Government of Western Australia
Department of Water and Environmental Regulation

Amended Licence

Licence number	L6265/1983/8
Licence holder	Boral Resources (WA) Ltd
ACN	008 686 904
Registered business address	Level 3, 40 Mount Street NORTH SYDNEY NSW 2060
DWER file number	DWERVT2698
Duration	03/08/2011 to 02/08/2023
Date of issue	28/07/2011
Date of last amendment	08/06/2021
Premises details	Boral Asphalt 90 McDowell Street WELSHPOOL WA 6106 Legal description – Lot 43 on Plan 3217

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed production capacity
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	330,000 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	110,000 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 8 June 2021, by:

Daniel Hartnup

Digitally signed by Daniel Hartnup
Date: 2021.06.08 08:56:16 +08'00'

Daniel Hartnup
A/MANAGER, PROCESS INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Ref number	Summary of changes
28/7/2011	L6265/1983/8	Licence granted.
30/10/2015	W5881/2015/1	Works to allow the processing of RAP on the premises and use of RAP for asphalt manufacture
20/11/2015	L6265/1983/8	Amendment to add category to allow processing and use of RAP on site.
29/04/2016	L6265/1983/8	Expiry date amended to 2/8/2023.
21/3/2017	L6265/1983/8	Amendment Notice 1 allowing the operation of installed wastewater treatment plant.
24/4/2018	L6265/1983/8	Amendment Notice 2 allowing temporary deployment of mobile asphalt plant on site.
27/7/2018	L6265/1983/8	Amendment Notice 3 amending the dates for operation of mobile asphalt plant from Amendment Notice 2.
28/6/2019	L6265/1983/8	Amendment Notice 4 approves use of additional asphalt plant on site increasing production capacity from 250,000 tonnes per annum to 330,000 tonnes per annum.
08/06/2021	L6265/1983/8	Amendment to include a mobile precoating plant and changing stack testing frequency to annually. Licence conditions consolidated to include previous amendment notices.

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 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
Ground bins	• Must have at least 3 sides. • Stored materials must not exceed the height or width of the bin. • Be fitted with misting sprays that direct water spray across the entire surface of the bin. • Materials stored in bins must be maintained in a damp state.	"Ground Bins", as shown in Schedule 1: Figure 1
Cold feed bins	• Must be located to minimize exposure to the wind. • Be enclosed on 3 sides and roofed. • Must not contain stored materials in excess of the height of the bin walls • Materials stored in bins must be maintained in a damp state.	"Cold Feed Bins", as shown in Schedule 1: Figure 1
Conveyors	Conveyors must be enclosed with wind shields or otherwise designed to prevent windblown dust.	Not specified
Asphalt plant D&G 3000	Waste gases from the drum drier can only be emitted to atmosphere via a baghouse filter and using Stack A1.	"A2 iNova Asphalt Plant", as shown in Schedule 1: Figure 1
Wastewater treatment plant	In accordance with conditions 8 and 9	"Wastewater Treatment Plant", as shown in Schedule 1: Figure 1
PF 7000IC-R crusher or a make and model that has equivalent manufacturers specifications for noise emissions and dust minimization controls	Unprocessed RAP must only be crushed or screened within the area depicted in Schedule 1	"RAP Crushing and Screening Equipment", as shown in Schedule 1: Figure 1
Precision Screen Precoater 6500	• Located and positioned to ensure that Stormwater runoff is collected and any discharge of treated stormwater within the premises occurs in accordance with conditions 9 and 10 unless otherwise removed from the premises. • Only one precoater will operate on the premises at any one time	"Precoater 6500", as shown in Schedule 1: Figure 1
Filler silo	• Displaced air from filling of silo must pass through a baghouse dust collector. • The baghouse must vent air emissions at less than 1 metre from the ground. • Ports and hatches must be sealed during filling activities	"A1 Plant Filler Silo", as shown in Schedule 1: Figure 1
6 x precoat storage bins	• Must have at least 3 sides. • Stored materials must not exceed the height or width of the bin.	"6 x Precoat Storage Bins", as shown in Schedule 1: Figure 1

2. The licence holder must ensure that production of asphalt does not exceed 180 tonnes per hour.

3. The licence holder is permitted to remove the following equipment from the premises and relocate back within the premises at one of the locations set out in Schedule 1 on an as needs basis:

(a) mobile asphalt plant;
(b) crushing and screening equipment for unprocessed RAP; and
(c) mobile pre-coaters.

4. The licence holder must only accept onto the premises waste of a waste type, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 2.

Table 2: Types of waste authorised to be accepted onto the premises

Waste type	Rate at which waste is received	Acceptance specification
RAP or processed RAP	Maximum of 110,000 tonnes per annual period	Does not contain any of the following materials: a) granular pavement materials, clay, soil or organic matter; b) bricks, concrete, glass or building materials; or c) tar based products, geotextile fabrics, raised pavement markers or surface treatment such as high friction surfacings.

5. The licence holder must ensure that the waste types specified in Table 3 are only subjected to the corresponding process(es), subject to the corresponding process limits and/or specifications.

Table 3: Waste processing

Waste type	Process(es)	Process limits and/or specifications
RAP	Receipt, storage and processing (crushing and screening and use in asphalt manufacturing process)	The licence holder must only crush and screen RAP if it does not contain any of the following materials: a) granular pavement materials, clay, soil or organic matter; b) bricks, concrete, glass or building materials; or c) tar based products, geotextile fabrics, raised pavement markers or surface treatment such as high friction surfacings.
Processed RAP	Storage and use in the asphalt manufacturing process	-

6. The licence holder must immediately recover or remove and dispose of spills of environmentally hazardous materials outside and engineered containment system.

Emissions and discharges

Discharges to air

7. The licence holder must ensure that the emissions specified in Table 4, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 4: Authorised discharge points

Emission	Discharge point	Emission point minimum height above ground level	Discharge point location
Emissions from drum dryer via baghouse dust collector	A1 (fixed plant)	12 m	"A1", as shown in Schedule 1: Figure 1
	A2 (Ciber iNOVA)	6 m	"A2", as shown in Schedule 1: Figure 1

8. The licence holder must ensure that emissions from the discharge point listed in Table 5 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 18.

Table 5: Emission and discharge limits

Discharge point	Parameter	Limit	Averaging period
A1, A2	PM	50 mg/m^3	Stack test (minimum 60 minutes)
	Stack velocity	>12 m/s	Stack test (minimum 30 minutes)

Discharge to land

9. The licence holder must ensure that the emissions specified in Table 6, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 6: Authorised discharge points

Emission	Discharge point	Discharge point location
Wash bay water	Wastewater treatment plant	"L1", as shown in Schedule 1: Figure 1

10. The licence holder must ensure that emissions from the discharge point listed in Table 7 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 18.

Table 7: Emission and discharge limits

Discharge point	Parameter	Limit	Averaging period
L1	pH	>4 and <10	Spot sample
	Surfactants	5 mg/L	
	Total Recoverable Hydrocarbons	15 mg/L	

Monitoring

General monitoring conditions

11. The licence holder must record production or throughput data and any other process parameters relevant to any non-continuous monitoring undertaken.

12. 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 and the requirements of the licence.

13. The licence holder must, 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 discharges to air

14. The licence holder must monitor emissions:

(a) from each discharge point;
(b) for the corresponding parameter;
(c) at the corresponding frequency;
(d) for the corresponding averaging period;
(e) in the corresponding unit; and
(f) using the corresponding method,

as set out in Table 8.

Table 8: Emissions and discharge monitoring for discharges to air

Discharge point	Parameter	Frequency[4]	Averaging period	Reporting unit[1,3]	Method[2]
A1, A2	PM	Biannual for A1, Annual for A2	Stack test (minimum 60 minutes)	mg/m^3 and g/s	USEPA Method 5 or USEPA Method 17
	Oxides of nitrogen				USEPA Method 7E
	Carbon monoxide				USEPA Method 10

Note 1: All units are referenced to STP dry
Note 2: Monitoring must be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production
Note 3: Concentration units for A1 and A2 are referenced to 17% O_2
Note 4: The licence holder is exempt from monitoring the mobile plant on this site if the stack testing was conducted at another licensed site during the annual period

15. The licence holder must ensure that sampling required under condition 14 of the licence is undertaken at a location in accordance with AS4323.1

16. The licence holder must ensure that all non-continuous sampling and analysis undertaken pursuant to condition 14 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.

17. The licence holder must ensure that the biannual testing as per Condition 14 is undertaken at least 5 months apart.

Monitoring of discharge to land

18. The licence holder must monitor emissions:

(a) from each discharge point;
(b) for the corresponding parameter;
(c) at the corresponding frequency;
(d) for the corresponding averaging period;
(e) in the corresponding unit; and
(f) using the corresponding method,

as set out in Table 9.

Table 9: Emissions and discharge monitoring for discharges to land

Discharge point	Parameter	Frequency	Averaging period	Reporting unit	Sampling method
L1	pH	Quarterly and every batch	Grab sample	-	AS/NZ 5667.10
	Surfactant			mg/L	

Discharge point	Parameter	Frequency	Averaging period	Reporting unit	Sampling method
	Total Recoverable Hydrocarbons	prior to discharge[1]			

Note 1: Every batch to be sampled prior to discharge may be done using non-NATA accredited analysis methods

19. The licence holder must ensure that the sampling undertaken as per condition 18 and Table 9 are analysed at a laboratory that holds NATA accreditation for the analysis undertaken.

20. The licence holder must ensure that the quarterly wastewater monitoring as per condition 18 is undertaken at least 45 days apart.

Records and reporting

21. 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.

22. 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 28 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
(c) complaints received under condition 21 of this licence.

23. The licence holder must maintain accurate and auditable books that include 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 1 of this licence;
(c) monitoring programmes undertaken in accordance with conditions 14 and 18 of this licence; and
(d) complaints received under condition 21 of this licence.

24. The books specified under condition 23 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.

25. The licence holder must submit to the CEO by no later than 28 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 10, and which provides information in accordance with the corresponding requirement set out in Table 10.

Table 10: Annual Environmental Report

Condition	Requirement
-	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.
11	Production and process parameters
14 and Table 6	Particulates
18 and Table 7	pH, surfactants and TRH
21	Complaints summary

26. The licence holder must, within 7 days of becoming aware of any non-compliance with condition 18, and 10 of this licence, notify the CEO in writing of that non-compliance and include in that notification the following information:

(a) which condition was not complied with;
(b) the time and date when the non-compliance occurred;
(c) if any environmental impact occurred as a result of the non-compliance and if so what that impact is and where the impact occurred;
(d) the details and result of any investigation undertaken into the cause of the non-compliance;
(e) what action has been taken and the date on which it was taken to prevent the non-compliance occurring again; and
(f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.

Definitions

In this licence, the terms in Table 11 have the meanings defined.

Table 11: 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 1 July until 30 June of the immediately following year.
AS 4323.1	means Australian Standard AS4323.1 *Stationary source emissions method 1: selection of sampling positions*
AS/NZ 5667.10	Means Australian and New Zealand Standard 5667.10 *Sampling Guidance on sampling of waste waters*
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained
biannual	means the 2 inclusive periods from 1 July to 31 December and in the following year, 1 January to 30 June
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 *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
g/s	means grams per second
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
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	means cubic metres
mg/m^3	means milligrams per cubic metre
m/s	means metres per second
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 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

Term	Definition
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 map Figure 1 in Schedule 1 to this licence
RAP	Reclaimed Asphalt Pavement
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
STP dry	means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively) dry
USEPA	means United States Environmental Protection Authority
USEPA Method 5	means the promulgated Test Method 5 – Determination of Particulate Matter Emissions from Stationary Sources
USEPA Method 7E	means the promulgated Test Method 7E - Determination of Nitrogen Oxides
USEPA Method 10	means the promulgated Test Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)
USEPA Method 17	means the promulgated Test Method 17 – Determination of Particulate Matter Emissions from Stationary Sources

END OF CONDITIONS

Schedule 1: Maps

Figure 1: Premises map and monitoring location