# Licence

**Licence number** L6870/1993/12

**Licence holder** Shire of East Pilbara

Registered business address PMB 22

NEWMAN WA 2873

DWER file number DWER2014/001424-1~1

**Duration** 30/07/2011 to 29/07/2023

Date of amendment 11/09/2020

Premises details Newman Wastewater Treatment Plant

Crown Reserve 45776 Windell Location 144, Lot 144 on Plan 192902 NEWMAN WA 6873

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed design capacity
Category <i>54</i> : Sewage facility – Premises on which sewage is treated or from which treated sewage is discharged onto land or into waters.	2000m³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 11 September 2020, by:

Steve Checker
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

# **Licence history**

Date	Reference number	Summary of changes
21/072011	L6870/1993/12	Licence Re-issue and expiry extended by five years
29/04/2016	L6870/1993/12	Amendment to Licence REFIRE - Extend expiry date from 29 July 2016 to 29 July 2023. No update to Licence format occurred.
08/09/2016	L6870/1993/12	Amendment Notice 1- Addition of a second clarifier to the Licence
02/09/2020	L6870/1993/12	Licence amendment to include historical discharge of treated effluent to neighbouring BHP owned wetland area. The amendment also includes the addition of a groundwater monitoring condition.
		Amendment was granted in the form of a revised licence, including consolidation of Amendment Notice 1 issued on 08 September 2016.

## 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 in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (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 shall manage the WWTP in a manner such that:
  - (a) stormwater runoff resulting from roof and site drainage does not enter the wastewater treatment tanks;
  - (b) extreme rainfall events do not cause overtopping of the treatment tanks;
  - (c) there is no discernible seepage loss from the plant; and'
  - (d) vegetation and floating debris (emergent or otherwise) shall be prevented from growing within treatment tanks.
- **2.** The Licence Holder shall operate the second clarifier (as shown in Figure 2) to the following specifications:
  - (a) Concrete construction and maintained in an impervious condition; and
  - (b) The maximum flow rate to the second clarifier shall not exceed 800 kiloliters per day.

#### **Emergency Storage Facility**

- 3. The Licence Holder shall ensure that during periods of plant failure or maintenance, the Licence Holder shall direct wastewater to the impervious storage facility, which has a minimum capacity of 5000 cubic metres (5 days nominal flow).
- **4.** Upon completion of the period of plant failure or maintenance as referred to in condition 3, the Licence Holder shall direct collected wastewater to the inlet works of the plant for treatment.

## **Emissions and discharges**

#### **Emissions to Land**

- 5. The Licence Holder shall discharge all treated effluent from the WWTP, through the effluent pipe to a holding pond(s), prior to irrigation or discharge to BHP Wetland area in accordance with Table 1.
- 6. The Licence Holder shall ensure that where waste is emitted to land from the emission points in Table 1 and identified on the map of emission points in Schedule 2, it is done so in accordance with the conditions of this Licence.

Table 1: Emissions to land

Emission point reference (Figure 4)	Emission point reference on Map of emission points	Description	Source including abatement
N/A	Discharge to Recycled Water Scheme	Shires Recycled	Treated wastewater/ effluent discharged from the Treated Effluent Holding Pond

Emission point reference (Figure 4)	Emission point reference on Map of emission points	Description	Source including abatement
Discharge Point	Discharged to BHP Wetland area	<ul> <li>Discharge of up to 0.5ML per day of treated effluent to the BHP Wetland area;</li> <li>In the event of an emergency, the licence holder may discharge up to 2ML per day of treated effluent to the BHP Wetland area for a period or cumulative periods not exceeding one month per annual period in accordance with condition 22.</li> </ul>	Treated wastewater/ effluent discharged from the Treated Effluent Holding Pond only in an emergency/ when insufficient demand for irrigation from the Recycled Water Scheme.

**7.** The Licence Holder must cease discharge of treated wastewater to the BHP wetland by 31 December 2027.

#### **Odour Emissions**

**8.** The Licence Holder shall ensure that odour emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the premises.

#### **Disposal of Sludge Material**

9. The Licence Holder shall ensure that any sludge removed from the wastewater ponds is disposed of in accordance with the Western Australian Guidelines for Direct Land Application of Biosolids and Biosolids Products, February 2002 or to an approved facility.

### **Monitoring**

**10.** The Licence Holder shall collect and preserve all water samples in accordance with Australian Standard 5667.

- 11. The Licence Holder shall submit all water samples to a laboratory with current NATA accreditation for the analyses specified in these conditions, and have them analysed in accordance with the current "Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF".
- **12.** The Licence Holder shall maintain a suitable device for measuring monthly cumulative volumes of effluent discharged from the WWTP.
- 13. The Licence Holder shall ensure that the monthly cumulative flow results referred to in condition 12 are presented in the next AER required by condition 19 in a tabular form.
- 14. The Licence Holder shall, every three months, collect a representative sample of treated wastewater being discharged from the WWTP to the holding pond(s), prior to irrigation and at the discharge point (Figure 4) prior to discharge to the BHP wetland area. The levels of the parameters in column 1 of Table 2 shall be determined in the units of column 2 of Table 2.

Table 2: Parameters to be determined.

Column 1	Column 2
Parameter	Units
pH	pH units
Total Suspended Solids	mg/L
Total Dissolved Solids	mg/L
5-Day Biochemical Oxygen Demand	mg/L
Total Nitrogen	mg/L
Total Phosphorous	mg/L
E coli. bacteria	cfu / 100mL

- **15.** The results required by condition 14 shall be presented in the AER.
- The Licence Holder shall determine the monthly load of each contaminant in the effluent discharged from the WWTP (except pH and bacteria) using flow weighted data. The loads shall be based on the effluent discharge rate and the concentration as measured in accordance with conditions 12, 13, 14 and 15. Monthly and annual average loads of the contaminants shall be reported in the AER required by condition 1 in kilograms per day.

#### **Groundwater Monitoring**

**17.** The licence holder must undertake the monitoring in Table 3 according to the specifications in that table.

Table 3: Monitoring of ambient groundwater quality

Monitoring bore location	Parameter <sup>3</sup>	Unit	Frequency	Averaging period
Groundwater bores B1 -7	Standing water level <sup>1</sup>	m(AHD) and mBGL	Six monthly	Spot sample
(figure 3, Schedule 1)	pH <sup>1</sup>	рН		
	Conductivity <sup>1</sup>	mS/cm		
	Chemical Oxygen Demand	Mg/L		
	Biochemical Oxygen Demand			

Monitoring bore location	Parameter <sup>3</sup>	Unit	Frequency	Averaging period
	Total Dissolved Solids			
	Total Nitrogen			
	Total Phosphorus	-		
	Ammonia			
	Nitrate			
	Nitrite			
	Chloride	1		
	Escherichia colî²	CFU/100ml		

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

## **Records and reporting**

- **18.** 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.
- **19.** 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 30 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- **20.** 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) any maintenance of infrastructure that is performed in the course of complying with this licence;
  - (c) monitoring programmes undertaken in accordance with conditions 10 to 17 of this licence; and
  - (d) complaints received under condition 18 of this licence.

- **21.** The books specified under condition 20 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.
- **22.** The licence holder must provide written notification to the CEO along with justification for the discharge and expected timeframes for resolution prior to any emergency discharge to the BHP Wetland area in accordance with condition 6.

## **Definitions**

In this licence, the terms in Table 1 have the meanings defined.

**Table 1: 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).
annual period	a 12 month period commencing from 01 September until 31 August of the immediately following year.
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	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)

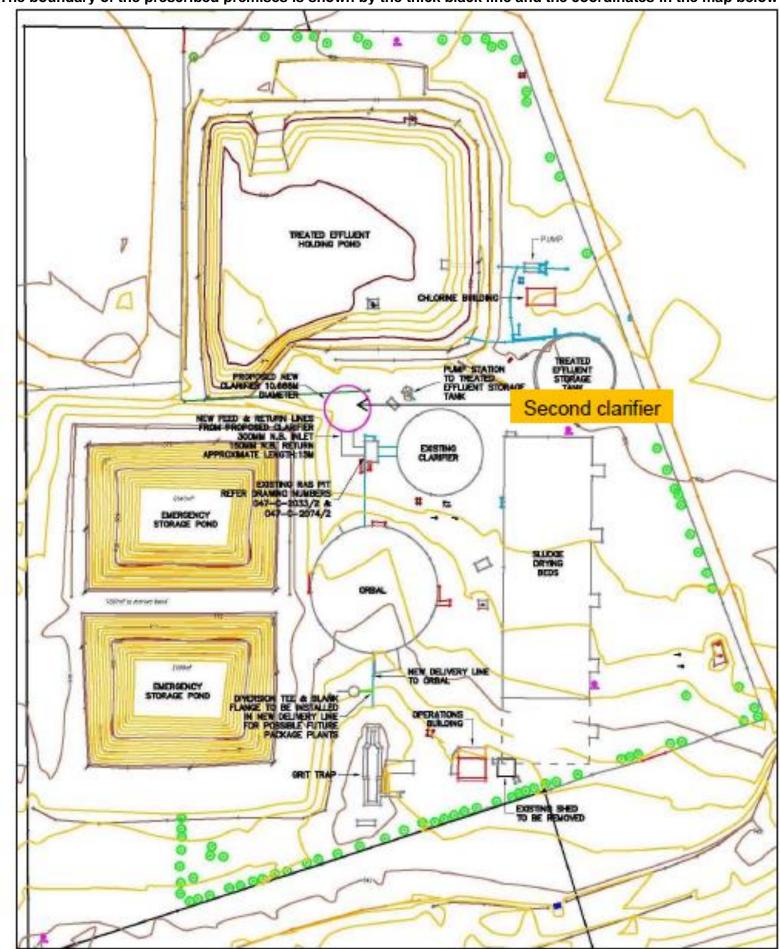
Term	Definition
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises maps (Figure 1 and 2) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
waste	has the same meaning given to that term under the EP Act.

#### **END OF CONDITIONS**

# **Schedule 1: Maps**

## **Premises map**

The boundary of the prescribed premises is shown by the thick black line and the coordinates in the map below (



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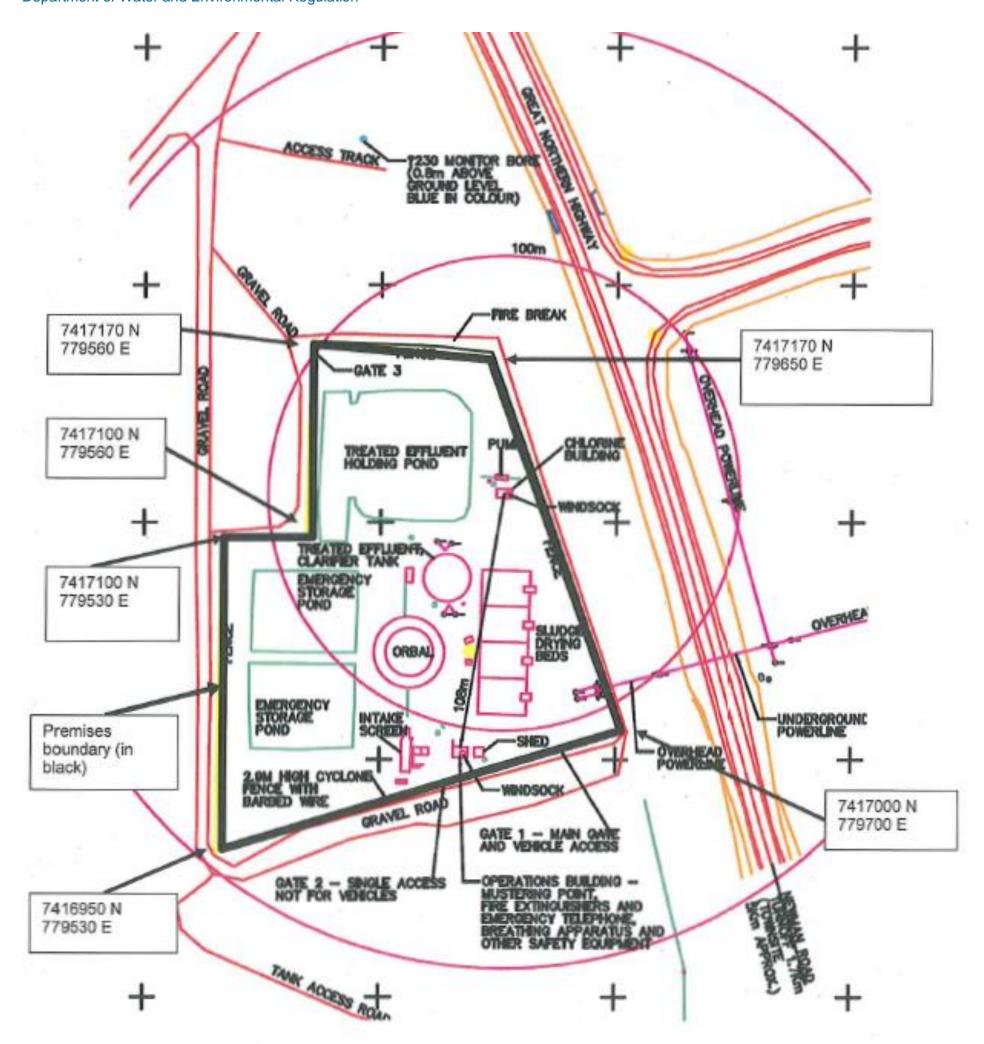
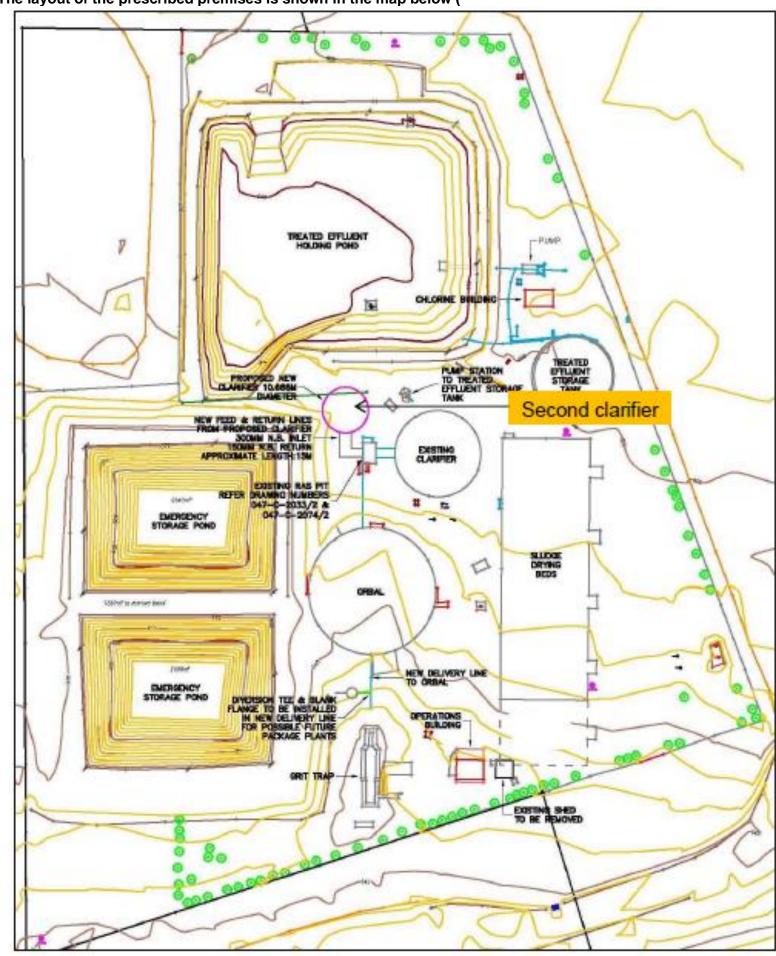


Figure 1: Map of the boundary of the prescribed premises

# **Premises layout**

The layout of the prescribed premises is shown in the map below (



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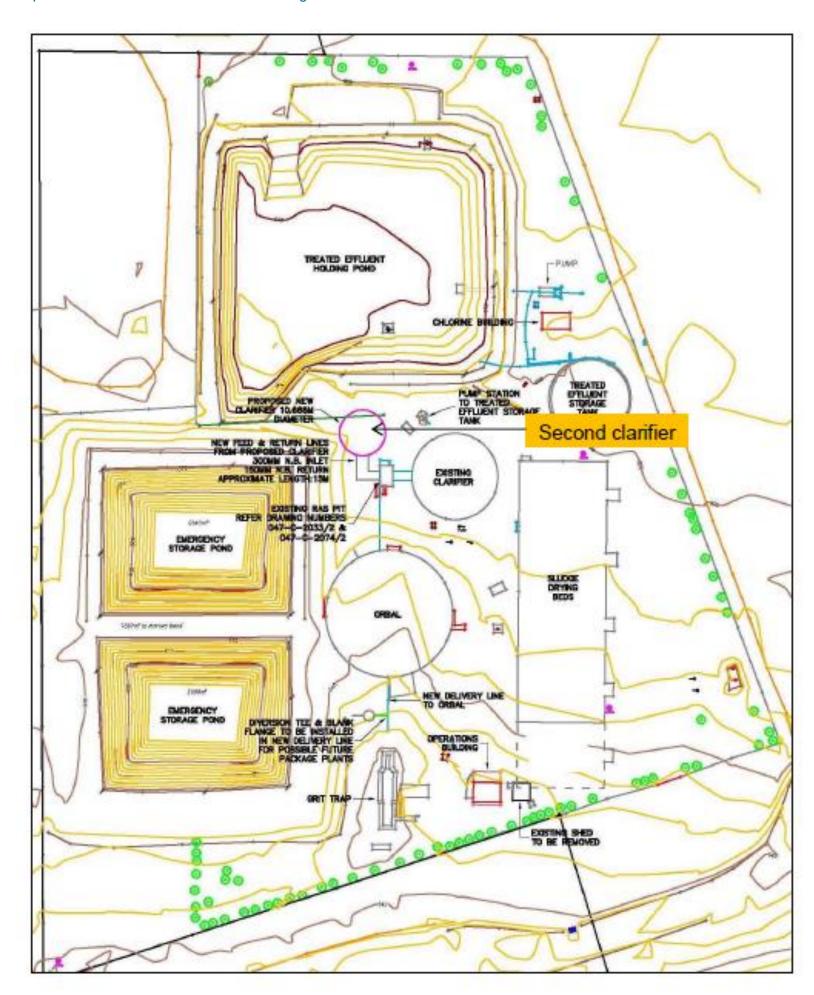
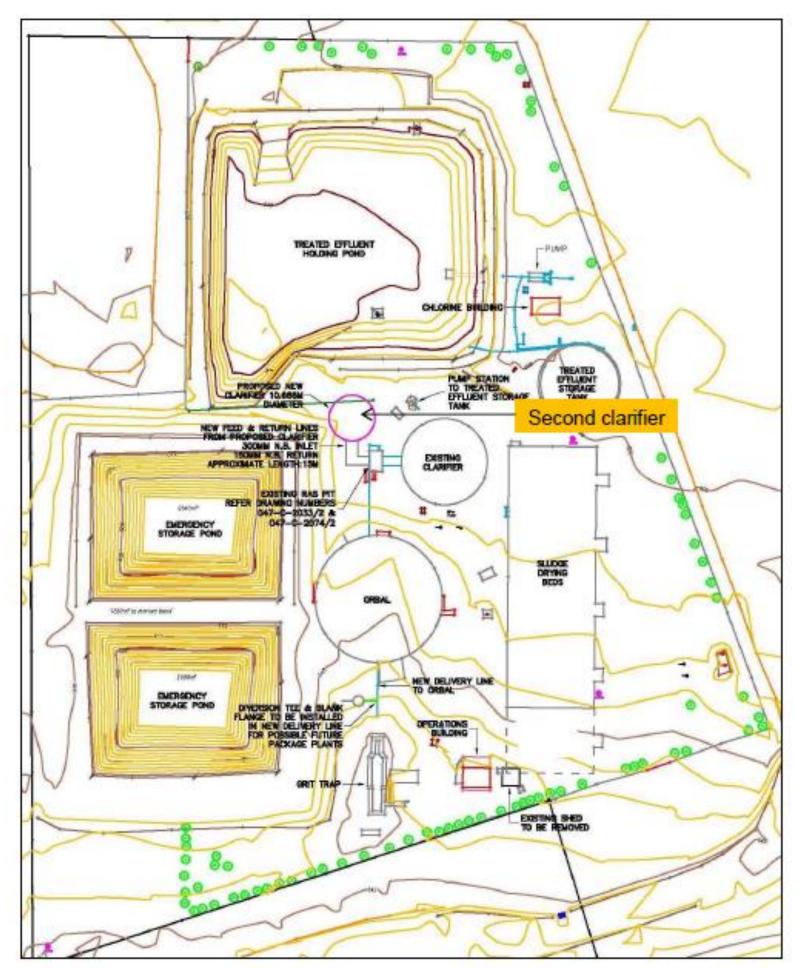


Figure 2: Layout of the prescribed premises

**Groundwater monitoring bore layout** 



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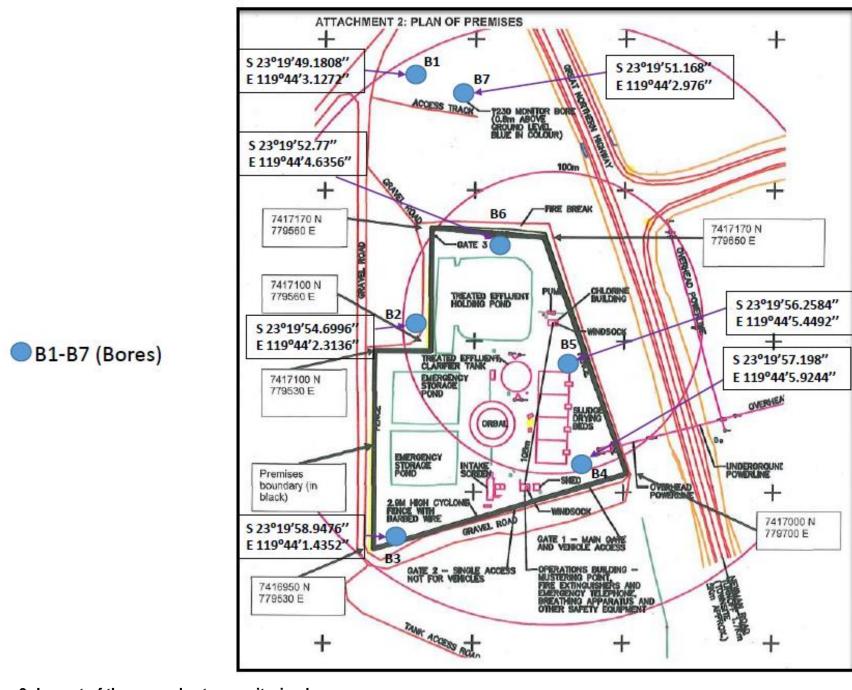


Figure 3: Layout of the groundwater monitoring bores

# **Schedule 2: Emission Points**

## **Emission Points map**

The premises emission points are shown in the map below (4).

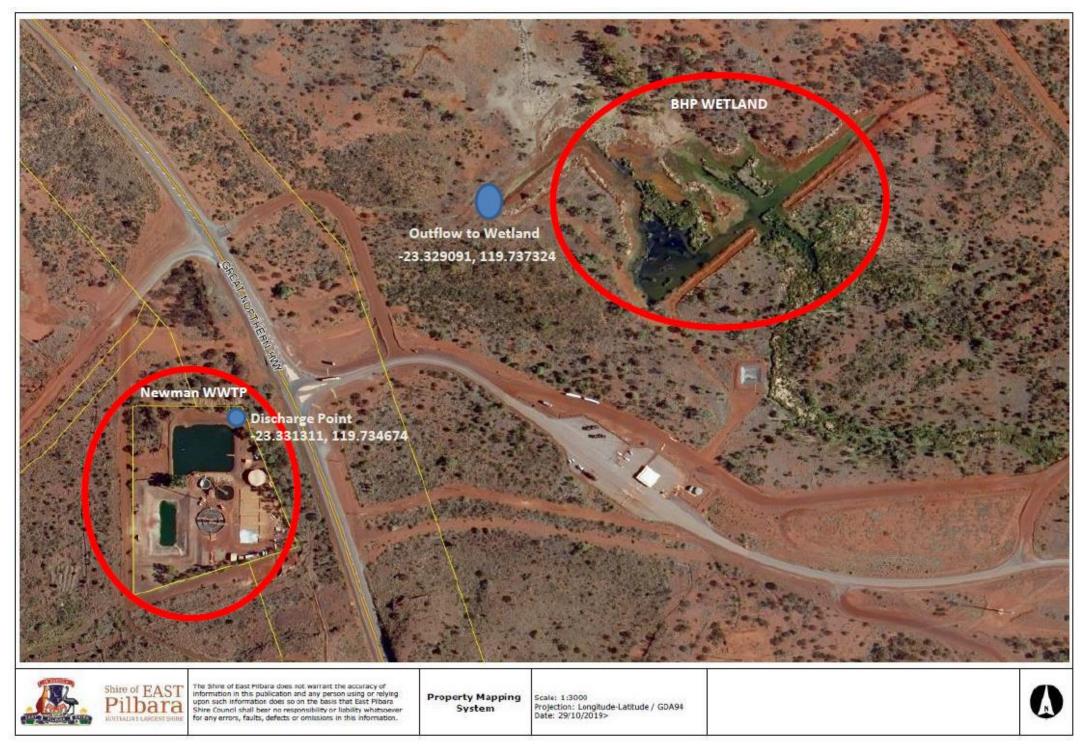


Figure 4: Discharge point to BHP owned Wetland area