Licence number L9284/2021/1

Licence holder Water Corporation

Registered business address 629 Newcastle Street

LEEDERVILLE WA 6001

DWER file number DER2020/000693

Duration 01/06/2022 to 31/05/2042

Date of issue 01/06/2022

Premises details Karratha No.3 Wastewater Treatment Plant

Lot 1935 Keating Road

KARRATHA INDUSTRIAL ESTATE 6714

Legal description -

Part of Lot 1935 on Deposited Plan 214092 Certificate of Title Volume LR3014 Folio 191

Reserve 35098

As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed design capacity
Category 54: sewage facility	670 m³/day

This licence is granted to the licence holder, subject to the attached conditions, on 01 June 2022, by:

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
01/06/2022	L9284/2021/1	Licence granted.

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:

Waste acceptance

- **1.** The licence holder must only accept onto the premises waste of a type that:
 - (a) does not exceed the rate at which that waste is received; and
 - (b) meets the relevant acceptance specification,

as set out in Table 1.

Table 1: Waste acceptance criteria

Waste type	Rate at which waste is received	Acceptance specifications	
Sewage	670 m³/day	(a) Accepted via sewerage inflow	

Waste processing

2. The licence holder must ensure that the waste types specified in Table 2 are only subjected to the corresponding processes, and subject to the corresponding process specifications as set out in Table 2.

Table 2: Waste processing

Waste type	Processes	Process limits and specifications
Sewage	Biological and physical treatment prior to disposal via evaporation	(a) Must not process more than 670 m³/day.
Sewage sludge	Removal, dewatering and temporary storage prior to offsite disposal	 (a) Must be contained and dried within: (i) a Temporary Desludging Area; or (ii) the primary ponds when using the drain and dry method, (b) Must be spadeable prior to offsite disposal at an appropriately licensed facility; and (c) The licence holder must notify the CEO no less than 14 days before the corresponding processes for sewage sludge are undertaken and provide the following information: (i) when desludging is proposed to occur; (ii) the desludging method; and (iii) any actions that will be taken to mitigate potential odour impacts.

Waste type	Processes	Process limits and specifications
Grit and screenings	Removal, dewatering and temporary storage prior to offsite disposal	(a) Must be stored within a sealed bin or container within a hardstand area prior to removal from the premises for offsite disposal at an appropriately licensed facility.

Infrastructure and equipment

3. The licence holder must ensure that the site infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

Table 3: Infrastructure and equipment requirements

	Site infrastructure and equipment	Ope	erational requirements	Infrastructure location
1.	Primary Pond 1; and	(a)	The integrity of the clay-liner must be maintained to achieve a permeability less than 1 x 10 ⁻⁹ m/s;	As specified in Figure 1
	Primary Pond 2	(b)	Must be maintained to achieve a minimum top of embankment freeboard level of 300 mm;	
		(c)	Overtopping of the ponds must not occur;	
		(d)	Vegetation and floating debris (emergent or otherwise) must be prevented from encroaching onto pond surfaces or inner pond embankments; and	
		(e)	Stormwater runoff must be prevented from entering the ponds or causing erosion of the outer pond embankments.	
2.	Evaporation Pond 1; and	(a)	The integrity of the clay-liner must be maintained to achieve a permeability less than 1 x 10 ⁻⁹ m/s;	As specified in Figure 1
	Evaporation Pond 2	(b)	Must be maintained to achieve a minimum top of embankment freeboard level of 300 mm;	
		(c)	Overtopping of the ponds must not occur;	
		(d)	Vegetation and floating debris (emergent or otherwise) must be prevented from encroaching onto pond surfaces or inner pond embankments; and	
		(e)	Stormwater runoff must be prevented from entering the ponds or causing erosion of the outer pond embankments.	

	Site infrastructure and equipment	Operational requirements		Infrastructure location
3.	Temporary	(a)	The area must be comprised of:	N/A
	Desludging Area		(i) a hardstand or liner with a permeability less than 1 \times 10 ⁻⁹ m/s; and	
			(ii) bunding that prevents the entry of stormwater into and the surface run-off of leachate out of the area; and	
		(b)	Collected leachate or contaminated stormwater must be directed to Primary Pond 1 or 2.	

4. The licence holder must:

- (a) undertake monthly inspections of all containment infrastructure to identify erosion, cracking or subsidence and confirm the integrity of pond embankments:
- (b) where erosion, cracking or subsidence of pond embankments is identified, undertake repairs to the containment infrastructure to prevent containment loss from that infrastructure; and
- (c) record the results of monthly inspections and maintenance undertaken pursuant to this condition.

5. The licence holder must:

- (a) erect and maintain suitable fencing to prevent unauthorised access to the premises;
- (b) ensure that any entrance gates to the premises are securely locked when the premises is unattended; and
- (c) undertake monthly inspections of all security measures and repair any damage to ensure unauthorised access is prevented.

Emissions and discharges

General

- **6.** The licence holder must immediately recover or remove and dispose of spills of sewage or other waste material located outside of an engineered containment system.
- 7. The licence holder must ensure that all material used for recovery, removal, and/or disposal in accordance with condition 6 is stored in an impermeable container prior to disposal at an appropriately authorised facility.

Monitoring

Waste acceptance and removal

8. The licence holder must record the total amount of waste accepted onto and removed from the premises, for each waste type listed in Table 4, in the corresponding unit, and for the corresponding averaging period, as set out in Table 4.

Table 4: Waste accepted and removed from the premises

Accepted/Removed ¹	Waste type	Unit	Averaging period
Waste accepted	Sewage	m³/day	Monthly
Waste removed	Sewage sludge ¹	tonnes	Yearly
	Waste type as defined in the Landfill Definitions		

Note 1: Additional requirements under the Environmental Protection (Controlled Waste) Regulations 2004 may apply

Treated wastewater discharge

9. The licence holder must monitor emissions and discharges in accordance with the requirements specified in Table 5.

Table 5: Emissions and discharge monitoring

Discharge point	Monitoring location	Parameter	Unit	Frequency	Method			
SP KTA KIE	•	pH ¹	ı	Quarterly	Spot sample, in accordance			
WWTP Primary Ponds (FLN S3000084)	i iguie i	BOD₅	OD ₅ mg/L	with AS/NZS 5667.10				
33000004)	(3000084)		TSS			3007.10		
		TDS						
		TP						
					TN			
				TKN				
		NH ₄ -N						
		NO _x -N						
		E. coli	CFU or MPN /100 mL					

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

Ambient groundwater monitoring

10. The licence holder must monitor groundwater for concentrations of the identified parameters in accordance with Table 6.

Table 6: Ambient groundwater monitoring

Monitoring well location	Parameters	Unit	Frequency	Method
01D/20; C/11;	SWL ¹	mBGL and mAHD	Six-monthly	Spot sample, in accordance with AS/NZS 5667.11
D/11; and	pH ¹	-		A3/N23 3007.11
02D/20;	TDS	mg/L		
as specified in Figure 2	TN			
	TKN			
	NH ₄ -N			
	NO _x -N			
	TP			
	Dissolved cobalt			
	Dissolved nickel			
	E. coli	CFU or MPN /100mL		

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

General

- 11. The licence holder must ensure that all sample analysis undertaken pursuant to condition 9 and 10 is completed by a holder of a current accreditation from NATA for the methods of analysis relevant to the corresponding parameter, unless indicated otherwise in Table 5 or Table 6.
- **12.** The licence holder must ensure that:
 - (a) monitoring is undertaken in each quarterly period such that there are at least 45 days in between the date on which samples are taken in successive quarters; and
 - (b) monitoring is undertaken in each six-monthly period such that there are at least 5 months in between the days on which samples are taken in successive periods of six months.

Records and reporting

- 13. 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.
- **14.** 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 October after the end of that annual period an Annual Audit Compliance Report in the approved form.
- 15. The licence holder must submit to the CEO by no later than 1 October after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 7, and which provides information in accordance with the corresponding requirements set out in Table 7.

Table 7: Annual Environmental Report

Conditions	Requirements		
-	(a) A summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period, including any actions taken.		
1, 2, 3	(a) A summary of inspections and maintenance performed to address the specifications in Table 1 and Table 2 and the operational requirements in Table 3 during the annual period.		
4	(a) A summary of any erosion, cracking or subsidence identified on pond embankments and any repairs to the embankments undertaken during the annual period.		
8	(a) A summary of the waste acceptance and removal at the premises presented in table format.		
9	(a) Tabulated monitoring data results and time-series graphs showing concentrations of all parameters over a minimum three year period (where sufficient data allows); and		
	(b) An assessment and interpretation of the data, including comparison to historical trends.		

Conditions	Requ	uirements
10	(a)	a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis;
	(b)	a diagram with aerial image overlay showing all monitoring locations and depicting groundwater level contours and flow direction (relevant site features including discharge points and other potential sources of emissions must also be shown);
	(c)	an interpretive summary and assessment of the results against relevant assessment levels for surface water and groundwater, as published in the Guideline Assessment and management of contaminated sites;
	(d)	an interpretive summary and assessment of results against previous monitoring results; and
	(e)	trend graphs to provide a graphical representation of historical results and to support the interpretive summary.
13	(a)	A summary of complaints received, and any action taken to investigate or respond to any complaint.

- **16.** 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 condition 3 of this licence;
 - (c) inspections and repair work undertaken in accordance with condition 4;
 - (d) monitoring programs undertaken in accordance with conditions 8, 9 and 10 of this licence; and
 - (e) complaints received under condition 13 of this licence.
- **17.** The books specified under condition 16 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.

Definitions

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

Table 8: Definitions

Term	Definition	
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 1 July until 30 June of the immediately following year.	
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water quality - Sampling - Guidance on sampling of waste waters	
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water quality - Sampling - Guidance on sampling of groundwaters	
BOD ₅	biochemical oxygen demand	
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	
CFU	colony forming units	
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.	
E. coli	Escherichia coli	
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)	
Landfill Definitions	Landfill Waste Classification and Waste Definitions 1996 (as amended from time to time).	

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 ³	cubic metres	
mAHD	metres Australian Height Datum	
mBGL	metres below ground level	
mg/L	milligrams per litre	
ml	millilitres	
MPN	most probable number	
NATA	National Association of Testing Authorities	
NH ₄ -N	ammonium as nitrogen	
NO _x -N	nitrate plus nitrite as nitrogen	
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 and in the coordinates table (Table 9) in Schedule 2 to this licence.	
prescribed premises	has the same meaning given to that term under the EP Act.	
spadeable	has the meaning defined in Landfill Definitions.	
SWL	standing water level	
TDS	total dissolved solids	
TKN	Total Kjeldahl nitrogen	
TN	total nitrogen	
TP	total phosphorus	
TSS	total suspended solids	
waste	has the same meaning given to that term under the EP Act.	
WWTP	wastewater treatment plant	

END OF CONDITIONS

Schedule 1

Premises maps

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

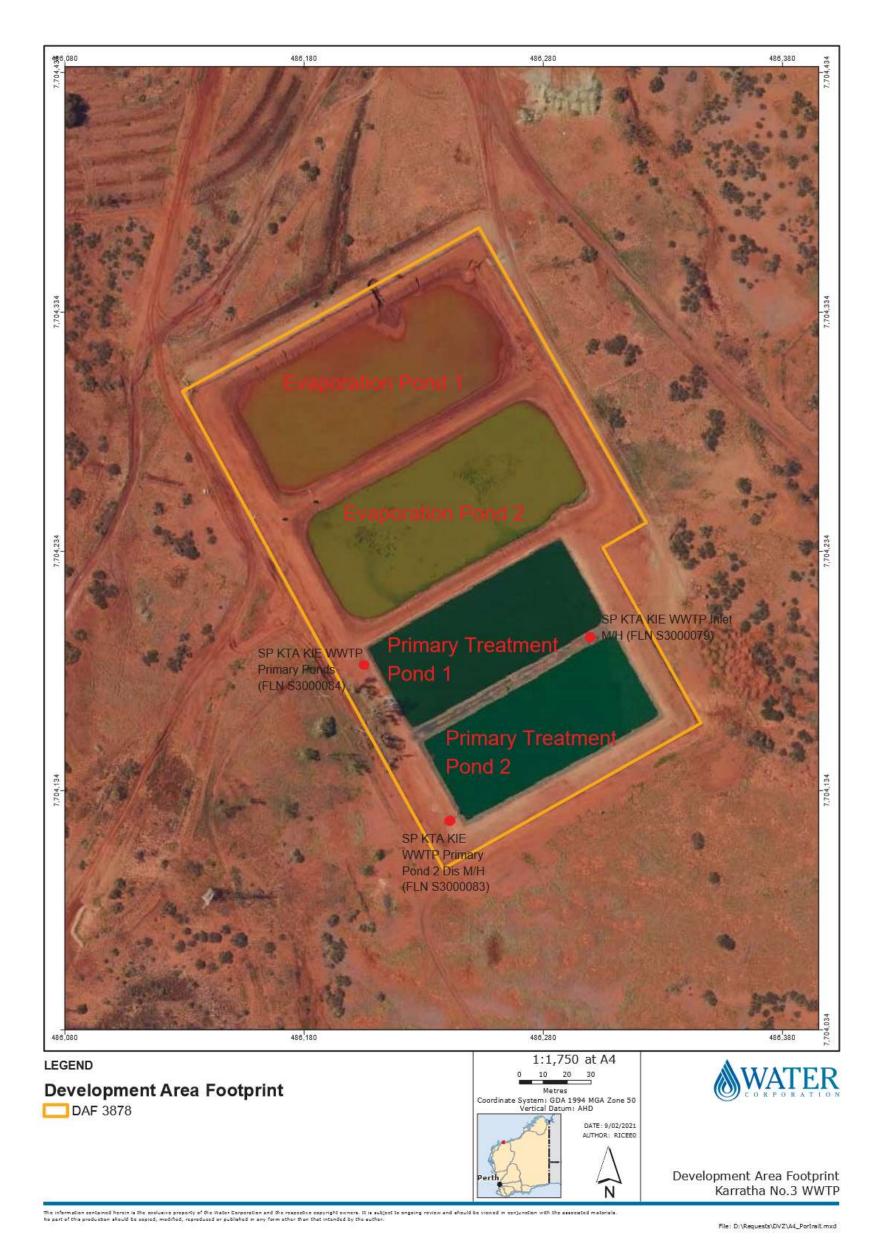


Figure 1: Site plan and map of the boundary of the prescribed premises

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Groundwater monitoring bores

Groundwater monitoring bores for the prescribed premises are shown as blue and white dots in the map below (Figure 2).



Figure 2: Groundwater monitoring bores

Schedule 2

Premises boundary

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

Table 9: Premises boundary coordinates (GDA94 MGA Zone 50)

Point no.	Eastings	Northings
1	486129.238	7704297.839
2	486249.150	7704365.158
3	486319.050	7704242.482
4	486302.043	7704233.358
5	486344.418	7704160.971
6	486235.842	7704100.163