Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8861/2014/1
Licence holder	Karratha Recycling Pty Ltd
ACN	163 991 106
Registered business address	Lakeside Corporate 16/24 Parkland Road OSBORNE PARK WA 6017
DWER file number	DER2014/002439
Duration	09/02/2015 to 08/02/2034
Date of amendment	02/08/2022
Premises Details	Karratha Recycling Liquid Waste Facility Lot 111 and 112 Exploration Drive GAP RIDGE WA 6714

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production throughput**
Category 35: Asphalt manufacturing - premises on which hot or cold mix asphalt is produced using crushed or ground rock aggregates mixed with bituminous or asphaltic materials for use at a place or premises other than those premises.	40,000 tonnes per annual period
Category 36: Bitumen manufacturing: premises on which bitumen is mixed or prepared for use at places or premises other than those premises	20,000 tonnes per annual period
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	130,000 tonnes per annual period
Category 61A: Solid Waste Facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated or discharged onto land	20,000 tonnes per annual period

This Licence is granted to the Licence Holder, subject to the attached conditions, on 2 August 2022 by:

Digitally signed by Abbie Crawford
Date: 2022.08.02 08:06:54 +08'00'

Abbie Crawford
A/MANAGER, WASTE INDUSTRIES

Officer delegated under section 20 of the *Environmental Protection Act 1986 (WA).*

Licence history

Date	Instrument	Summary of changes
20/02/2014	W5538/2013/1	New Works Approval for construction of a liquid waste facility.
29/01/2015	L8861/2014/1	New Licence issued to operate liquid waste facility.
06/03/2015	W5579/2014/1	New Works Approval for construction of an asphalt plant.
19/03/2015	W5806/2015/1	New Works Approval for expansion of the liquid waste facility.
30/07/2015	L8861/2014/1	Licence Amendment to include Category 35 asphalt manufacturing plant.
07/02/2018	L8861/2014/1	Amendment Notice 1 to permit acceptance of controlled waste type D300 - high saline industrial wash waters.
18/05/2018	L8861/2014/1	Amendment Notice 2 to permit use of an additional evaporation pond under W5806/2015/1 and to increase design capacity for Category 61 liquid waste from 20,000 tonnes to 70,000 tonnes per annum.
06/09/2018	L8861/2014/1	Amendment Notice 3 to enable the acceptance of additional Controlled Wastes types K130 sewage waste from reticulated sewerage systems; L100 car and truck wash waters; and L150 industrial wash water contaminated with a controlled waste.
7/02/2020	L8861/2014/1	Licence amendment to permit the use of an additional evaporation pond constructed under W5806/2015/1 and to increase design capacity for the Category 61 liquid waste facility from 70,000 to 100,000 tonnes per annum. Also, the amalgamation of all previous amendments into this Licence.
05/10/2020	L8861/2014/1	Licence Amendment to include Category 36 bitumen manufacturing plant with a maximum production capacity of 20,000 tonnes per annum.
22/12/2020	L8861/2014/1	Licence Amendment to increase Category 61 premises throughput and authorise waste acceptance into two additional evaporation ponds.
02/08/2022	L8861/2014/1	Licence amendment to add controlled waste code N205 to approved waste acceptance.

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

General

General Conditions

1. The Licence Holder shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
2. The Licence Holder shall immediately recover, or remove and dispose of spills of environmentally hazardous materials or any spilled material used in the bitumen and asphalt manufacturing process outside an engineered containment system.
3. The Licence Holder shall:
   (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
   (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.[1]

   Note 1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

Premises operation

4. The Licence Holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Mobile Bitumen Emulsion Plant	• Plant must be placed on asphalt hardstand at least 40 m from the premises boundary • Bitumen emulsion to be transferred via hose into enclosed vessels for storage and transport • Chemicals used to make soap must be kept in bunded storage to prevent interaction with stormwater	Schedule 1, Figure 2 - Emulsion Plant
Mobile Polymer Modified Bitumen (PMB) Plant	• Plant must be placed on asphalt hardstand at least 40 m from the premises boundary • PMB to be transferred via hose into enclosed vessels for storage and transport	Schedule 1, Figure 2 - PMB Plant

5. The Licence Holder shall record and investigate the exceedance of any descriptive or numerical limit in this section.
6. The Licence Holder shall 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	Waste Code	Quantity limit	Specification[1]
Sewage	N/A	130,000 tonnes per annual period (combined).	• Liquid waste receipt in tankers. • Discharged to Treatment ponds 1 and 2.
Septage waste (Sewage) – domestic wastes from apparatus for the treatment of sewage	K210		
Waste from grease traps	K110		
Sewage waste from reticulated sewerage system	K130		
High-saline industrial wash waters	D300		• Liquid waste receipt in tankers. • Discharged to evaporation pond only.
Car and truck wash waters	L100		• L150 limited to wastes contaminated only with D300, K110, K130, K210, L100, J100, J120, J130, J180 controlled wastes. • Liquid waste receipt in tankers. • Discharged to evaporation pond only.
Industrial wash water contaminated with a controlled waste	L150		
Industrial waste treatment plant residues	N205		• Excluding PFAS contaminated materials. • Industrial waste treatment sludges and residues • Ion-exchange column residues • Residues from pollution control • Scrubber sludge
Processed RAP	N/A	20,000 tonnes per annual period.	• The Licence Holder shall ensure that Processed RAP does not contain any of the following materials: - Granular pavement materials, clay, soil or organic matter; - Bricks, concrete, glass or building materials; or - Laterite asphalt, tar based products, geotextile fabrics, raised pavement markers or surface treatments such as high friction surfacings or green or red pavement markings.

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

7. The Licence Holder shall 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 limits
Sewage	Receipt in tankers; Physical, biological and chemical treatment	Primary treatment (Treatment Ponds 1 and 2): - Water depth to sludge shall be greater than 0.4 m or equivalent and sludge depth on ponds to be less than 1m or equivalent; and - pH of wastewater to be maintained at 6.5 to 9; Secondary treatment (Treatment Pond 3, and Evaporation Ponds 1, 2, 3 4, and 5): - Water depth to sludge shall be greater than 0.4 m or equivalent and sludge depth on ponds to be less than 1m or equivalent; - pH of wastewater to be maintained at 6.5 to 9; - Treatment of waste shall be at or below the treatment capacity of 130,000 tonnes per annual period; and - vegetation is prevented from encroaching onto pond surfaces or inner pond embankments.
Septage wastes (Sewage) – domestic wastes from apparatus for the treatment of sewage		
Waste from grease traps		
Sewage waste from reticulated sewerage system		
High saline industrial wash waters	Receipt in tankers for direct disposal to Evaporation Ponds 1, 2, 3, 4 and 5 for evaporation	
Car and truck wash waters		
Industrial wash water contaminated with a controlled waste		
Industrial waste treatment plant residues		
Sewage sludge resulting from onsite liquid waste treatment	Drying out of ponds; Storage prior to landfill disposal	300 m^3 at any one time prior to landfill disposal off-site.
Processed RAP	Asphalt manufacturing	500 tonnes at any time

8. The Licence Holder shall 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
Receiving pit	Wastewater	Impermeable receptacle or storage chamber.
Treatment Pond 1 - receiving anaerobic pond – 18m x 27m x 4.5m	Wastewater	Lined with a geosynthetic clay liner in accordance with WQPN 27.
Treatment Pond 2 - receiving anaerobic pond – 18m x 27m x 4.5m	Wastewater	Lined with a geosynthetic clay liner in accordance with WQPN 27.

Vessel or compound	Material	Requirements
Treatment Pond 3 - facultative aerobic pond – 33m x 58m x 2.2m	Treated wastewater	Lined with a geosynthetic clay liner in accordance with WQPN 26.
Evaporation Pond 1 – 77m x 58m x 2m	Treated wastewater	Lined in accordance WQPN 26 with a synthetic membrane.
Evaporation Pond 2 - 80m x 80m x 3.5m	Treated wastewater	Lined in accordance with WQPN 26 with a HDPE liner.
Evaporation Pond 3 - 80m x 70m x 3.5m	Treated wastewater	Lined in accordance with WQPN 26 with a HDPE liner.
Evaporation Pond 4 - 69m x 43m x 3.5m	Treated wastewater	Lined in accordance with WQPN 26 with a HDPE liner.
Evaporation Pond 5 - 69m x 72m x 3.5m	Treated wastewater	Lined in accordance with WQPN 26 with a HDPE liner.
Sewage sludge compound	Sewage sludge	Temporary or permanent infrastructure to consist of a bunded hardstand or lined area (lined to achieve a permeability of less than 10^{-9} m/s or equivalent), capable of preventing surface run-off of leachate and sludge and which includes a leachate collection system

9. The Licence Holder shall manage all wastewater treatment, receiving, facultative and storage evaporation ponds such that:

   (a) overtopping of the ponds does not occur; and
   (b) a freeboard equal to, or greater than, 500 mm is maintained;
   (c) the integrity of the containment infrastructure is maintained; and
   (d) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter.

10. The Licence Holder shall ensure that automatic safeguards are incorporated within the asphalt manufacturing process to prevent the ignition of bitumen within the drum.

11. The Licence Holder shall ensure that:

   (a) the baghouse is operational prior to start-up of the drier and operated continuously whilst the drier is operating;
   (b) the baghouse filters are regularly inspected; and
   (c) when detected, blocked, frayed or leaking, baghouse filters are immediately replaced.

12. The Licence Holder shall ensure that bulk materials are stored in a manner which minimises the generation of airborne dust.

Emissions

General

13. The Licence Holder shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of the ‘Emissions’ section of this Licence.

Point source emissions to air

14. The Licence Holder shall ensure that where waste is emitted to air from the emission points in Table 5 it is done so in accordance with the conditions of this Licence.

Table 5: Emission points to air

Emission point reference	Emission Point	Emission point height (m)	Source, including any abatement
A1	Asphalt Plant Stack	6	Drum drier via baghouse

15. The Licence Holder shall not cause or allow point source emissions to air greater than the limits listed in Table 6.

Table 6: Point source emission limits to air

Emission point reference	Parameter	Limit (including units)[1,2]	Averaging period
A1	PM	50 mg/m^3	Stack test (Minimum 60 minute tests)

Note 1: All units are referenced to STP dry
Note 2: Concentration units are referenced to 17% O_2

Specified actions

16. The Licence Holder must design, construct, and install a groundwater monitoring bore in accordance with the requirements specified in Table 7.

Table 7: Infrastructure requirements – groundwater monitoring wells

Infrastructure	Design, construction, and installation requirements	Monitoring bore location	Timeframe
Groundwater monitoring bore (Monitoring Bore 3)	<u>Well design and construction:</u> Designed and constructed in accordance with *ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores*. Well screens must target the part, or parts, of the aquifer most likely to be affected by contamination[1]. Where temporary/seasonal perched features are present, wells must be nested, and the perched features individually screened.	Must be located to the immediate north of Treatment Pond 3	Must be constructed, developed (purged), and determined to be operational by 31 July 2021.
	<u>Logging of borehole:</u> Soil samples must be collected and logged during the installation of the monitoring wells. A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726. Any observations of staining / odours or other indications of contamination must be included in the bore log.		
	<u>Well construction log:</u>		

Infrastructure	Design, construction, and installation requirements	Monitoring bore location	Timeframe
	Well construction details must be documented within a well construction log to demonstrate compliance with *ASTM D5092/D5092M-16*. The construction logs shall include elevations of the top of casing position to be used as the reference point for water-level measurements, and the elevations of the ground surface protective installations.		
	Well development: All installed monitoring wells must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well. A detailed record should be kept of well development activities and included in the well construction log.		
	Installation survey: the vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor.		
	Well network map: a well location map (using aerial image overlay) must be prepared and include the location of all monitoring wells in the monitoring network and their respective identification numbers.		

Note 1: refer to Section 8 of Schedule B2 of the *Assessment of Site Contamination NEPM* for guidance on well screen depth and length.

17. The Licence Holder must, within 60 calendar days of the monitoring bore being constructed, submit to the CEO a bore construction report evidencing compliance with the requirements of condition 16.

Monitoring

General monitoring

18. The Licence Holder shall ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless otherwise indicated in the relevant table;
(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
(c) 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.

19. The Licence Holder shall ensure that:

    (a) six monthly monitoring is undertaken at least 5 months apart; and
    (b) annual monitoring is undertaken at least 9 months apart.

20. The Licence Holder shall record production or throughput data and any other process parameters relevant to any non-continuous monitoring undertaken.

21. The Licence Holder shall 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.

22. The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Monitoring of point source emissions to air

23. The Licence Holder shall undertake the monitoring in Table 8 according to the specifications in that table.

Table 8: Monitoring of point source emissions to air

Emission point reference	Parameter	Units[1,3]	Averaging period	Frequency[2]	Method
A1	Volumetric flow rate	m^3/s	n/a	Annual	USEPA Method 2
	PM	mg/m^3 g/s	60 minute minimum		USEPA Method 5 or 17
	Sulphur dioxide		30 minute minimum		USEPA Method 6C
	Nitrogen oxides				USEPA Method 7E
	Carbon monoxide				USEPA Method 10
	Total Volatile Organic Compounds (TOC)				USEPA Method 18

Note 1: All concentration units are referenced to STP dry
Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.
Note 3: Concentration units are referenced to 17% O_2.

24. The Licence Holder shall ensure that sampling required under condition 23 of the Licence is undertaken at sampling locations in accordance with the AS 4323.1.

25. The Licence Holder shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 23 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Monitoring of inputs and outputs

26. The Licence Holder shall undertake the monitoring in Table 9 according to the specifications in that table.

Table 9: Monitoring of inputs and outputs

Input/output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Waste received	tonnes	N/A	Each load arriving at the Premises

Ambient environmental quality monitoring

27. The Licence Holder shall undertake the monitoring in Table 10 according to the specifications in that table.

Table 10: Monitoring of ambient groundwater quality

Monitoring point reference and location as shown on Figure 2 in Schedule 1	Parameter	Units	Averaging period	Frequency
Monitoring Bore 1 Monitoring Bore 2 Monitoring Bore 3 (as required by Condition 16 – to be monitored in accordance with this table after the submission of the bore construction report required by condition 17)	pH[1]	pH units	Spot sample	Six monthly
	Electrical conductivity[1]	µS/cm		
	Dissolved Oxygen	mg/L		
	Redox potential	mV		
	Standing Water Level (SWL)	m AHD		
	E. coli and Enterococci	cfu/100mL		
	Total Phosphorus	mg/L		
	Total Nitrogen			
	Ammonium, Nitrate and Nitrite			
	Major ions: sodium, potassium. Calcium, magnesium, chloride, sulphate and alkalinity			
	Metals and metalloids: arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.			
	Total recoverable hydrocarbons (TRH)			

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

Information

Records

28. All information and records required by the licence shall:

    (a) be legible;
    (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
    (c) except for records listed in 28(d) be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent Licence; and
    (d) for those following records, be retained until the expiry of the licence and any subsequent Licence:
        (i) off-site environmental effects; or
        (ii) matters which affect the condition of the land or waters.

29. The Licence Holder shall complete an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the conditions of the licence, and any previous Licence issued under Part V of the Act for the premises for the previous annual period.

30. The Licence Holder shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

Reporting

31. The Licence Holder shall submit to the CEO an Annual Environmental Report by 31 March in each year after the end of the annual period. The report shall contain the information listed in Table 11 in the format or form specified in that table.

Table 11: Annual Environmental Report

Condition or table	Parameter	Format or form
-	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
Table 1	Summary of any treatment capacity exceedances and any action taken.	None specified
Condition 9	Summary of any freeboard exceedances and any action taken.	None specified
Table 6	Limit exceedances	AACR
Table 8	Volumetric flow rate, particulate matter, sulphur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide	None specified
Table 9	Total waste received	None specified
Condition 27	Monitoring results of ambient groundwater quality including: • A description of the field methodologies employed; • A summary of the field and laboratory quality assurance / quality control (QA/QC) program;	None specified

	• Copies of the field QA/QC documentation and field monitoring records; • An assessment of the reliability of field procedures and laboratory results; • A tabulated summary of results; • A diagram with aerial image overlay showing all monitoring locations and depicting groundwater level contours, flow direction and hydraulic gradient (relevant site features including discharge points and other potential sources of contamination must also be shown); • An interpretive summary and assessment of results against relevant assessment levels for water as published in the Guideline: Assessment and management of contaminated sites. • An interpretive summary and assessment of results against previous monitoring results, supported by trend graphs.	
Condition 29	Compliance	AACR
Condition 30	Complaints summary	None specified

32. The Licence Holder shall ensure that the Annual Environmental Report also contains:

(a) any relevant process, production or operational data recorded under condition 20; and

(b) an assessment of the information contained within the report against previous monitoring results and Licence limits.

Notification

33. The Licence Holder shall ensure that the parameters listed in Table 12 are notified to the CEO and in accordance with the notification requirements of the table.

Table 127: Notification requirements

Condition	Parameter	Notification requirement[1]
-	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
Condition 21	Calibration report	As soon as practicable.

Note 1: No notification requirement in the Licence shall negate the requirement to comply with s72 of the EP Act.

Definitions

In this licence, the terms in Table 13 have the meanings defined.

Table 13: Definitions

Term	Definition
AACR	means Annual Audit Compliance Report, a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO from time to time and published on the Department's website and a copy of the AACR form is accessible from the DWER website.
ACN	means Australian Company Number.
annual period	means the inclusive period from 1 January until 31 December in the same year.
AS 4323.1	means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions.*
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 5667.11	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 is measured or a monitoring result is obtained.
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
controlled waste	has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the *EP Act*, which includes Part V Division 3.
DWER	means Department of Water and Environmental Regulation.
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).
Evaporation pond	means Evaporation ponds 1, 2, 3, 4 and 5 as defined in Figure 2, Schedule 1 of this Licence;
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.

Term	Definition
Guideline: Assessment and management of contaminated sites	means the document titled *Assessment and management of contaminated sites, Contaminated sites guidelines* (Department of Environment Regulation, December 2014), as amended from time to time.
HDPE	High Density Polyethylene
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	Karratha Recycling Pty Ltd.
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;
PFAS	means per-and poly-fluoroalkyl substances;
PM	means total particulate matter including both solid fragments of material and miniscule droplets of liquid;
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 in Schedule 1 to this Licence.
prescribed premises	has the same meaning given to that term under the EP Act.
processed RAP	means RAP which has been crushed and/or screened to size for recycling into new asphalt;
RAP	means Reclaimed Asphalt Pavement which consists of surplus plant mix or the material reclaimed from an asphalt wearing or intermediate course by cold planing;
Schedule 1	means Schedule 1 of this Licence unless otherwise stated;
six monthly	means the 2 inclusive periods from 1 January to 30 June and 1 July to 31 December each year;
spot sample	means a discrete sample representative at the time and place at which the sample is taken;
stack test	means a discrete set of samples taken over a representative period at normal operating conditions;
start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions;
STP dry	means standard temperature and pressure (0^{o}Celsius and 101.325 kilopascals respectively), dry;
Treatment ponds 1 and 2	means the anaerobic ponds defined in Figure 2, Schedule 1 of this Licence;
Treatment pond 3	means the aerobic pond defined in Figure 2, Schedule 1 of this Licence;
USEPA	means United States (of America) Environmental Protection Agency;

Term	Definition
USEPA Method 2	means United States (of America) Environmental Protection Agency Method for Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pilot Tube);
USEPA Method 5	means United States (of America) Environmental Protection Agency Method for Determination of Particulate Matter Emission From Stationary Sources;
USEPA Method 6C	means United States (of America) Environmental Protection Agency Method for Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure);
USEPA Method 7E	means United States (of America) Environmental Protection Agency Method for Determination of Nitrogen Oxides Emissions From Stationary Sources (Instrumental analyser Procedure);
USEPA Method 10	means United States (of America) Environmental Protection Agency Method for Determination of Carbon Monoxide Emissions From Stationary Sources (Instrumental Analyzer Procedure);
USEPA Method 17	means United States (of America) Environmental Protection Agency Method for Determination of Particulate Matter Emission From Stationary Sources;
USEPA Method 18	means the USEPA Method 18 - Measurement of Gaseous Organic Compound Emissions By Gas Chromatography;
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 Water and Environmental Regulation “Controlled Waste Category List” (May 2018), as amended from time to time;
WQPN 26	means the Department of Water, *Water Quality Protection Notes 26 – Liners for containing pollutants, using synthetic liners*, *August 2013; and*
WQPN 27	means the Department of Water, *Water Quality Protection Notes 27 – Liners for containing pollutants, using engineered soils, August 2013*

END OF CONDITIONS

Schedule 1: Maps

Figure 1. Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary. Coordinates for A – D are defined in Table 14.

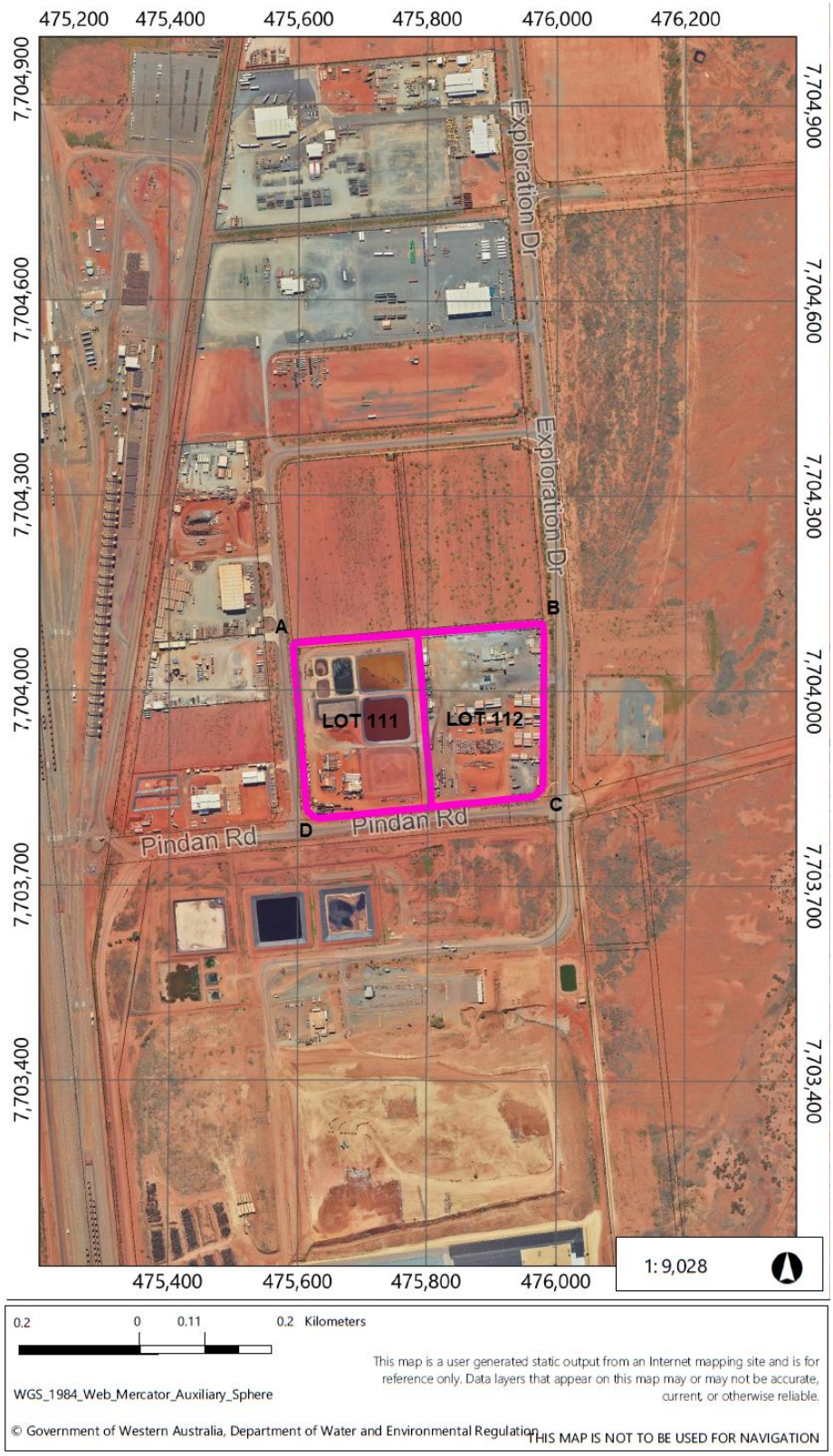
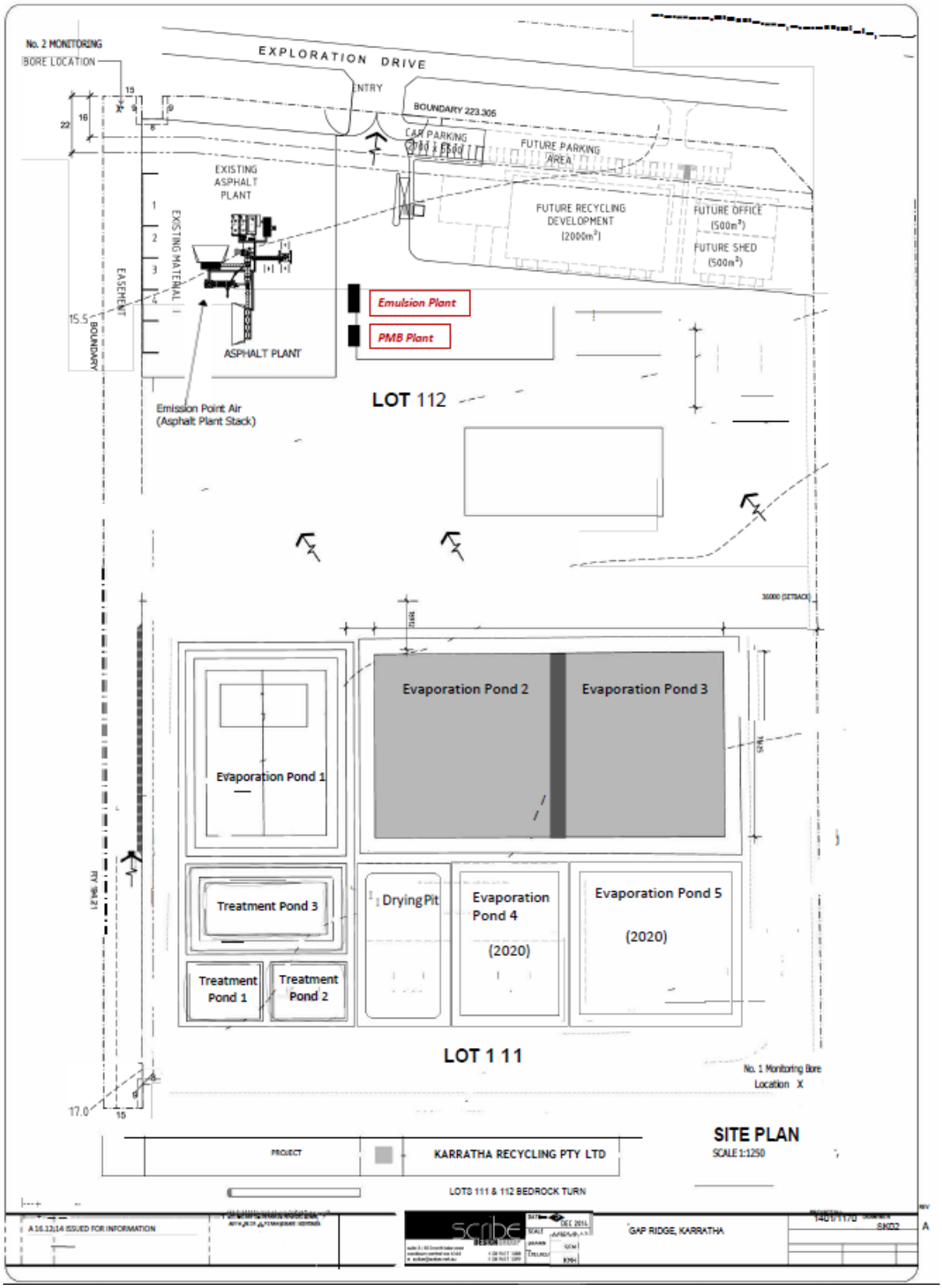


Figure 2. Map of monitoring locations and Premises infrastructure

The location of the containment infrastructure defined in Table 4 and monitoring points defined in Tables 5 and 10 are shown below.



Premises boundary

The premises boundary depicted in Figure 1 is defined by the approximate coordinates inTable 14.

Table 14: Premises boundary coordinates (GDA94)

Coordinate Points	Easting	Northing	Zone
A	475590	7704079	50
B	475977	7704111	50
C	475972	7703844	50
D	475619	7703810	50