Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8893/2015/2
Licence holder	Karora (Beta Hunt) Pty Ltd
ACN	162 824 473
Registered business address	21 Ord Street WEST PERTH WA 6005
DWER file number	DER2015/001006-1~2
Duration	09/07/2021 to 06/07/2045
Date of issue	07 July 2021
Date of amendment	05/06/2025
Premises details	Beta Hunt Mine Site St Ives Road KAMBALDA WA 6442 Part of Mining Tenements: M15/1512, M15/1513, M15/1516, M15/1517, M15/1518, M15/1526, M15/1527, M15/1529, M15/1531, M15/1628, M15/1629, M15/1691, M15/1694, M15/1698, M15/1699, M15/1702 and M15/1705 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production / throughput**
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	1,500,000 tonnes per annum
Category 64: Two Class II putrescible landfill sites: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	• 450 tonnes per annum — clean fill; inert waste type 1; uncontaminated fill; putrescible wastes; inert waste type 2 (not including tyres) • 1,000 tonnes per annum — inert waste type 2 (tyres only)

This licence is granted to the licence holder, subject to the attached conditions, on 05 June 2025, by:

Fiona Westcott
Digitally signed by Fiona Westcott
Date: 2025.06.05 17:33:08 +08'00'

MANAGER, RESOURCE INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Issued	Instrument number	Summary of changes
12 April 2002	L8626/2012/1	A licence was issued to the premises in April 2012 for categories 6 and 77 under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) for the dewatering of the underground mine and the operation of a concrete batching plant.
11 April 2013	L8626/2012/1	Licence holder initiated licence amendment to remove Category 77 as the batching plant no longer existed on site.
03 July 2014	L8626/2012/1	Licence holder initiated licence amendment to increase dewatering limit. The nominated throughput for dewatering was increased from 250,000 tonnes per annum (tpa) to 380,000 tpa and later to 480,000 tpa to dewater an old section of mine to allow proposed mining of this area. Water quality from the old section of mine was considered to be similar to the existing discharge and therefore unlikely to cause additional or different environmental impact, given the management measures and licence conditions that were in place. The licence amendment included the transfer of occupier name.
9 July 2015	L8893/2015/1	The premises was previously licensed under L8626/2012/1. A new licence L8893/2015/1 was issued as a result of a late annual fee payment that resulted in L8626/2012/1 ceasing to have effect. No reassessment of emissions and discharges was undertaken for the new licence. The risk assessment of the previous licence conducted in July 2014 was transferred to the decision document of the new licence.
25 March 2020	L8893/2015/1	Inclusion of Category 64 - installation and operation of two Class II putrescible waste landfills (including the burying of tyres).
7 July 2021	L8893/2015/2	Administrative licence renewal – expiry extended until 8 July 2026.
05 June 2025	L8893/2015/2	Licence Holder initiated amendment to increase the annual dewatering throughput from 480,000 tonnes per annum to 1,500,000 tonnes per annum, and modify location of dewater discharge to the Formidable Pit, with discharge to Lake Lefroy acting as a contingency. Construction of a new pipeline to facilitate discharge of dewater to the Formidable Pit. Changes to the timing of the AACR and Environmental Report (previously AER) have been made in response to the 2022 Amendment Notice.

Interpretation

In this licence:

(a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice means the version of the standard, guideline, or code of practice in force at the time of granting of this licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the licence;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The Licence Holder must:

(g) construct and/or install the infrastructure and/or equipment;

(h) in accordance with the corresponding design and construction / installation requirements; and

(i) at the corresponding infrastructure location; and

(j) as set out in Table 1.

Table 1: Design and construction requirements / installation requirement

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1	Dewater discharge and return water pipelines and return pump.	• High-density polyethylene (HDPE) pipeline constructed within existing disturbed corridors to limit environmental impacts; • Sections of pipeline traversing the lake shore to be double skinned to ensure any spills are directed onto the lake surface away from riparian vegetation; • Telemetry systems and flowmeters to be installed to monitor water flow and optimise water management; • Bunded v-drains and overflow sumps to be constructed if required overland; and • Water trucks to be used for dust suppression during construction.	As per Schedule 1: Figure 2

2. The Licence Holder must within 60 days of each item of infrastructure required by condition 1 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 1; and

(b) prepare and submit to the CEO an Environmental compliance report on that compliance.

3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:

(a) certification by a suitability qualified person that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and

(c) be signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person.

General

4. The licence holder must ensure that the premises infrastructure and equipment listed in Schedule 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Schedule 2.

5. The licence holder must ensure that during operation activities, stormwater is managed so that:

(a) clean surface water is diverted around operation work areas;

(b) potentially contaminated and contaminated waters are retained onsite via bunds or surface diversions; and

(c) potentially contaminated and contaminated waters are either:

(i) added to the wastewater recycling system, provided the system has adequate capacity to accept the contaminated waters; or

(ii) appropriately stored (in secured, covered and bunded areas) until collection and disposal at a facility approved to accept the waste.

Emissions and discharges

Mine dewater

6. Where the licence holder uses saline water for dust suppression during both construction and operation activities, the water must be applied so as to avoid damage to vegetation (such as from overspray or runoff).

7. The licence holder must ensure that the emissions specified in Table **2**2, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 2: Authorised discharge point

Emission	Discharge point	Discharge point location
Mine dewater	Turkey's nest	Discharge point as shown in Figure 1 and Figure 3
	Formidable Pit	Discharge point as shown in Figure 2

8. The turkey's nest must be used to store mine dewater prior to discharge to Lake Lefroy.

9. Mine dewater pumped into the turkey's nest must have sufficient time for the settling of particulates and have a total dissolved solids (TDS) concentration below 360,000 mg/L prior to being discharged to Lake Lefroy.

10. Discharge of mine dewater onto Lake Lefroy must be via the installed energy dissipation infrastructure (rock wall located at the low point in the turkey's nest that allows mine dewater to flow at a maximum rate of 16 L/s down the rock wall and into the lake) to minimise erosion and scouring impacts, to reduce the likelihood of ponding in Lake Lefroy and to minimise damage to fringing vegetation.

Landfill management

11. The licence holder shall only allow waste generated at the premises to be disposed of on the premises in accordance with the waste type, quantity limit and disposal location in Table 3.

Table 3: Management of waste

Waste type	Quantity limit	Disposal location
• Clean fill • Inert waste type 1 • Uncontaminated fill • Putrescible wastes • Inert waste type 2 (not including tyres)	450 tonnes per annum	Landfill as shown in Figure 1, Figure and Figure .
• Inert waste type 2 (tyres only)	1,000 tonnes per annum	

12. The licence holder shall ensure that cover is applied and maintained on landfilled waste types in accordance with the corresponding cover requirements in Table 4 and that sufficient stockpiles or cover are maintained on the premises at all times.

Table 4: Cover requirements

Waste type	Cover requirements
• Clean fill • Inert waste type 1 • Uncontaminated fill • Putrescible wastes • Inert waste type 2	Waste deposited in the landfill is to be: • covered at least every 30 days or when the open area reaches >30m length x 20m width (whichever is sooner); • covered with a dense, inert and incombustible material; and • totally covered, so that no waste is left exposed.

Monitoring

Mine dewater

13. The licence holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer's specifications.

14. The licence holder must ensure that all non-continuous sampling and analysis undertaken pursuant to condition 15 is undertaken by a holder of a current accreditation from the National Association of Testing Authorities (NATA) for the methods of sampling and analysis relevant to the corresponding relevant parameter (unless indicated otherwise in Table 5).

15. The licence holder must monitor emissions in accordance with the requirements specified in Table 5 and record the results of all such monitoring.

Table 5: Emissions and discharge monitoring

Monitoring Location	Parameters[1]		Units	Frequency	Sampling Method
At the mine dewatering abstraction/ drawpoint as shown in Figure 1 ~~and~~ Figure , and Figure 3	Dewatering volumes	Volumetric flow rate	kL/month	Monthly[2]	AS/NZS 5667.1
Mine dewater discharged from the turkey's nest to Lake Lefroy, and via the Formidable Pit discharge point. At the Discharge as shown in Figure 1, Figure 2, and Figure 3	General	pH[3]	-	Quarterly[4]	AS/NZS 5667.1 and AS/NZS 5667.4
		Total dissolved solids (TDS)	mg/L		
		Total Suspended Solids (TSS)			
		Total Recoverable Hydrocarbons (TRH)			
	Anions and cations	Bicarbonate (HCO_3)			
		Calcium (Ca)			
		Magnesium (Mg)			
		Potassium (K)			
		Sodium (Na)			
		Sulphate (SO_4)			
	Metals and metalloids	Arsenic (As)			
		Cadmium (Cd)			
		Chromium (Cr III)			
		Chromium (Cr VI)			
		Cobalt (Co)			
		Copper (Cu)			
		Iron (Fe)			
		Lead (Pb)			
		Nickel (Ni)			
		Selenium (Se)			
		Zinc (Zn)			

Note [1]: Level of detection is required to be sufficient to enable a comparison with ANZECC & ARMCANZ (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality.
Note [2]: Monthly monitoring is undertaken at least 15 days apart.
Note [3]: In-field non-NATA accredited analysis permitted.
Note [4]: Quarterly monitoring is undertaken at least 70 days apart.

Vegetation

16. The licence holder must monitor vegetation in accordance with the requirements specified in Table 6 and record the results of all such monitoring.

Table 6: Vegetation monitoring table

Monitoring Location	Parameters		Frequency	Sampling Method
Lake Lefroy shoreline nearest the mine dewater discharge point[1]	Riparian vegetation	Photograph and record the presence and condition of key vegetation features within the zone of influence.	Annual[2]	Undertaken by a person suitably qualified in vegetation identification and sampling.
Areas where saline water is used for dust suppression	Vegetation			

Note [1]: Riparian vegetation is to be monitored at the shoreline nearest to the discharge point.
Note [2]: Annual monitoring is undertaken at least 300 days apart.

Records and reporting

17. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;

(b) the maintenance of infrastructure and equipment required to ensure that it is kept in good working order in accordance with condition 4 of this licence;

(c) monitoring undertaken in accordance with conditions 15 and 16 of this licence; and

(d) complaints received under condition 19 of this licence.

18. The books specified under condition 17 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the licence holder for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

19. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the department or another party) about any alleged emissions from the premises:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

20. The licence holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO by no later than 1 August, an Annual Audit Compliance Report (AACR) in the approved form.

21. The licence holder must submit to the CEO by no later than 1 March, an Annual Environmental Report (AER) for that biennial period for the conditions listed in Table 7, and which provides information in accordance with the corresponding requirement set out in Table 7.

Table 7: Annual Environmental Report requirements

Condition	Requirement
8	• Volumes of waste deposited in each of the two Class II landfills.
12	• Tabulated mine dewater monitoring data results and time series graphs showing concentrations of all parameters over the preceding three-year period. • An interpretation of monitoring data results including comparison to historical trends.
13	Compare the results of the assessment against the preceding three year assessments and identify whether any deterioration in the presence and/or quality of vegetation has taken place.

Definitions

In this licence, the terms in Table 8 have the meanings defined.

Table 8: Definitions

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the department's website).
AER	Annual Environmental Report
annual period	a 12 month period commencing from 1 January until 31 December.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.*
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made.*
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
department	the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
energy dissipation infrastructure	rock wall located at the low point in the turkey's nest that allows mine dewater to flow at a maximum rate of 16 L/s down the rock wall and into the lake.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
kL	kilolitres

Term	Definition
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
m	metres
mg/L	milligrams per litre
m^3/s	cubic metres per second
monthly period	means a one-month period commencing from day 1 of a month until day 1-1 of the immediately following month. *e.g. "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."*
No.	typographic abbreviation of the word number(s).
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
significant rainfall event	A significant rainfall event is defined based on the Bureau of Meteorology website for the location of Kalgoorlie (http://www.bom.gov.au/water/designRainfalls/revised-ifd/?year=2016). A significant rainfall event has been based on Intensity Frequency Duration (IFD), being 24 hours rainfall duration at 20% Annual Exceedance Probability (AEP). Note that a 20% AEP is equivalent to a 4.48 Annual Recurrence Internal (ARI).
tipping area	means the area of the landfill in which waste other than cover material is being deposited.
tpa	tonnes per annum
turkey's nest	means a lined (rock and geofabric material) dam that receives mine dewater and allows for the settling of particulates prior to discharge to Lake Lefroy.
waste	has the same meaning given to that term under the EP Act.
waste type	waste types identified in the *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019).*

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

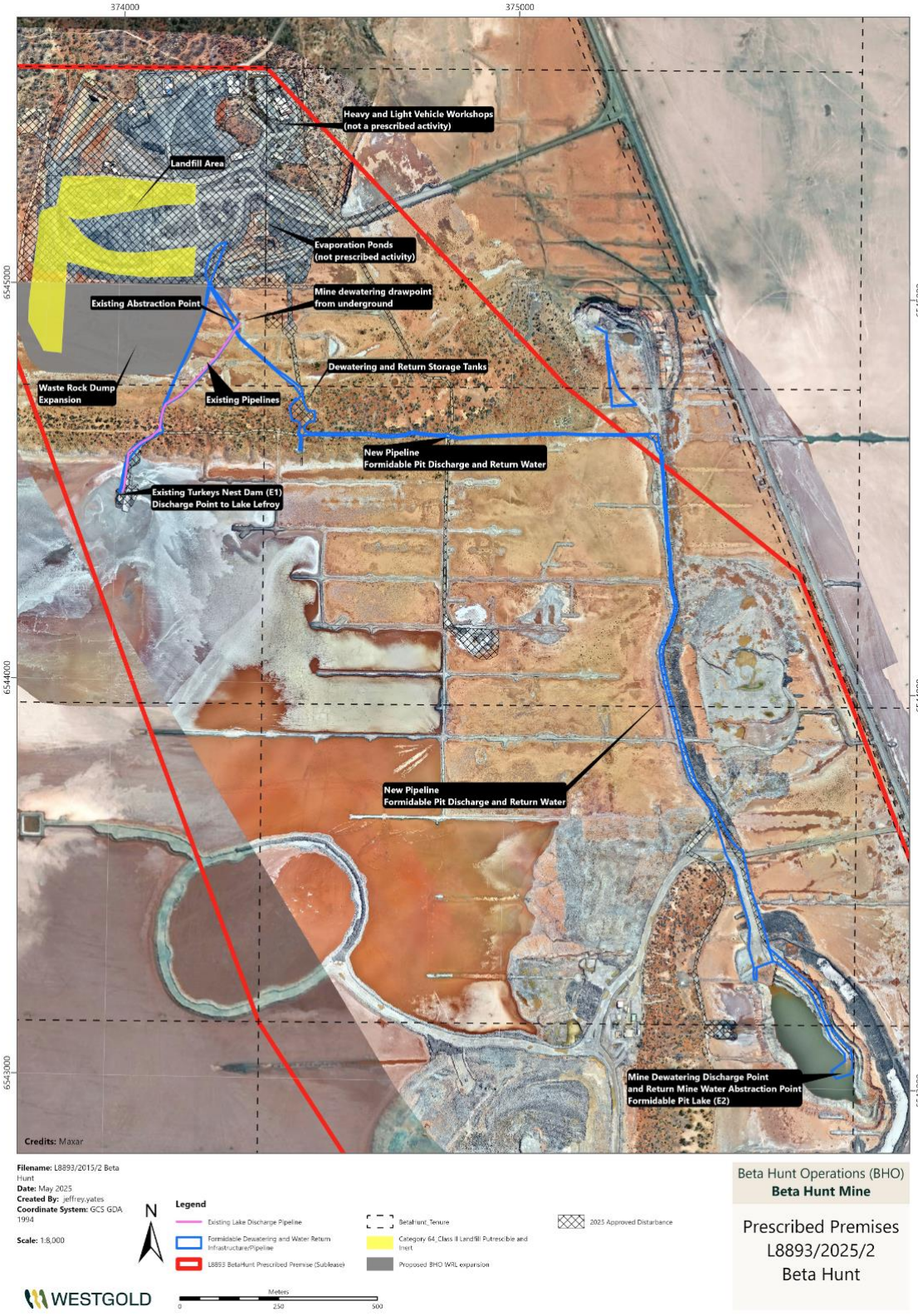

Figure 1: Map of the boundary of the prescribed premises

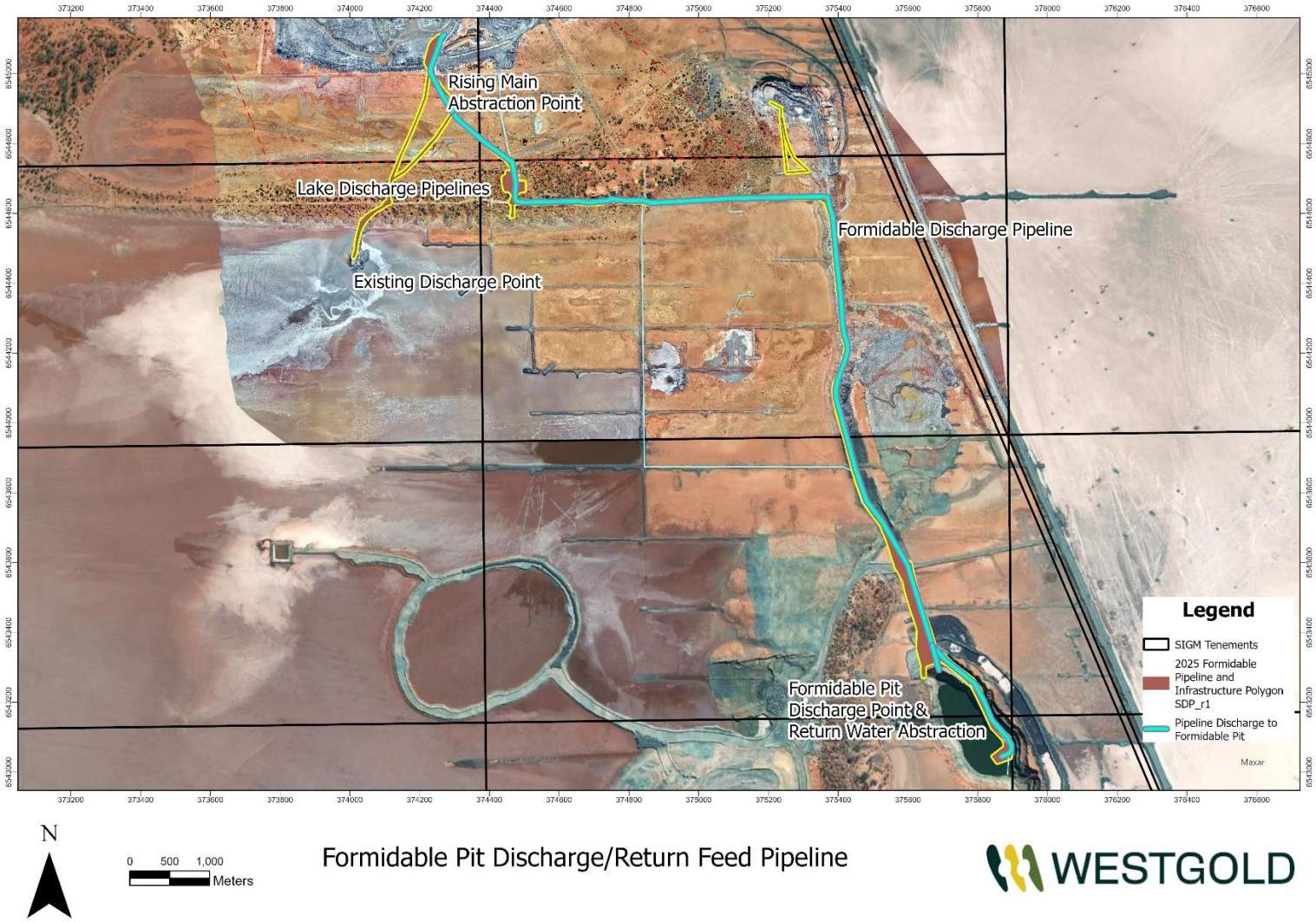

Figure 2: Premises map showing Formidable Pit dewater discharge pipeline.

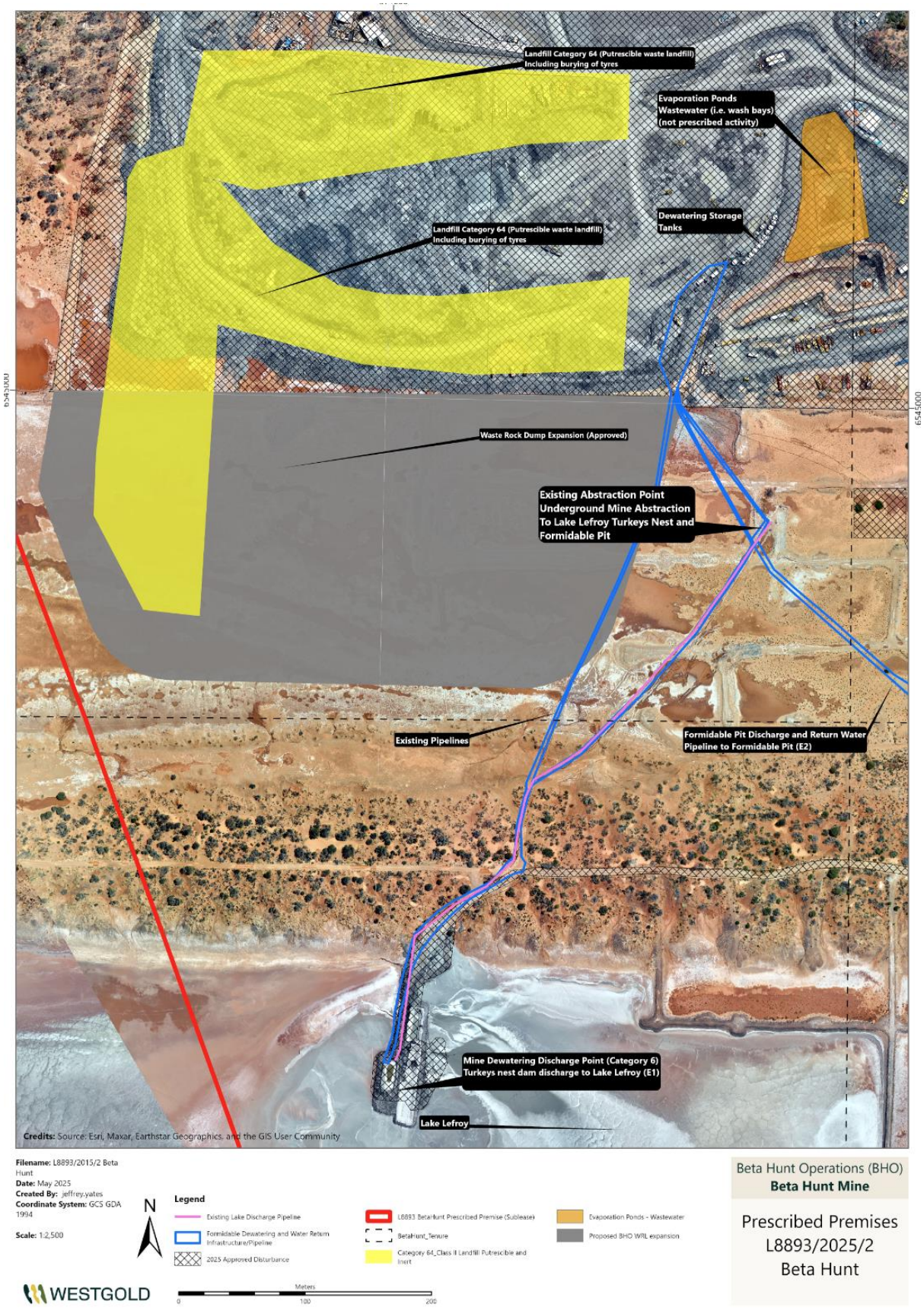

Figure 3: Site layout

Figure 4: Site layout

Premises boundary

The premises boundary is defined by the coordinates in Table 9.

Table 9: Premises boundary coordinates

Point	Easting	Northing	Comment
1	373444	6545542.58	Northwest corner of the Beta Hunt Mine Site tenements.
2	374362.31	6545554.5	Proceeding clockwise.
3	375140.42	6544759.86	
4	375140.42	6544759.86	
5	375734.91	6544302.81	
6	375878.32	6543963.21	
7	376198.45	6543164.84	
8	376198.45	6543164.84	
9	377430.8	6540304.1	
10	377444.19	6539128.98	
11	376062	6539112.39	
12	376043	6540694.35	
13	374389.63	6543141	
14	374389.63	6543141	
15	374073.73	6543941.59	
16	373767.27	6544742.02	
17	373767.27	6544742.02	
18	373444	6545542.58	Northwest corner of the Beta Hunt Mine Site tenements.

Schedule 2: Infrastructure and equipment operational requirements

No.	Infrastructure and equipment	Operational requirements	Infrastructure and equipment location
Category 6			
1.	Dewatering pumps	• Visual inspections every 12 hours to check the integrity of the pumps when in operation.	-
2.	Flow Metres	• Weekly checks of the integrity of flow meters when dewatering in operation.	-
3.	Dewatering pipeline from the dewatering drawpoint to the turkey's nest.	• Visual inspections every 12 hours to check the integrity of the pipeline when in operation.	Water pipeline from underground to discharge point as shown in Figure 1 and Figure .
4.	Dewatering pipeline from the dewatering drawpoint to the Formidable Pit.	• Visual inspections every 12 hours to check the integrity of the pipeline when in operation.	Water pipeline from underground to discharge point as shown in Figure 2.
5.	Dewatering pipeline anchors	• Visual inspections every 12 hours and prior to and following significant rainfall events to check the integrity of the pipeline anchors when in operation.	-
6.	Turkey's nest	• Visual inspections every 12 hours to ensure mine dewater is being stored in the turkey's nest for sufficient time for settling of particulates prior to discharge to Lake Lefroy.	Turkeys nest dam (E1) as shown in Figure 1 and Figure .
7.	Formidable Pit	• Monitoring of the facility every 12 hours. • Completion of monthly water balance.	Southern end of Formidable Pipeline at Lake Lefroy Access as shown in Figure 2.
8.	Energy dissipation infrastructure	• Weekly checks to identify any erosion and scouring impacts, ponding or damage to fringing vegetation.	-
Category 64			
9.	Landfill (putrescible and industrial) trench 80m long x 50m wide x 4m deep.	• Weekly checks of the landfill areas to identify and record the length and width of any uncovered areas.	Landfill as shown in Figure 1, Figure and Figure .

No.	Infrastructure and equipment	Operational requirements	Infrastructure and equipment location
10.	Tyre disposal trench 60m long x 60m wide x 3m deep.	• The licence holder shall manage the landfilling activities to ensure: ○ the size of each tipping face is kept to a minimum and not larger than 30m in width and 2m in height; ○ waste is covered as per requirements in condition 9; ○ waste is placed and compacted to ensure all faces are stable and capable of retaining further waste placement or placement of cover or rehabilitation material; and ○ any windblown waste is collected on at least a weekly basis and returned to the landfill area or otherwise appropriately contained.	
Item pertaining to all prescribed activities			
11.	Mobile equipment (e.g. vehicles, heavy equipment, generators and dewatering pumps)	• Store environmentally harmful materials in secured, covered, impervious and bunded areas. • Bunded areas to have a minimum capacity of 110% of the largest container stored within it, or 25% of the volume of all containers, whichever is the larger. • Maintain all mobile equipment as per manufacturer's specifications. • Keep suitably stocked spill response equipment close to where spills may occur. • Ensure all staff are trained to use the spill response equipment. • Contain and clean-up spills as soon as they occur.	-