Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L6248/1991/8
Licence holder	Water Corporation
ACN	28 003 434 917
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	INS-0001291
Duration	01/11/2013 to 31/10/2036
Date of issue	01/11/2013
Date of amendment	12/01/2026
Premises details	Karratha No. 1 Waste Resource Recovery Facility Lot 1933 Millstream Road KARRATHA WA 6714 Legal description - Lot 500 on Plan 74743, Lot 600 on Plan 74155, Lot 3921 on Plan 216652 and Crown Reserve 35053 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed design capacity**
Category 54 Sewage facility premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters.	10 000 m^3 per day

This licence is granted to the licence holder, subject to the attached conditions, on 12 January 2026, by:

Abbie Crawford

Digitally signed by Abbie Crawford
Date: 2026.01.12 09:43:37 +08'00'

Abbie Crawford
MANAGER, WASTE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
07/10/2000	L6248/1991/1	Licence re-issue – First licence noted in Industry Licensing System
07/10/2001	L6248/1991/2	Licence re-issue
07/10/2002	L6248/1991/3	Licence re-issue
07/10/2003	L6248/1991/4	Licence re-issue
07/10/2004	L6248/1991/5	Licence re-issue
01/11/2006	L6248/1991/6	Licence re-issue
01/11/2008	L6248/1991/7	Licence re-issue
24/03/2010	L6248/1991/8	Licence amendment for AACR submission date
18/06/2012	W5138/2012/1	Works Approval issued for construction on WRP and associated infrastructure
05/09/2013	W5434/2013/1	Works Approval issued for construction of the offsite contingency/evaporation/infiltration basins and associated infrastructure
01/11/2013	L6248/1991/8	Licence re-issue
24/12/2015	L6248/1991/8	Licence amendment for completion of Works Approval W5138/2012/1 and W5434/2013/1 in standardised format
26/04/2016	L6248/1991/8	Notice of Amendment of Licence expiry dates
19/05/2016	L6248/1991/8	Licence amendment to outline Storage Pond lined to achieve a permeability of $1x10^{-9}$
01/06/2023	L6248/1991/8	Licence amendment for renaming premises, AER and AACR reporting timeframes, the reconstruction of 10 sludge drying beds, and the construction of 3 temporary sludge drying beds.
12/01/2026	L6248/1991/8	APP-0030429; Licence amendment to remove the reconstruction of 10 sludge drying beds. Renaming of ponds and updating of offsite monitoring bore locations.

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:

Construction phase

Infrastructure and equipment

1. The licence holder must construct the infrastructure in accordance with the corresponding design and construction requirements as set out in Table 1.

Table 1: Design and construction requirements

Infrastructure	Design and construction requirements
Two temporary sludge drying beds (Figure 6)	(a) To be constructed to the following dimensions: (i) Bed in Area 1: 60 m wide by 25 m long; and (ii) Bed in Area 2: 70 m wide by 65 m long. (b) Soils to be compacted and mounded up with a 500 mm wide and 300 mm high embankment; (c) Lined with a 1 mm thick liner consisting of linear low-density polyethylene or high density polyethylene, to achieve a permeability of 1 x 10^{-9} m/sec or less; (d) All pipework, sumps, fittings and joins are to be constructed of impervious material and are to be free from leaks and defects; and (e) The leachate drains are to be maintained to ensure they are free from leaks and defects, and that leachate from the sludge drying beds is directed back to the either a treatment pond or inlet of the WWTP.

Compliance reporting

2. The licence holder must within 30 calendar days of an 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 suitably qualified civil engineer 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 works approval holder and contains the printed name and position of that person.

Operation phase

4. The licence holder must only allow waste to be accepted on to the Premises if:

(a) it is of a type listed in Table 2; and

(b) the quantity accepted is below any limit listed in Table 2; and

(c) it meets any specification listed in Table 2.

Table 2: Waste acceptance

Waste Type	Quantity Limit	Specification
Sewage	10 000 m^3 per day	Accepted through sewer inflow(s) and tankered waste only

Note 1: Additional requirements for the acceptance of controlled waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

5. The licence holder must ensure that the wastes accepted onto the premises are only subjected to the processes set out in Table 3 and in accordance with any process requirements described in that table.

Table 3: Waste processing

Waste Type	Process	Process requirements
Sewage	Physical, biological and chemical treatment	Treatment of sewage waste must be limited at or below the treatment capacity of 10 000 m^3/day.
Sewage sludge	Storage and disposal	(a) To be stored in Geobags within the three temporary sludge drying beds, or within refurbished sludge drying beds 1-10. (b) Collected leachate to be returned to treatment ponds; and (c) Removal of sludge and biosolids in accordance with the document 'Western Australian Guidelines for Biosolids Management', Department of Environment and Conservation, (December 2012 or updated version), or to a licensed landfill facility.

6. The licence holder must ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 4.

Table 4: Containment infrastructure

Vessel or compound	Material	Requirements
Inlet works (Drum Screen)	Grit and Screenings	Stored in a sealed bin or in a container within a hardstand area which returns sludge leachate to the start of the treatment process
Anaerobic Ponds 1 and	Wastewater	Geosynthetic clay lined to achieve a

Vessel or compound	Material	Requirements
2		permeability of $<10^{-9}$ m/s or equivalent
Facultative Ponds 1, 2, and Maturation Pond 3	Wastewater	Lined with compacted in-situ soils
Facultative Ponds 4, 5 and Maturation Pond 6	Wastewater	Geosynthetic clay lined to achieve a permeability of $<10^{-9}$ m/s or equivalent
Storage Pond	Treated wastewater	Geosynthetic clay lined to achieve a permeability of $<10^{-9}$ m/s or equivalent
Sludge Drying Beds 1 to 10 (Figure 5)	Sewage sludge	(a) Maintained in accordance with manufacturer's recommendations, to be free of leaks and defects and to achieve a permeability of ≤ 2.96 x 10^{-9} m/sec; and (b) Beds 11 to 24 are not authorised to store sludge
Three Temporary Sludge Drying Beds (Figure 6)	Sewage sludge	(a) Maintained in accordance with manufacturer's recommendations, to be free of leaks and defects and to achieve a permeability of ≤ 1 x 10^{-9} m/sec; and (b) The leachate drains are to be maintained to ensure they are free from leaks and defects, and that leachate from the sludge drying beds is directed back to either a treatment pond or inlet of the WWTP.

7. The licence holder must manage all wastewater treatment storage ponds, and sludge drying beds such that:

(a) overtopping of the ponds and sludge drying beds does not occur;

(b) overfilling of geobags does not occur;

(c) the integrity of the containment infrastructure is maintained;

(d) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and

(e) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.

8. The licence holder must ensure stormwater runoff resulting from site drainage is prevented from entering the wastewater treatment ponds and sludge drying beds, or causing erosion of the outer pond or bed embankments.

9. The licence holder must:

(a) implement security measures at the site to prevent as far as is practical unauthorised access to the site; and

(b) undertake regular inspections of all security measures and repair damage as soon as practicable; and

(c) ensure the entrance gates are closed and locked when the site is closed or unmanned.

Emissions

10. The licence holder must ensure that where waste is emitted to land from the emission points in Table 5 (and identified on the map of emission points in Schedule 1) it is done so in accordance with the conditions of this licence.

Table 5: Emissions to land

Emission point reference	Description	Source including abatement
L1	Discharge from Storage Pond to offsite contingency evaporation/infiltration basins	Treated wastewater not used for offsite Shire reuse is discharged to offsite contingency evaporation/infiltration basins

Monitoring

11. The licence holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless indicated otherwise in the relevant table;

(b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;

(c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

(d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

12. The licence holder must ensure that quarterly monitoring is undertaken at least 45 days apart.

13. The licence holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of emissions to land

Monitoring point reference	Parameter	Units	Frequency
M1	Volumetric flow rate (cumulative)[1]	m^3/day	Continuous
	pH[1]	pH units	Quarterly
	Biochemical Oxygen Demand	mg/L	
	Total Suspended Solids		
	Total Dissolved Solids		

Monitoring point reference	Parameter	Units	Frequency
	Total Nitrogen		
	Ammonium Nitrogen		
	Nitrate + Nitrite Nitrogen		
	Total Phosphorus		
	E.coli[2]	cfu/100 mL	

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.

14. The licence holder must undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring of inputs and outputs

Input/Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Sewage - Inlet Flow	Inflow meter	Volumetric flow rate (cumulative)	m^3/day	Monthly	Continuous
Treated wastewater directed to the Water Recycling Plant for tertiary treatment	M1	Volumetric flow rate (cumulative)			
Treated wastewater discharged to offsite evaporation/infiltration basins	M1	Volumetric flow rate (cumulative)			

15. The licence holder must undertake the monitoring in Table 8 according to the specifications in that table.

Table 8: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
MB1/14; MB2/14; MB3/14;	Standing water level[1]	m(AHD) mBGL	Spot sample	Quarterly
	pH[1]	pH units		

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
MB4/14; MB5/14; MB6/11; 1/20; 3/20; and 4/20.	Electrical conductivity	µS/cm		
	Total Nitrogen	mg/L		
	Ammonium Nitrogen			
	Nitrate + Nitrite-Nitrogen			
	Total Phosphorus			

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

Records and reporting

16. 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.

17. 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 an Annual Audit Compliance Report in the approved form by 1 October each year.

18. 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 works conducted in accordance with condition 1 of this licence;

(c) any maintenance of infrastructure that is performed in the course of complying with condition 6 of this licence;

(d) monitoring programmes undertaken in accordance with conditions 13, 14 and 15 of this licence; and

(e) complaints received under condition 16 of this licence.

19. The books specified under condition 18 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 tfhe duration of the licence; and

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

20. The licence holder must:

(a) prepare an environmental report that provides information in accordance with

(b) Table 9 for the preceding annual period, and

(c) submit the environmental report to the CEO by 1 October each year.

Table 9: Environmental reporting requirements

Condition or table (if relevant)	Parameter	Format or form[1]
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 13 Table 6	Monitoring of emissions to land	None specified
Condition 14 Table 7	Monitoring of inputs and outputs	None specified
	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater pumped to evaporation basins and results of those calculations.	None specified
Condition 15 Table 8	Monitoring of ambient groundwater quality	Tabular form
Condition 16	Complaints summary	None specified
Condition 17	Compliance	Annual Audit Compliance Report (AACR)

Note 1: Forms are in Schedule 2

21. The licence holder must ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and licence limits.

22. The licence holder must submit the information in Table 10 to the CEO according to the specifications in that table.

Table 10: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form[1]
-	Copies of original monitoring reports submitted to the licence holder by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the licence holder from third parties

Note 1: Forms are in Schedule 4

23. The licence holder must ensure that the parameters listed in Table 11 are notified to the CEO in accordance with the notification requirements of the table.

Table 11: Notification requirements

Parameter	Notification requirement[1]
Taking process equipment offline for maintenance works that may result in increased odour emissions	No less than 72 hours in advance of works
Removal of sewage sludge from a treatment pond, wastewater treatment vessel, sewage sludge storage pond or Geobag.	No less than 14 days in advance of works. Notification is to include information on: (i) when desludging is proposed to occur, (ii) which pond desludging is to occur in, (iii) which sludge drying bed or temporary sludge drying bed is being utilised for desludging (iv) the desludging method including the type of liner utilised and type of drainage system utilised, and (v) action to mitigate potential odour impacts
Direct discharge to the environment, excluding infiltration, within 48 hours of becoming aware that such a discharge will occur, or has occurred	No less than 48 hours

Note 1: Notification requirement in the Licence must not negate the requirement to comply with s72 of the Act.

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

Term	Definition
ACN	Australian Company Number
AHD	Means the Australian height datum
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.
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
AS 3735	Means the Australian Standard AS3735 *Concrete Structures for Retaining Liquid*
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*
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*
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained
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
condition	a condition to which the licence is subject under section 62 of the *Environmental Protection Act 1986*

Term	Definition
controlled waste	has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*
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)
geobag	means a geotextile dewatering bag that allows solids to dewater over time while containing the solid component
hardstand	means a surface with a permeability of 10-9 metres/second or less
leachate	means liquid released by or water that has percolated through waste and which contains some of its constituents
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.
NATA	means the National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring
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 and specified by the co-ordinates in Schedule 2 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
process equipment	means any wastewater or sludge containment infrastructure or wastewater treatment vessel
quarterly	means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December in the following year ,1 January to 31 March and 1 April to 30 June
Schedule 1	means Schedule 1 of this Licence unless otherwise stated

Term	Definition
Schedule 2	means Schedule 2 of this Licence unless otherwise stated
shut-down	means the period when plant or equipment is brought from normal operating conditions to inactivity
spot sample	means a discrete sample representative at the time and place at which the sample is taken
start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions
suitably qualified civil engineer	means a person who: (a) holds a Bachelor of Engineering degree recognised by Engineers Australia; and (b) has a minimum of five years of experience working in a supervisory role in civil or structural engineering; and (c) s employed by an independent third party external to the Works Approval Holder's business; or is otherwise approved in writing by the CEO to act in this capacity.
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia
Waste Code	means the Waste Code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in the Department of Environment Regulation "Controlled Waste Category List" (July 2014), as amended from time to time
wastewater treatment vessels	means any vessel or tank containment infrastructure associated with the treatment of wastewater
waste	has the same meaning given to that term under the EP Act.
µS/cm	means micro Siemens per centimetre

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

Monitoring points maps

The location of the monitoring points defined in Table 6 and Table 7are shown below.

Figure 2: Map of monitoring points

The location of the monitoring points defined in Table 8 are shown below.

Figure 3: Map of onsite monitoring locations

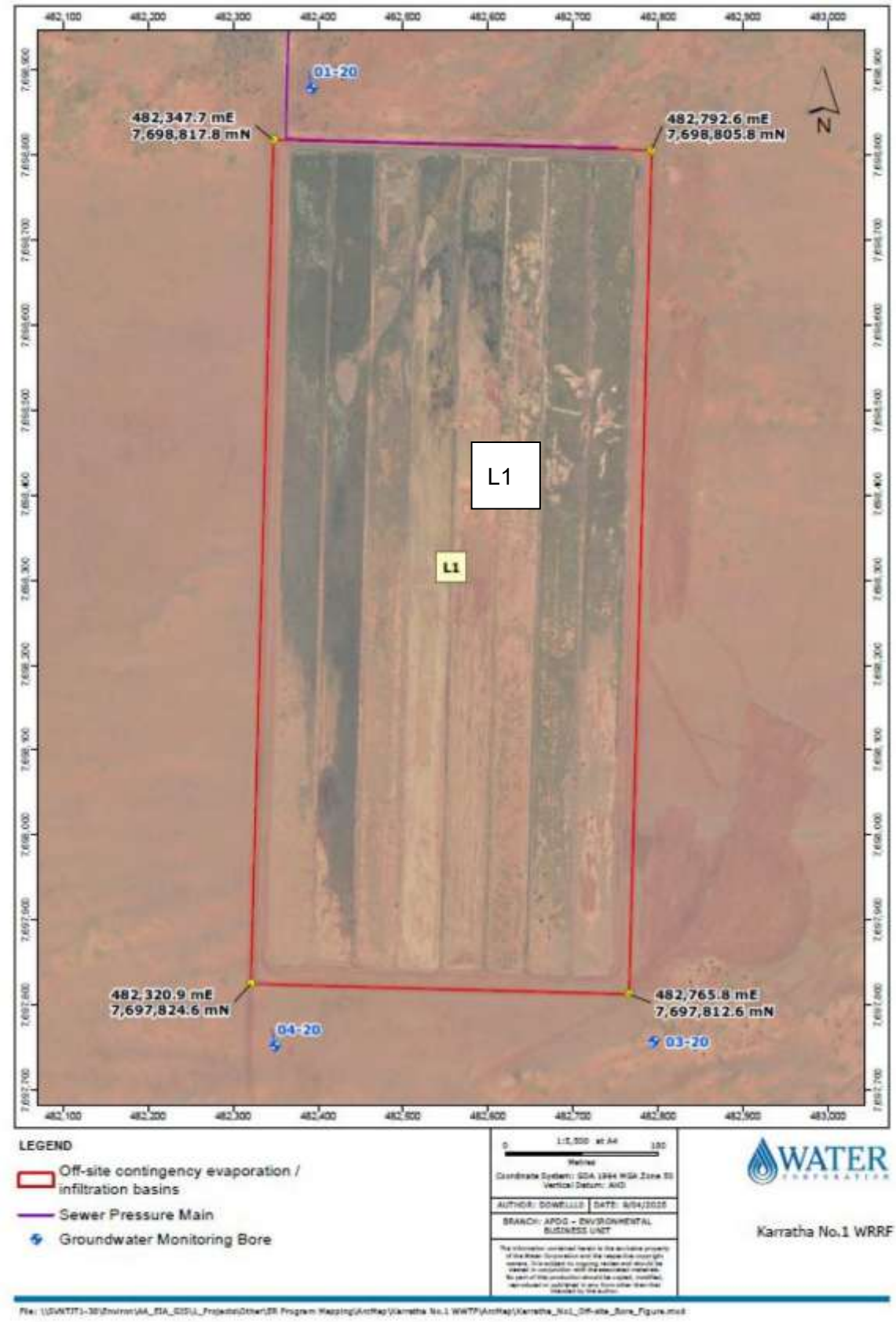

Figure 4: Map of offsite monitoring locations

Figure 5: Map of premises infrastructure

The three temporary sludge drying beds to be reconstructed in accordance with Table 1 and operated in accordance with Table 4 are shown below. Area 3 has been constructed.

Proposed Temporary sludge drying Areas
Area 1 - leachate to drain into pit after inlet screens
Area 2 - Leachate to be pumped back into Anaerobic Pond 1 or Pond 4
Area 3 – Leachate to drain into Pond 1b

Figure 6: Temporary sludge drying beds

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 13.

Table 13: Premises boundary coordinates (GDA2020)

Easting	Northing	Zone
485869.93430	7705496.64701	50
486354.75802	7705565.05286	50
486437.79810	7704979.88433	50
486364.56667	7704969.07110	50
486365.44652	7704960.05059	50
486007.09014	7704909.48548	50
485986.77353	7705028.97384	50
485931.05079	7705069.37638	50
485905.34428	7705249.26792	50
485926.77487	7705290.15967	50
485897.40830	7705306.68590	50