



Licence

Environmental Protection Act 1986, Part V

Licensee: BGC (Australia) Pty Ltd

Licence: L6533/1993/11

Registered office: 18 Mount Street
 PERTH WA 6000

ACN: 005 736 005

Premises address: BGC Asphalt
 4 Stirling Crescent
 HAZELMERE WA 6055

Being Lot 4 on Plan 55932
 Certificate of Title Volume 1978 Folio 979
 (as depicted in Schedule 1).

Issue date: Friday, 22 January 2016

Commencement date: Sunday, 31 January 2016

Expiry date: Saturday, 30 January 2021

Prescribed Premises Category

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
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.	Not applicable	100 000 tonnes per annual period

Conditions

This Licence is subject to the conditions set out in the attached pages.

Date signed: 31 March 2016

.....
 Officer delegated under Section 20
 of the *Environmental Protection Act 1986*



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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to protect and conserve the state's environment on behalf of the people of Western Australia.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitor and audit compliance with works approvals and licence conditions, take enforcement action as appropriate and develop and implement licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

BGC (Australia) Pty Ltd (“the Licensee”) operates the BGC Asphalt plant located in the Perth suburb of Hazelmere. The site has been used to manufacture asphalt since 1993 and is zoned ‘industrial development’ and almost all land immediately surrounding the site is zoned ‘industrial development.’ The nearest sensitive receptors are within an area zoned ‘rural residential’ to the west of the premises with the closest dwelling approximately 450 m. There is ‘general rural’ zoned land commencing approximately 350 m north east of the BGC Asphalt premises boundary.

The Licensee applied to amend its licence on 04/11/2015 in relation to key aspects of:

- replacement of the existing fixed asphalt plant with a new fixed asphalt plant;
- replacement of the baghouse dust collector;
- enclosure of the aggregate stockpile bins; and
- temporary operation of a mobile asphalt plant during decommissioning of the existing fixed asphalt plant and construction of the new fixed asphalt plant.

Emissions and discharges relevant to this premises are point source air emissions (combustion gases, volatile organic compounds, particulates and odour), fugitive emissions (dust, odour and volatile organic compounds), noise emissions and risk of contaminated stormwater entering the environment. This licence is an amended version of licence L6533/1993/11 based on the risk assessment of emissions, discharges and impacts associated with the application for licence amendment. This licence does not authorise the receipt, storage or reprocessing of reclaimed asphalt pavement. The licences and works approvals issued for the Premises since 31/01/2011 are:

Instrument log		
Instrument	Issued	Description
L6533/1993/10	31/01/2011	Licence reissue
L6533/1993/10	19/05/2014	Licence amended to REFIRE format
L6533/1993/11	22/01/2016	Licence reissue
L6533/1993/11	31/03/2016	Licence amendment – licensee initiated for construction and operation of a new fixed asphalt manufacturing plant and operation of a temporary mobile asphalt plant .

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986*;

'annual period' means the inclusive period from 1 July until 30 June in the following year;

'AS 4323.1' means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions*;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'bin walls' means the walls of raw material storage bins, and includes temporary wind shields which may be installed as a dust control measure, and for the purpose of this licence, increase the height of the walls;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Administering the *Environmental Protection Act 1986*
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

'cold feed bins' means bins into which raw materials are placed immediately prior to being used to manufacture asphalt and are physically attached to conveyors leading directly into the asphalt manufacturing plant;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'fugitive emissions' means all emissions not arising from point sources identified in Section 2.2.

'ground bin' means a concrete structure used to store granular raw materials;

'Licence' means this Licence numbered L6533/1993/10 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;



'mobile asphalt plant' means the trailer mounted mobile asphalt manufacturing equipment inclusive of its cold feed bins, conveyors, a diesel-fired rotary drier/mixing drum, loading hopper, trailer mounted storage for diesel fuel and hot bitumen and a baghouse dust collection system;

'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;

'PM' means total particulate matter including both solid fragments of material and miniscule droplets of liquid;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'raw materials' means coarse aggregate, fine aggregate, hydrated lime and oxide or other any granular material added to the asphalt manufacturing process;

'shut-down' means the period when plant or equipment is brought from normal operating conditions to inactivity;

'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° Celsius and 101.325 kilopascals respectively), dry;

'USEPA' means United States (of America) Environmental Protection Agency;

'USEPA Method 5' means the USEPA Method 5 – Determination of Particulate Matter Emissions From Stationary Sources;

'USEPA Method 7E' means the USEPA Method 7E – Determination of Nitrogen Oxides Emissions From Stationary Sources (Instrumental Analyzer Procedure);

'USEPA Method 10' means the USEPA Method 10 – Determination of Carbon Monoxide Emissions From Stationary Sources (Instrumental Analyzer Procedure);

'USEPA Method 17' means the USEPA Method 17 – Determination of Particulate Matter Emissions From Stationary Sources;

'USEPA Method 18' means the USEPA Method 18 – Measurement of Gaseous Organic Compound Emissions By Gas Chromatography; and

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.



- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.
- 1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.
- 1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
- (a) pollution;
 - (b) unreasonable emission;
 - (c) discharge of waste in circumstances likely to cause pollution; or
 - (d) being contrary to any written law.

1.2 General conditions

- 1.2.1 The Licensee shall maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
- 1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.3 Premises operation

- 1.3.1 The Licensee shall ensure that:
- (a) Any baghouse dust collection system is operational prior to start-up of the rotary drier or mobile asphalt plant and operated continuously whilst in operation;
 - (b) any baghouse dust collection system filters are inspected regularly; and
 - (c) any blocked, frayed or leaking baghouse filters are immediately replaced when detected.
- 1.3.2 The Licensee is permitted to operate a mobile asphalt plant subject to the following specifications:
- (a) it is located within the area depicted in Schedule 1;
 - (b) no other fixed asphalt manufacturing plant operates on the premises while the mobile asphalt plant is operating;
 - (c) daily asphalt production does not exceed 300 tonnes; and
 - (d) operation of the mobile asphalt plant ceases upon submission of a compliance document pursuant to condition 4.3.2.
- 1.3.3 No raw materials, materials or fuels, listed in Table 1.3.3 shall be subjected to the process in that table unless they comply with the relevant specifications in that table.



Table 1.3.3: Materials handling and processing

Material	Process	Specification
Raw Materials	Receipt, storage and use in the asphalt manufacturing process	<p>The Licensee shall ensure that:</p> <p>(a) prior to submission of a compliance document pursuant to condition 4.3.2, raw materials are stored in accordance with the following:</p> <ul style="list-style-type: none"> (i) granular raw materials are stored only in dedicated ground bins or cold feed bins; (ii) all raw material bins comprise of at least three sides; (iii) cold feed bins are roofed; and (iv) stored raw materials shall not extend beyond the sides or height of the bin walls or, if wind shields are also fitted the combined height of the bin walls plus wind shields. <p>(b) after the submission of a compliance document pursuant to condition 4.3.2, raw materials are stored in dedicated ground bins or cold feed bins comprised of three sides and a roof.</p>

2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limits in this section.

2.2 Point source emissions to air

2.2.1 The Licensee is permitted, subject to conditions in the Licence, to emit waste to the atmosphere from the emission points listed in Table 2.2.1 and identified in the Map of emission points in Schedule 1.

Table 2.2.1: Emission points to air

Emission point reference	Emission point	Emission point height	Source, including any abatement
A1	Baghouse stack	12 m above ground level	Fixed asphalt plant rotary dryer via baghouse dust collector ¹
A2	Baghouse stack	6.1 m above ground level	Mobile asphalt plant via baghouse dust collector

Note 1: Upon submission of a compliance document pursuant to condition 4.3.2, the source of emissions will additionally include ducted emissions from the truck load out batch mix tower.

2.2.2 The Licensee shall not cause or allow point source emissions to air greater than the limits listed in Table 2.2.2.



Table 2.2.2: Point source emission limits to air

Emission point Reference	Parameter	Limit (including units)^{1, 2, 3}	Averaging period
A1 – A2	PM	50 mg/m ³	Stack test (60 minute average)

Note 1: All units are referenced to STP dry

Note 2: The addition of diluent gases shall not be used to achieve compliance with the emission limits

Note 3: Concentration units for A1 and A2 are referenced to 17% O₂

2.3 Fugitive emissions

- 2.3.1 The Licensee shall ensure that all conveyors are enclosed with wind shields or otherwise designed to prevent windblown dust.
- 2.3.2 The Licensee shall ensure that any spilt or accumulated granular raw materials are removed from ground level surfaces on each usual working day.

3 Monitoring

3.1 General monitoring

- 3.1.1 The Licensee shall ensure that six-monthly monitoring is undertaken at least 5 months apart.
- 3.1.2 The Licensee 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, and the requirements of the Licence.
- 3.1.3 The Licensee 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.

3.2 Monitoring of point source emissions to air

- 3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.



Table 3.2.1: Monitoring of point source emissions to air				
Emission point reference	Parameter	Units ^{1,4}	Frequency ^{2,3}	Method
A1	PM	mg/m ³ g/s	Six-monthly	USEPA Method 5 or USEPA Method 17
	Oxides of nitrogen			USEPA Method 7E
	Carbon monoxide			USEPA Method 10
	Total volatile organic compounds			USEPA Method 18
A2	PM		Six-monthly until mobile asphalt plant operation has ceased pursuant to condition 1.2.1(d).	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 shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

Note 3: The Licensee is exempt from monitoring emission point reference A1 for the period commencing with the date of the notification pursuant to condition 4.1.2 and ending with submission of a compliance document pursuant to condition 4.3.2.

Note 4: Concentration units for A1 and A2 are referenced to 17% O₂

3.2.2 The Licensee shall ensure that sampling required under conditions 3.2.1 and 4.2.1 of the Licence is undertaken at sampling locations in compliance with the AS 4323.1.

3.2.3 The Licensee shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 3.2.1 and 4.2.1 for the parameters specified in Tables 3.2.1 and 4.2.1 respectively is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

4 Works

4.1 General works conditions

4.1.1 The Licensee shall construct the works in accordance with the documentation detailed in Table 4.1.1.

Table 4.1.1: Construction Requirements ¹		
Document	Parts	Date of Document
Supplementary Information, Licence Amendment / Planning Application, BGC Asphalt Premises, Hazelmere authored by Holmes Environmental	All, including Attachments A and B	3 November 2015
Correspondence to the Department of Environment Regulation entitled: DER letter and attachment 27 November 2015 ref CEO2832/15 authored by Holmes Environmental	All	16 December 2015

Note 1: Where the details and commitments of the documents listed in condition 4.1.1 are inconsistent with any other condition of Section 5 of this licence, the conditions of this section of licence shall prevail.



4.1.2 The Licensee shall notify the CEO in writing of the mobile asphalt plant operation commencement date within two usual working days of commencing its operation.

4.2 Point source air emissions validation conditions

4.2.1 The Licensee shall undertake validation stack testing of air emissions as specified in Table 4.2.1.

Table 4.2.1: Validation monitoring of point source emissions to air				
Emission point reference	Parameter	Units¹	Frequency²	Method
A1	PM	mg/m ³ g/s	One off sampling within two weeks of submitting a compliance document pursuant to condition 4.3.2	USEPA Method 5 or USEPA Method 17
	Oxides of nitrogen			USEPA Method 7E
	Carbon monoxide			USEPA Method 10
	Total VOCs			USEPA Method 18
A2	PM		One off sampling within two weeks of the CEO notification pursuant to condition 4.1.2	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 shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

4.3 Reporting

4.3.1 The Licensee shall submit reports to the CEO within two weeks of completing the point source air emissions validation for the respective emission point references in Table 4.2.1, specifying the results.

4.3.2 The Licensee shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning of the same.

4.3.3 The compliance document shall:

- (a) certify that the works were constructed in accordance with condition 4.1.1 of this licence; and
- (b) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.



5 Information

5.1 Records

- 5.1.1 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 5.1.1(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 groundwater.
- 5.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 5.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee 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 year.
- 5.1.4 The Licensee 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.

5.2 Reporting

- 5.2.1 The Licensee shall submit to the CEO at the Contact Address an annual environmental report within 28 calendar days after of the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

Table 5.2.1: Annual environmental report		
Condition or table (if relevant)	Parameter	Format or form¹
Table 3.2.1	PM, oxides of nitrogen, carbon monoxide and total VOC's	None specified
Condition 5.1.2	Compliance	Annual Audit Compliance Report (AACR)
Condition 5.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

5.3 Notification

- 5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.



Table 5.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
3.1.3	Calibration report	As soon as practicable.	None specified

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

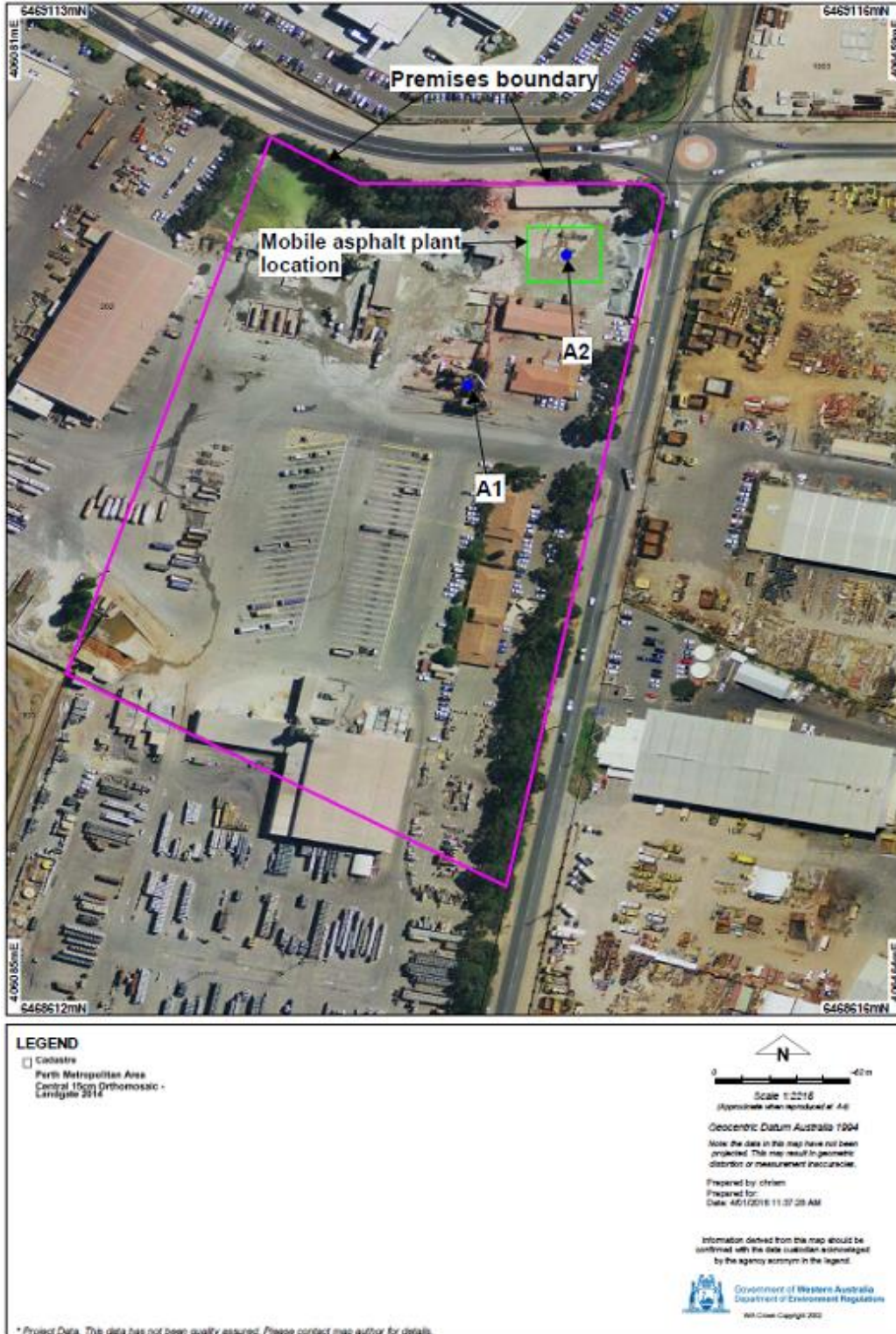
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises and point source emissions to air map

The Premises, point source emissions to air and mobile asphalt plant location are shown in the map below. The pink line depicts the Premises boundary and the green line depicts the operating location of the mobile asphalt plant.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
<input type="checkbox"/> Yes	<input type="checkbox"/> Reported to DER verbally Date _____
	<input type="checkbox"/> Reported to DER in writing Date _____
<input type="checkbox"/> No	
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):	
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:	
i) Action taken or that will be taken to prevent recurrence of the non compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:



SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of <i>Environment Regulation</i> .
A public authority (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L6533/1993/10
 Form: N1

Licensee: BGC (Australia) Pty Ltd
 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.
 Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
To be notified as soon as practicable and no later than 5PM of the next working day	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	



Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any unauthorised emissions from the installation in the preceding 24 months.	

Name	
Post	
Signature on behalf of BGC (Australia) Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: **BGC (Australia) Pty Ltd**

Licence: **L6533/1993/11**

Registered office: Level 6
18 Mount Street
PERTH WA 6000

ACN: 005 736 006

Premises address: BGC Asphalt
4 Stirling Crescent
HAZELMERE WA 6055

Being Lot 4 on Diagram 55932
Certificate of Title Volume 1978 Folio 979

Issue date: Friday, 22 January 2016

Commencement date: Sunday, 31 January 2016

Expiry date: Saturday, 30 January 2026

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by: Chris Malley
Licensing Officer

Decision Document authorised by: Lauren Trott
Delegated Officer



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/>	<input type="checkbox"/>
	New Licence <input type="checkbox"/>	<input type="checkbox"/>
	Licence amendment <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Works Approval amendment <input type="checkbox"/>	<input type="checkbox"/>
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	35 (Asphalt manufacturing)	100,000 tonnes per annual period
Application verified	Date: 08/12/2015	
Application fee paid	Date: 16/12/2015	
Works Approval has been complied with	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Compliance Certificate received	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>



3 Executive summary of proposal and assessment

BGC (Australia) Pty Ltd (BGC) operates the BGC Asphalt plant located in the Perth suburb of Hazelmere. The site has manufactured asphalt since 1993. The site is zoned 'industrial development' and almost all land in the immediate surroundings of the site is zoned 'industrial development.' There is a parcel of land adjacent north east of the site on the opposite side of Bushmead Road that is zoned 'residential development' according to DER's geographical information system (GIS). The nearest sensitive receptors are within an area zoned 'rural residential' to the west of the premises with the closest dwelling approximately 450 m. DER understands that the band of 'rural residential' zoned land is part of the *Integrated Master Plan for Kewdale/Hazelmere* (further information available at www.planning.wa.gov.au/publications/907.asp). There is 'general rural' zoned land commencing approximately 350 m north east of the BGC Asphalt premises boundary. The nearest dwelling within this area is approximately 520 m from the premises boundary or approximately 550 m from the proposed location of the new asphalt plant equipment. As a reference, DER *draft Guidance Statement: Separation Distances*, August 2015 recommends a separation distance of 1000 m for asphalt plants from the industry activity boundary to sensitive receptors. DER's GIS shows a threatened ecological community (TEC) area that encroaches into the south eastern portion of the premises, however the TEC also covers other parts of the industrial area east of the premises all of which are largely developed and devoid of vegetation

BGC submitted an application to amend licence L6533/1993/10 on 3 November 2015, however this application now applies to licence L6533/1993/11 as it replaced the previous version that expired on 30 January 2016. The application for licence amendment relates to the following key aspects:

- the replacement of the existing fixed asphalt plant with a new fixed asphalt plant;
- replacement of the baghouse dust collector for removal of particulate in air emissions from the rotary dry dryer;
- enclosure of the aggregate stockpile bins; and
- temporary operation of a mobile asphalt plant during decommissioning of the existing fixed asphalt plant and construction of the new fixed asphalt plant.

A general process diagram was included in the application and has been included in Appendix B of this decision document for reference.

Emissions and discharges relevant to the proposal are point source air emissions (combustion gases, particulate matter, volatile organic compounds and odour), fugitive emissions (dust, odour and volatile organic compounds), noise and risk of contaminated stormwater entering the environment. The risk of emissions and discharges has been assessed and regulatory controls have been included in amended licence L6533/1993/11. While the Licensee's application had specified the proposed receipt, storage and reprocessing of reclaimed asphalt (RAP), this was clarified to be the return of unused asphalt product which does not have the same risks as RAP for contamination with other materials and impacts on emissions to air relating to moisture. The amended licence does not authorise the receipt, storage and reprocessing of RAP.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	1.2.1 1.2.2	<p>Construction The risk assessment of emissions and discharges during the construction phase has not identified the need for changes to the general conditions section.</p> <p>Operation Risk assessment applies to temporary operation of a mobile asphalt plant during construction of the fixed asphalt plant and also the fixed plant operational phase.</p> <p><u>Emission Description</u> <i>Emission:</i> Stormwater runoff in operational areas of the premises. The Licensee's application states the asphalt manufacturing process does not include substances likely to cause pollution or contamination. Materials such as bitumen set upon cooling therefore present minimal likelihood of contaminating stormwater. The temporary mobile asphalt plant is diesel fired and the application states there will be a 45, 000 L double skinned diesel storage tank. Minor leaks and spills of hydrocarbons may occur from equipment and machinery. <i>Impact:</i> Contamination of soil and groundwater through stormwater drainage systems. DER's GIS shows a TEC that encroaches into the south eastern portion of the premises, however the TEC also covers other parts of the industrial area east of the premises all of which are developed and devoid of vegetation. The Department of Water Perth Groundwater Atlas indicates depth to groundwater at approximately 10.5 m (relative to ground level) or 7.5 m (relative to AHD). <i>Controls:</i> None specified for the fixed plant. The Licensee's application states that uncontaminated stormwater is discharged to an existing sump adjacent to the aggregate</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p> <p><i>Environmental Protection Act 1986 – Part V</i></p> <p>Department of Mines and Petroleum - <i>Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>yard. The mobile plant diesel tank will be double skinned and located within the plant trailer.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Condition 1.2.1 of the previous licence has been retained as per the point source emissions to air risk assessment.</p> <p>Condition 1.2.2 of the previous licence has been retained which ensures spills likely to contaminate stormwater are recovered and disposed of.</p> <p>Condition 1.2.3 of the previous licence has been removed. This condition has been removed as DER does not authorise a direct discharge of treated wastewater to the environment. The <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> and the general provisions of Part V of the <i>Environmental Protection Act 1986</i> (e.g. section 49) regulate the discharge of potentially contaminated stormwater off site.</p> <p>Diesel is a C1 combustible liquid with a placarding quantity of 1,000 L for the purposes of Dangerous Goods legislation. The mobile asphalt plant 45,000 L diesel tank is therefore above placard quantity and subject to Department of Mines and Petroleum regulatory requirements and not subject to DER regulatory controls.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises operation	1.3.1	Condition 1.3.1 on the previous licence has been removed. Liquid bitumen is added post-rotary dryer in the new fixed plant therefore a regulatory control for automatic safeguards to prevent the ignition of bitumen in the drum is not relevant or necessary.	Application supporting documentation
	1.3.2	To reflect outcomes of the point source emissions to air risk assessment, condition 1.3.1 has been modified so as to additionally relate to operation of the baghouse on the temporary mobile asphalt plant. Condition 1.3.2 is a newly added condition that also reflects the outcomes of the point source emissions to air risk assessment. Condition 1.3.2 specifies operational controls for the temporary mobile asphalt plant and reflects information provided by the Licensee in its supporting documentation. The condition ensures operation of the mobile plant occurs as proposed, as the risk of emissions may change if operational parameters are altered.	
	1.3.3	Condition 1.3.3 on the previous licence specified the requirements and specifications for processing of raw materials. This condition was proposed to be modified to include the receipt, storage and use of returned RAP (in this case returned asphalt product), however based on consideration of the Licensee's submission on the draft amendments, DER did not include reference to returned RAP or specifications in condition 1.3.3.	
Emissions general	2.1.1	Raw material specifications have also been altered to account for proposed modifications to storage bins. The raw materials specification for conveyors to be enclosed with windshields has been transferred to condition 2.3.1 as it is a control for fugitive dust emissions. These requirements relate to potential emissions to stormwater, air and fugitive emissions to groundwater. Refer to the relevant section of the decision table for DER's assessment.	
Emissions general	2.1.1	The licence will contain limits therefore condition 2.1.1 regarding recording and investigation of limits exceedances has been retained.	N/A
Point source emissions to air including monitoring	1.2.1 – 1.2.2	Refer to risk assessment in Appendix A.	Refer to risk assessment in Appendix A
	1.3.1 – 1.3.2		
	2.2.1 – 2.2.2		
	3.2.1 – 3.2.3		



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Point source emissions to surface water including monitoring	N/A	The existing premises does not have point source emissions to surface water and there are no emissions or identified risk of emissions associated with the proposal that would cause consideration to including controls for points source emissions to surface water including monitoring.	Application supporting documentation
Point source emissions to groundwater including monitoring	N/A	The existing premises does not have point source emissions to groundwater and there are no emissions or identified risk of emissions associated with the proposal that would cause consideration to including controls for point source emissions to groundwater including monitoring.	Application supporting documentation
Emissions to land including monitoring	N/A	The existing premises does not have direct emissions to land and there are no emissions or identified risk of emissions associated with the proposal that would cause consideration to including controls for direct emissions to land.	Application supporting documentation
Fugitive emissions	2.3.1 - 2.3.2	<p>Construction The risk of fugitive dust emissions during construction including operation of the mobile asphalt plant, is expected to be similar to the operational phase. Refer to the operational phase risk assessment below.</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Fugitive dust emissions from exposed sections of storage bins, loose loads of aggregate transported in truck within the site, ground surfaces, trafficable dust, conveyors and transfer of raw materials. <i>Impact:</i> Reduced local air quality. Nuisance or amenity impact. Nearest dwelling approximately 450 m west. <i>Controls:</i> Aggregate ground bins along the eastern boundary are to be roofed as part of the proposal. These bins have existing misting sprays that will be retained but are expected to be infrequently used after installation of a roof. Returned asphalt product will be stored in three side existing ground bins. Other controls as contained with the December 2015 Dust Management Plan include optional watering of storage bins where necessary, cessation of high risk dust generating activities during high wind conditions, covering of truck loads, sweeping of surface areas, internal traffic speed limiting and wind breaks.</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection Act 1986 – Part V</i></p> <p>www.der.wa.gov.au – Administrative changes advice</p> <p><i>Guidance Statement: Regulatory Principles</i></p> <p><i>Guidance Statement:</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Conditions 2.6.1 and 2.6.2 on the previous licence were removed as per DER's policy on administrative changes to licences on its public website. The Licensee is required to comply with the general provisions of the <i>Environmental Protection Act 1986</i> (e.g. section 49).</p> <p>DER will include management based conditions for fugitive dust that align with its <i>Guidance Statement: Regulatory Principles</i> and <i>Guidance Statement: Setting Conditions</i>. Condition 2.3.1 has been transferred from the raw materials specifications in condition 1.3.3 of the previous licence. It requires conveyors to be enclosed with windshields. Condition 2.3.2 in the amended licence is a new condition that requires any spilt or accumulated raw materials are removed from ground level surfaces of each usual working day.</p> <p>The specifications in condition 1.3.3 also control the risk of fugitive dust emissions</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	<i>Setting Conditions</i>
Odour	N/A	<p>Refer to the point source emissions to air risk assessment in Appendix A for point source odour emissions.</p> <p><u>Emission Description</u> <i>Emission:</i> Fugitive odour from hot asphalt from the new fixed plant dumped into waiting trucks. Short-term odour may also be released from the bitumen storage tanks during</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection Act 1986 – Part V</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>refilling due to air displacement. No specific fugitive odour sources identified for the temporary mobile asphalt plant.</p> <p><i>Impact:</i> Reduction in local air quality. Nuisance or amenity impact. Nearest dwelling approximately 450 m west.</p> <p><i>Controls:</i> Exact temperature control of the asphalt product to prevent asphalt being at a temperature that encourages the generation of blue smoke. To minimise heat loss, truck loads are covered as soon as possible which also minimises fugitive odour release.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Condition 2.7.1 on the previous licence has been deleted consistent with DER policy as stated on its public website. The risk assessment of fugitive odour has not identified the need for specific odour conditions in the amended licence. The Licensee is required to comply with the general provisions of Part V of the <i>Environmental Protection Act 1986</i> (e.g. section 49)</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	
Noise	N/A	<p>Construction</p> <p><u>Emission Description</u> <i>Emission:</i> General construction noise associated with the construction of the new fixed asphalt plant.</p> <p><i>Impact:</i> Nuisance or amenity impact. Nearest dwelling approximately 450 m west</p> <p><i>Controls:</i> None specified by the Licensee</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Noise)</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Specific noise conditions relating to construction are not required. The Licensee is required to comply with the assigned noise levels specified in Regulation 8 of the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Noise emissions from operation of the new fixed asphalt manufacturing plant and also temporary operation of a mobile asphalt plant during the construction phase of the new fixed plant. Sources of noise include machinery movement (front end loader), aggregates within the rotating drum and blower noise via the baghouse stack. <i>Impact:</i> Nuisance or amenity impact. Nearest dwelling approximately 450 m west. <i>Controls:</i> Some infrastructure such as aggregate bins, sheds, and buildings may provide a noise barrier effect.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	<p><i>Regulations 1997</i> – R.8 (assigned noise levels)</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Regulatory Controls</u> The previous licence did not contain specific noise conditions. DER is not aware of any previous history of noise complaints or noise compliance issues attributable to the premises. Noise specific conditions are not required in the amended licence. The licensee is required to comply with the assigned levels in the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	
Monitoring general	L3.1.1 L3.1.2 L3.1.3	As per the risk assessment for point source emissions to air, there will be air emissions monitoring requirements on the amended licence. Consequently general monitoring conditions 3.1.1 – 3.1.4 will be retained in the licence.	N/A
Monitoring of inputs and outputs	N/A	The previous licence did not require the monitoring of inputs and outputs. The assessment of emissions, discharges and impacts associated with this proposal did not identify any changes to risk that would cause consideration to including monitoring of input and output controls.	Application supporting documentation
Process monitoring	N/A	The previous licence did not require process monitoring. The assessment of emissions, discharges and impacts associated with this proposal did not identify any changes to risk that would cause consideration to including process monitoring controls.	Application supporting documentation
Ambient environmental quality monitoring	N/A	The previous licence did not require the monitoring of ambient environmental quality monitoring. The assessment of emission, discharges and impacts associated with this proposal did not identify any changes to risk that would cause consideration to including ambient environmental quality monitoring controls.	Application supporting documentation
Meteorological monitoring	N/A	The previous licence did not require the monitoring of meteorology. The assessment of emissions, discharges and impacts associated with this proposal did not identify any changes to risk that would cause consideration to including meteorological monitoring controls.	Application supporting documentation
Improvements	N/A	The previous licence did not specify any improvement conditions. The assessment of	Application



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		emissions, discharges and impacts associated with this proposal did not identify any changes to risk that would cause consideration to including improvement conditions.	supporting documentation
Works	4.1.1 – 4.1.2 4.2.1 4.3.1 – 4.3.3	<p>Works proposed by the Licensee have been authorised by the inclusion of condition 4.1.1 in the amended licence. Condition 4.1.2 require notification of commencing mobile asphalt plant operations. This aligns with point source emissions to air monitoring in condition 3.2.1.</p> <p>As per the point source emissions to air risk assessment, emissions from both fixed plant baghouse stack and mobile plant baghouse stack will need to be validated. This validation is specified in condition 4.2.1 of the amended licence. The Licensee will be required to submit a report with validation results as per condition 4.3.1 in the amended licence.</p> <p>Once works have been completed, the Licensee will be required to submit a compliance document as per conditions 4.3.2 and 4.3.3.</p>	Application supporting documentation
Information	5.2.1	<p>Annual Environmental Report (AER) requirements in Table 5.2.1 were modified consistent with point source emissions to air monitoring requirements.</p> <p>The AER requirement to summarise the failure or malfunction of any pollution control or incidents was removed as this duplicates notification requirements of section 72 of the EP Act and limit exceedance reporting requirements of condition 5.3.1.</p> <p>The AER requirement to report a chart demonstrating asphalt production rates was deleted. This was on the basis that there was no existing requirement on the licence to monitor production rates and the risk assessment of emissions did not identify and need for monitoring or reporting of production rates.</p>	N/A
Other	Schedule 1	The premises map and point source emissions to air map were combined into a new map. An additional point source emission to air was added as per the point source emissions to air risk assessment. The area for locating the mobile asphalt plant was also specified to reflect condition 1.3.2.	N/A
Licence Duration	N/A	The licensee was issued with development approvals DA-854/2015 and DA-898/2015 by the City of Swan on 21/03/2015. The development approvals do not conflict with the	<i>Guidance Statement: Land</i>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		existing licence duration which has not been modified as part of this amendment.	<i>use planning</i>



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
5/2/16	Notification of proposed licence amendments and decision document sent to licensee for comment.	<p>A submission was received by DER from the Licensee on 22/02/2016 requesting removal of Returned RAP and related specifications from condition 1.3.3 on the following basis:</p> <ul style="list-style-type: none"> • Asphalt that is returned to the Hazelmere premises is not <i>processed RAP</i> - it is neither recovered from a road surface, nor has it been through a crushing and screening process. • Asphalt returned to BGC Hazelmere premises is newly manufactured asphalt that has not been unloaded from the contractor's truck - it is not recovered asphalt - the definition applies to asphalt that has been removed from a road surface. • Returned asphalt does not need to be covered because 1. bitumen is hydrophobic - it does not absorb water. 2. If there is any water that is somehow retained on the surface of returned asphalt it will not affect the process or the emissions. • Returned asphalt will be initially accumulated in small quantities within a 3-sided bin and when machines and staff are available, it will be loaded into the RAP storage bin within the manufacturing plant. This returned asphalt will be deposited into a pug mill, a closed system, for processing into fresh asphalt. 	<p>DER noted the comments from the Licensee. The terminology of 'RAP' does not appear to apply to what is the return of unused asphalt product.</p> <p>On consideration of the points raised by the Licensee, DER agrees that the receipt, storage and reprocessing of returned unused asphalt product does not require regulatory controls as the environmental risks (i.e. potential impact of moisture on point source emissions to air and contaminated stormwater runoff) do not apply to unused returned asphalt product as they do for RAP. It is also noted that returned asphalt product occurs in much smaller quantities (approx. 2% of annual production)DER understands the return of asphalt product to be normal practice for asphalt manufacturing premises generally.</p> <p>In response to the submission DER took the following actions:</p> <ul style="list-style-type: none"> • returned RAP and associated specifications were deleted from condition 1.3.3 of the amended licence; • the premises description and summary in the licence was updated to reflect the fact that the licence does not authorise the receipt, storage and reprocessing of RAP; and • Relevant parts of this decision document were updated to reflect the change, in particular the executive summary and 'premises operation' risk assessment.



Date	Event	Comments received/Notes	How comments were taken into consideration
15/03/2016	Notification of intended decision sent to Licensee pending planning determinations.	<p>The licensee provided copies of development approvals DA-854/2015 and DA-898/2015 granted by City of Swan on 21/03/2016.</p> <p>The licensee also made an additional comment on the licence regarding condition 1.3.2(c) which will restrict the mobile asphalt plant production to 300 tonnes per day. The licensee stated its production is up and down and the condition seriously constricts its business. Since the licence allows us to produce 100,000 tonnes per annual period this condition should be removed.</p>	<p>DER noted the development approvals which do not conflict with the granting of an amended licence.</p> <p>DER noted the comment on condition 1.3.2(c). The mobile plant production limit was imposed as per specification provided in the application and supported by risk assessment of emissions. To change the limit may require the submission of additional information, further assessment of any changes to the risk of emissions and may require a further consultation period. BGC agreed (email dated 31/03/2016) to submit a separate application for licence amendment to request a change to condition 1.3.2(c). The amended licence will be granted without change to condition 1.3.2.</p>



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High



Appendix A

POINT SOURCE EMISSIONS TO AIR INCLUDING MONITORING

The Licensee proposes to decommission the existing fixed asphalt plant and replace it with a new fixed asphalt plant. This includes replacement of the existing baghouse with a new baghouse and stack. The emission point effectively remains the same as the new stack will be 12 m from ground level. For the new plant, there will also be ducted air emissions from the truck load out batch mix tower directed via the baghouse and emitted through the stack.

During the phase of decommissioning the old fixed plant and construction of a new fixed plant, the Licensee proposes to operate a mobile asphalt plant. The mobile plant has its own baghouse and 6.1 m stack for air emissions to atmosphere. As the temporary mobile plant and new fixed plant will not operate simultaneously, the risk of point source emissions to air from the mobile plant and new fixed plant have been assessed individually.

POINT SOURCE EMISSIONS TO AIR – RISK ASSESSMENT

1. Mobile asphalt plant operation

Emission Description

Emission: Combustion gases (NO_x, SO_x, CO and particulates) and odour from the mobile asphalt plant to be operated during the construction phase of the new fixed asphalt plant. The Licensee's application estimates the mobile plant will be operated for approximately three months. Emissions pass through a baghouse and are emitted via 6.1 m stack. The application included stack testing results taken on 2 July 2015 that are indicative of normal operating conditions for the mobile asphalt plant. The total suspended particulate (TSP) concentrations across two tests were 44 mg/m³ and 42 mg/m³ with a mass emission rate of 13 g/min (based on a STP, dry, flow rate of 300 m³/min). NO_x concentrations were 13 mg/m³ and 25 mg/m³ with respective mass emission rates of 3.9 g/min and 7.4 g/min. SO_x concentrations were 150 mg/m³ and 250 mg/m³ with respective mass emission rates of 46 g/min and 74 g/min. CO concentrations were 1400 mg/m³ and 1700 mg/m³ with respective mass emissions of 410 g/min and 510 g/min. Emissions of SO_x are relevant to the mobile asphalt plant because the burner uses diesel fuel. By way of comparison, Asphalt Surfaces held licence L5873/1990/9, however has now relocated its premises. It operated a temporary mobile asphalt plant prior to construction of a new fixed plant. A review of stack monitoring data for that mobile plant in 2012/2013 indicates that emissions are comparable, including the higher levels of CO that relate to use of diesel as a fuel to fire the burner.

Impact: Reduced local air quality and nuisance impact on sensitive receptors. The nearest sensitive receptors are within an area zoned 'rural residential' to the west of the premises with the closest dwelling approximately 450 m.

Controls: The mobile asphalt plant has a baghouse dust collection system for removal of particulate matter to less than 50 mg/m³ during normal operations. DER knowledge and experience with this type of technology is that this type of emissions performance is achievable with adequate maintenance and timely troubleshooting and resolution of issues (e.g. broken/damaged bags, faulty cleaning systems). The baghouse system utilises a computerised pulsing system for cleaning of bags.



Risk Assessment

Consequence: Minor

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls

Condition 1.2.1 is on the existing licence and requires the Licensee to maintain pollution control equipment (e.g. the baghouse) and monitoring equipment to relevant specifications of management systems. This reduces the risk of increased emissions through poor maintenance and control of equipment such as the mobile asphalt plant baghouse.

Condition 1.3.1 has been modified so as to additionally apply to the mobile asphalt plant baghouse.

Condition 1.3.2 is a new condition to specify operational controls on the mobile asphalt plant. The requirements of the condition reflect the information provided by the Licensee in its application and ensures operation of the plant occurs as proposed. Changes to key operational aspects may change the risk of emissions and impacts on receptors.

Table 2.2.1 in condition 2.2.1 will be modified to include additional reference to emission point reference 'A2' for emissions from the mobile asphalt plant baghouse stack. It is noted that emission point reference A1 will effectively be retained albeit the source of emissions will change. Table 2.2.1 will have a footnote to the effect that after submission of a compliance document (i.e. the new plant has been completed) the source of emissions will additionally include ducted emissions from the truck load out batch mix tower.

The particulate limit of 50 mg/m³ specified in Table 2.2.2 of condition 2.2.2 will also apply to 'A2.'

Point source monitoring requirements in Table 3.2.1 of condition 3.2.1 will be modified to include stack sampling of 'A2.' As the mobile plant is to be operated for a temporary period until new fixed plant is operational, monitoring will be required once within the first two weeks of operating to validate emissions then 6-monthly thereafter if still operational. Air emissions validation requirements are specified in condition 4.2.1.

Residual Risk

Consequence: Minor

Likelihood: Unlikely

Residual Risk Rating: Moderate

2. *New fixed asphalt plant operation*

Emission Description

Emission: Combustion gases (NO_x, CO and particulates), volatile organic compounds (VOCs) and odour from the rotary dryer and ducted emissions from the truck load out batch mix tower. Emissions are ducted via a baghouse dust collector and discharged through a 12 m stack. The burner is natural gas-fired therefore emissions of SO_x are negligible. The risk of VOC emissions is relevant as air emissions from the new truck load out batch mix tower are ducted via the baghouse and emitted to atmosphere via the stack. The baghouse is designed to achieve a normal operating condition particulate matter concentration less than 50 mg/m³.

Impact: Reduced local air quality and nuisance impact (e.g. odour) on sensitive receptors. There are dwellings approximately 450 m from the proposed location of the fixed plant.



Controls: The new fixed plant will have a baghouse to reduce particulates in the air stream extracted from the batch mix tower and drier. The baghouse will have scheduled maintenance and daily visual checks. Emissions of NOx and CO are related to combustion efficiency and the licensee states there will be digital control of burner function and temperature monitoring to provide improved temperature and fuel/air mixture management. The new plant process involves heated aggregate and liquid bitumen being mixed in a separate process – the mixing takes place in a sealed pug-mill and from there it goes to a closed hot storage silo or is dropped directly into a truck. This reduces odour generation risk meaning that emissions are primarily combustion gases and particulate matter post-baghouse treatment.

Risk Assessment

Consequence: Minor

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls

Reference to emission point 'A1' will be retained in Table 2.2.1 of condition 2.2.1. There will be a footnote included to clarify that post-works, the source of emissions will additionally include ducted emissions from the truck load out batch mix tower. The particulate limit in condition 2.2.2 will be retained. No additional air emissions limits are required based on the risk assessment of NOx, CO and VOCs. However, these parameters are required to be validated on initial operation and then on a six-monthly basis thereafter to demonstrate ongoing emissions performance. Validation of emissions will need to occur within two weeks of operating the new fixed plant as per condition 4.2.1. The Licensee is then required to undertake 6-monthly stack sampling thereafter as per condition 3.2.1.

As indicates above under regulatory controls for the mobile plant, condition 1.2.1 will be retained.

Residual Risk

Consequence: Minor

Likelihood: Unlikely

Residual Risk Rating: Moderate



Appendix B

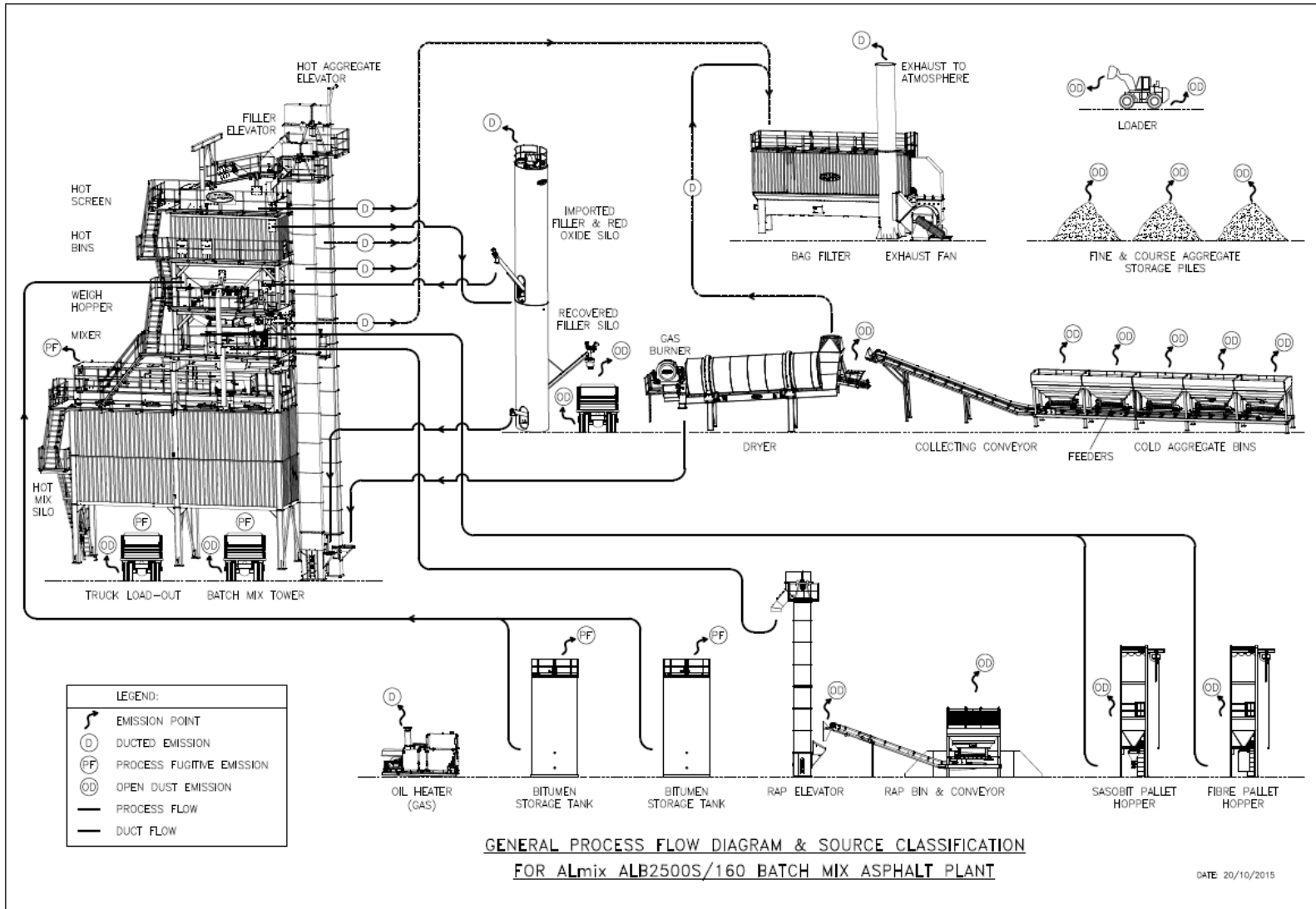


Figure 1 – General process flow diagram & source classification (Source: application supporting documentation)