fee,
- a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
- a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
- 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:

- 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
- 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

# Environment Protection Licence

Licence - 21266

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.

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.

Note: The Licensee or its employees (including any contractors engaged to undertake works on the Premises on behalf of the Licensee) must provide the EPA with comprehensive sampling results immediately after quality assurance quality control processes are completed, but no later than 14 days upon receipt of the results relating to any incidents notified in accordance with condition R2 of the Licence.

## 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;

# Environment Protection Licence

Licence - 21266

- 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

### Environmental Monitoring Report

- R4.1 By 30 June each year, the Licensee must submit an Environmental Monitoring Report which covers the preceding period of 1 December - 31 May, unless otherwise agreed in writing by the EPA.
- R4.2 By 15 January each year, the Licensee must submit an Environmental Monitoring Report which covers the preceding period of 1 June - 30 November, unless otherwise agreed in writing by the EPA.
- R4.3 The Environmental Monitoring Report must be prepared by a suitably qualified and experienced person and include, but not be limited to:
  - a) results of all water quality monitoring undertaken in the relevant preceding period nominated in Condition R4.2 and R4.3;
  - b) results of all weather monitoring undertaken in the relevant preceding period nominated in Condition R4.2 and R4.3;
  - c) assessment of historical trends in all water sampling data for each monitoring point inclusive of the relevant preceding period nominated in Condition R4.2 and R4.3;
  - d) identification of instances where the water quality objective triggers for each relevant pollutant were exceeded at receiving water locations and/or where the predicted discharge water quality was exceeded at sediment basin discharge points;
  - e) include details of any actions taken by the Licensee in response to exceedances identified under point (d), including but not limited to:
    - i. additional monitoring
    - ii. remedial actions; and
    - iii. activation of trigger, action, response plans (TARPs);
  - f) recommendations for future actions in relation to monitoring and/or management
  - g) identification of any water quality monitoring that was not completed in compliance with Condition M2.2. This must include an appropriate justification for the non-compliance.

# Environment Protection Licence

Licence - 21266

## 7 General Conditions

### G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

### G2 Other general conditions

#### G2.1 Completed Programs

Program	Description	Completed Date
PRP 1 - Assessment of the water and contaminant management system at MAT spoil stockpile area	PRP to assess the water management system at MAT spoil stockpile area with a view of improving water management outcomes. PRP identified all CoC associated with TBM and stockpile placement and both short and long-term controls to be implemented in the future.	29-April-2022
PRP 2 - Diffuse Source Water Pollution Management	Licensee must undertake an assessment of all controls employed to manage the risk of diffuse source water pollution across the Premises.	24-January-2024
PRP 3 - Generator emission improvements program	A program to improve emissions from generators or decommission generators in accordance with the Clean Air Regulation.	09-February-2024
PRS 4 - Review of Process Water Treatment Plant	Program requires the Licensee to undertake an assessment of the PWTPs at the premises and make recommendations on improvements	03-July-2024
PRS 5 - Sampling Quality Assurance Quality Control Program	Program requires the Licensee to undertake an assessment of current water quality sampling methodology and make improvements. Includes provisions for a QAQC program.	29-May-2024

## 8 Pollution Studies and Reduction Programs

### U1 Assessment of Water Reuse and Basin Maintenance Activities

- U1.1 The Licensee (and/or persons conducting business on behalf of the Licensee) must complete a staged assessment and improvement program for all water reuse activities and basin management activities undertaken on the Premises to manage project-impacted water.

Stage 2 and Stage 3 of the program must be undertaken by a suitably qualified and independent person(s) approved in consultation with the EPA and must be completed in accordance with the stages, content and

# Environment Protection Licence

Licence - 21266

schedule specified below.

## Stage 1 - Data Collection and Description (Complete)

U1.2 Under Stage 1 of this program the Licensee will:

1. Compile and consolidate all relevant information pertaining to water reuse activities (such as water cart spraying, irrigation, and concrete batching) and basin maintenance (including sediment basins, leachate basins, sumps, and associated drainage infrastructure) undertaken at the Premises.
2. Identify and describe all components of the water reuse and basin maintenance management system, including associated governance arrangements and infrastructure
3. Identify and document all incidents that occurred within the past twelve months due to issues related to basin maintenance or water reuse activities.
4. Spatially represent (in digital format) all water reuse systems, basin infrastructure and surrounding tributaries and / or downgradient environmental receptors potentially impacted by reuse activities.

U1.3 By 30 November 2025, the Licensee must complete a final report documenting the findings of Condition U1.2 above. The report must be submitted to [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au).

## Stage 2 - Suitability Assessment

U1.4 Under Stage 2 of this program the Licensee will:

1. Assess the suitability and adequacy of all water reuse and basin maintenance activities, and associated governance frameworks.
2. Identify potential risks to tributaries and/or downgradient environmental receptors from water reuse and basin management activities.
3. Identify key gaps, risks, and improvement opportunities within existing systems and provide feasible implementation recommendations.

U1.5 By 31 July 2026, the Licensee must complete a final Suitability Assessment Report documenting the findings of Condition U1.4 above. The report must be submitted to [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au).

## Stage 3 - Management Plan Provision

U1.6 Under Stage 3 of this program the Licensee will develop an Improvement Implementation Plan that outlines feasible short, medium, and long-term actions to address key gaps, risks, and improvement opportunities identified during Stage 2, with indicative implementation timeframes assigned to each action.

U1.7 By 31 October 2026, the Licensee must submit the final Improvement Management Plan required under U1.6. The report must be submitted to [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au).

# Environment Protection Licence

Licence - 21266

## 9 Special Conditions

### E1 Lining requirements for the Ravine Bay, Tantangara and Rock Forest Permanent Spoil Emplacement Areas

- E1.1 Prior to the emplacement of spoil at Ravine Bay, Tantangara and Rock Forest Permanent Spoil Emplacement Areas (PSE), the Licensee must install a suitable engineered liner and drainage system that achieves a safe, stable and non-polluting landform, and separates any potential leachate from groundwater. The Licensee must:
1. evaluate and identify a suitable engineered liner and drainage system that achieves the aforementioned outcomes;
  2. provide the EPA with the drainage design and technical liner specifications, including Construction Quality Assurance (CQA) plan and detailed design prior to installation;
  3. design, construct, install and operate the liner and drainage system in accordance with the design specifications, including the CQA plan;
  4. engage an independent and suitably qualified person/s to develop a CQA report to verify that all liner and drainage construction and installation is in accordance with the design specifications committed to under point 2 above; and
  5. in the event that a CQA report developed in accordance with point 4 above identifies that liner and drainage construction and installation is not in accordance with the design specifications committed to under point 2 above, the Licensee must immediately notify the EPA via [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au)

### E2 Capping Requirements for the Ravine Bay, Tantangara and Rock Forest Permanent Spoil Emplacement Areas

- E2.1 Prior to the rehabilitation of the Ravine Bay, Tantangara and Rock Forest Permanent Spoil Emplacement Areas (PSE), the Licensee must install a suitable capping layer which fully encapsulates the PSEs, and minimises ingress of water into the PSEs. The capping layer must achieve a safe, stable and non-polluting landform. The Licensee must
1. evaluate and identify a suitable capping methodology that achieves the aforementioned outcomes;
  2. provide the EPA with the final technical capping design specifications, including appropriate Quality Assurance (QA) and Quality Control (QC) plans and detailed design specifications prior to installation;
  3. design, construct, and install the capping system in accordance with the design specifications; and,
  4. provide QA/QC reports prepared by a suitably qualified person to the EPA following completion of the capping layer verifying achievement of the design specifications.

### E3 Nitrogen Management Plan

- E3.1 The licensee must prepare a Nitrogen Management Plan when undertaking blasting operations on the premises using Ammonium Nitrate Fuel Oil (ANFO) explosives or emulsions.

# Environment Protection Licence

Licence - 21266

E3.2 The Nitrogen Management Plan must be developed in consultation with the EPA and must:

1. Specify how ANFO explosives will be selected, handled and used at the premises to minimise the impact of nitrate residues upon the surrounding environment;
2. Specify how nitrate residues from blasting activities will be monitored and managed by the licensee;
3. Specify arrangements for a suitable water sampling regime of surface water and ground water in the vicinity of all waste rock emplacement areas;
4. Specify how waste rock emplacement areas will be monitored, characterised and managed by the licensee; and
5. Specify how surface and groundwater impacts will be monitored and managed by the licensee.
6. Specify what remediation measures will be undertaken by the licensee in relation to any elevated nitrate residue levels.
7. Consider and include monitoring for all forms of nitrogen residues in soils, water and groundwater.

E3.3 The licensee must comply with the Nitrogen Management Plan.

E3.4 The licensee must monitor its compliance performance with the Nitrogen Management Plan and report any non-compliances to the EPA immediately.

## E4 Reservoir discharge limit validation and nutrient loading monitoring program

E4.1 By 30 October 2026, the Licensee must submit a Validation Report for the Reservoir Discharge Limit Validation Monitoring Program (provided to the EPA on 26 November 2025) to the EPA. The program and Validation Report must, at a minimum:

1. Be designed to validate the modelling and assumptions presented in the document titled '*Snowy 2.0 Waste and Process Water Mixing Zone Assessment*'.
2. Monitor discharge volumes, flow rates, and water quality parameters relevant to the mixing zone
3. Include a Nutrient Loading Monitoring Program to assess potential nutrient contributions from reservoir discharges. The program must include, but not be limited to:
  - a. Monitoring of Total Nitrogen and Total Phosphorus concentrations and loads within the reservoirs.
  - b. Consider seasonal and environmental factors influencing nutrient dynamics.

Note: Once reviewed the EPA intends to incorporate the relevant programs and reporting requirements on the Licence.

# Environment Protection Licence

Licence - 21266

## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	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
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	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> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	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.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	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> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	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.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

# Environment Protection Licence

Licence - 21266

<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	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.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	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.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	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> .

# Environment Protection Licence

Licence - 21266

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

Ms Janine Goodwin

Environment Protection Authority

(By Delegation)

Date of this edition: 09-May-2019

# Environment Protection Licence

Licence - 21266

## End Notes

2	Licence varied by notice	1592053 issued on 02-Mar-2020
3	Licence varied by notice	1592566 issued on 08-Apr-2020
4	Licence varied by notice	1600132 issued on 16-Oct-2020
5	Licence varied by notice	1601912 issued on 02-Nov-2020
6	Licence varied by notice	1602469 issued on 18-Dec-2020
7	Licence varied by notice	1604232 issued on 08-Apr-2021
8	Licence varied by notice	1612017 issued on 30-Aug-2021
9	Licence varied by notice	1615458 issued on 14-Jan-2022
10	Licence varied by notice	1615931 issued on 09-Feb-2022
11	Licence varied by notice	1618696 issued on 13-May-2022
12	Licence varied by notice	1619252 issued on 31-May-2022
13	Licence varied by notice	1620013 issued on 06-Jul-2022
14	Licence varied by notice	1622035 issued on 05-Oct-2022
15	Licence varied by notice	1626611 issued on 06-Jun-2023
16	Licence varied by notice	1634101 issued on 28-Mar-2024
17	Licence varied by notice	1638603 issued on 20-Dec-2024
18	Licence varied by notice	1648456 issued on 23-Jul-2025
19	Licence varied by notice	1653201 issued on 26-Sep-2025
20	Licence varied by notice	1654401 issued on 01-Apr-2026