



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** Downer EDI Works Pty Ltd

**Licence:** L5882/1976/13

**Registered office:** 39 Dehli Road  
NORTH RYDE NSW 2113

**ACN:** 008 709 608

**Premises address:** Emoleum Gosnells Asphalt Plant  
89 Cockram Road  
MARTIN WA 6110

Being Part of Lot 3 on Plan 14769  
Certificate of Title Volume 1683 Folio 198; and

Part Lot 5003 on Plan 28867  
Certificate of Title Volume 2521 Folio 509  
(as depicted in Schedule 1)

**Issue date:** Thursday, 28 January 2016

**Commencement date:** Friday, 29 January 2016

**Expiry date:** Sunday, 28 January 2018

**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 | Not Applicable                         | 150 000 tonnes per annual period                |
| 61A             | Solid waste depot     | 1 000 tonnes or more per year          | 25 000 tonnes per annual period                 |

**Conditions**

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

Date signed: 28 January 2016

.....  
Jonathan Bailes  
Manager Licensing (Process Industries)  
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 advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements 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**

Downer EDI Works Pty Ltd (Downer) operates an asphalt manufacturing plant (the 'facility') within a quarry owned and operated by Holcim Australia Pty Ltd.

The nearest sensitive receptor is a residential area located approximately 450 metres (m) north of the facility and there is a Roman Catholic precinct located approximately 700m south-west.

The facility is located within an Environmentally Sensitive Area which imposes clearing restrictions. There is a large Bush Forever site 1.2km south-west of the facility which is also located within the buffer of multiple threatened ecological sites.

The facility is designed to produce 150,000 tonnes of asphalt per year. Aggregate material is dried in a gas-fired rotary drum dryer and mixed with bitumen in a rotary mixer. Exhaust gases from the drum dryer are emitted to atmosphere via a baghouse which is designed to minimise particulate emissions. The key emissions and discharges from this plant are air emissions, namely particulates, combustion gases and Volatile Organic Compounds (VOCs), and the discharge of potentially contaminated stormwater.

Downer operates a wastewater treatment system on site to treat potentially contaminated stormwater.

This Licence is the successor to Licence L5882/1976/12 and includes changes to conditions for the receipt, storage and reprocessing of Reclaimed Asphalt Pavement (RAP) and update into the current licence template.

The licences and works approvals issued for the Premises since 06/01/2011 are:

| <b>Instrument log</b> |               |  |
|-----------------------|---------------|--|
| <b>Instrument</b>     | <b>Issued</b> | <b>Description</b>   |
| L5882/1976/13         | DRAFT         | Licence re-issue with changes to conditions to allow RAP                 |
| L5882/1976/12         | 16/04/2014    | Licensee initiated licence amendment – reduction in stack velocity limit |
| L5882/1976/12         | 23/08/2013    | DER initiated licence amendment – conversion to a new format             |
| W5106/2011/1          | 12/03/2012    | Works approval   |
| L5882/1976/12         | 06/01/2011    | Licence re-issue   |
| L5882/1976/13         | 28/01/2016    | Licence re-issue and amendment to authorise processing of RAP            |



## 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 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*;

**'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 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

**'Damp'** means moist to the touch;

**'Licence'** means this Licence numbered L5882/1976/13 and issued under the Act;

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

**'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;

**'Processed RAP'** means RAP which has been crushed and/or screened to size for recycling into new asphalt;

**'RAP'** means reclaimed asphalt pavement;

**'Schedule 1'** means Schedule 1 of this Licence unless otherwise stated;

**'Schedule 2'** means Schedule 2 of this Licence unless otherwise stated;

**'six monthly'** means the two inclusive periods from 1 January to 30 June and 1 July to 31 December in the same year;

**'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 (of America) Environmental Protection Agency;

**'USEPA Method 5'** means the promulgated Test Method 5 – Determination of Particulate Matter Emissions from Stationary Sources;

**'USEPA Method 17'** means the promulgated Test Method 17 – Determination of Particulate Matter Emissions from Stationary Sources; 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 operate and 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 automatic safeguards are incorporated within the process to prevent the ignition of bitumen within the drum.

1.3.2 The Licensee shall not produce asphalt at a rate exceeding 150 tonnes per hour.

1.3.3 No materials listed in Table 1.3.1 shall be subjected to the process in that table unless they comply with the relevant specifications in that table.

| <b>Table 1.3.1: Processing of materials</b> |  |  |
|---|--|--|
| <b>Material</b>                             | <b>Process</b>   | <b>Specification</b>   |
| Raw Materials (excluding RAP)               | Storage  | The Licensee shall ensure that material kept in open stockpiles are treated in one of the following ways to minimise the generation of airborne dust:<br>i) covered with plastic sheeting or tarpaulins;<br>ii) kept damp through the use of sprinklers or water trucks; or<br>iii) treated with a surface binding agent to minimise the dust.   |
|   | Transfer   | The Licensee shall ensure that all conveyors are enclosed with windshields, or otherwise appropriately designed to minimise the generation of airborne dust.   |
| Bulk Filler (e.g. Lime)                     | Storage  | Bulk filler shall only be stored (other than bagged storage) in a purpose built storage silo, which is designed and operated to meet the following requirements:<br>i) Air discharged from any silo during filling shall pass through a filter-type dust collector fitted with either a mechanical rapping or reverse air-pulse filter cleaning system.<br>ii) The air outlet from the dust collector shall either be piped to within one metre of the ground or ducted to a fully-enclosed space.<br>iii) During the filling of the silo, if there is visible dust being emitted, the fault leading to that emission shall be rectified before the silo is filled from any additional trucks.<br>iv) All inspection ports and hatches shall be sealed during silo filling such that no dust is emitted. |
| Unprocessed RAP                             | Receipt, storage and processing (crushing and screening) | The Licensee shall only:<br>i) crush, screen and store unprocessed RAP within the area depicted on the Map of emission points and RAP processing area in Schedule 1;<br>ii) screen RAP with a Powerscreen Warrior 1800 or a make/model that has equivalent manufacturers specifications for noise emissions and dust minimisation controls; and<br>iii) crush and screen unprocessed RAP if it does not contain any of the following materials:<br>a) granular pavement materials, clay, soil or organic matter;<br>b) bricks, concrete, glass or building materials; or<br>c) tar based products, geotextile fabrics, raised pavement markers or surface treatment such as high friction surfacing.   |
| Processed RAP                               | Storage and use in the asphalt manufacturing process     | None specified.  |



- 1.3.4 The Licensee is permitted to remove crushing and screening equipment for unprocessed RAP from the premises and relocate it back within the premises on an as needs basis, subject to the unprocessed RAP specifications in Table 1.3.1.

## 2 Emissions

### 2.1 General

- 2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of section 2 of this Licence.

### 2.2 Point source emissions to air

- 2.2.1 The Licensee shall ensure that where waste is emitted to air from the emission points in Table 2.2.1 it is done so in accordance with the conditions of this Licence.

| Table 2.2.1: Emission points to air                             |                |                           |  |
|---|----------------|---------------------------|--|
| Emission point reference and location on Map of emission points | Emission Point | Emission point height (m) | Source, including any abatement        |
| A1  | Baghouse stack | 13                        | Drum drier via baghouse dust collector |

- 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) <sup>1,2</sup> | Averaging period               |
| A1   | PM             | 50 mg/m <sup>3</sup>                   | Stack test (60 minute average) |
|  | Stack velocity | >9 m/s                                 |                                |

Note 1: All units are referenced to STP dry

Note 2: Concentration units for A1 are referenced to 17% O<sub>2</sub>

## 3 Monitoring

### 3.1 General monitoring

- 3.1.1 The licensee shall ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- 3.1.2 The Licensee shall ensure that six monthly monitoring is undertaken at least five months apart.
- 3.1.3 The Licensee shall record the current production rate and details of product being manufactured during any non-continuous monitoring undertaken.
- 3.1.4 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.
- 3.1.5 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 <sup>1,3</sup> | Frequency <sup>2</sup> | Method                            |
| A1   | PM             | mg/m <sup>3</sup>    | Six monthly            | USEPA Method 5 or USEPA Method 17 |
|  | Stack velocity | m/s                  |                        |                                   |

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: Concentration units for A1 are referenced to 17% O<sub>2</sub>.

3.2.2 The Licensee shall ensure that sampling required under Condition 3.2.1 of the Licence is undertaken at sampling locations in accordance 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 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

## 4 Improvements

### 4.1 Improvement Program

4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.

| Table 4.1.1: Improvement program |   |                    |
|----------------------------------|---|--------------------|
| Improvement reference            | Improvement   | Date of completion |
| IR1                              | <p>The Licensee shall submit to the CEO a Stormwater Management Plan. The Plan shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>(a) Identification of activities that could cause stormwater to become contaminated and any potential contaminants;</li> <li>(b) Operational measures to prevent contamination of stormwater;</li> <li>(c) Measures for containment or treatment of contaminated or potentially contaminated stormwater generated from activities on the premises;</li> <li>(d) Diagram or plan identifying existing stormwater management drains on the premises and containment ponds;</li> <li>(e) Assessment of adequacy of existing containment ponds including details of permeability;</li> <li>(f) Assessment of adequacy of existing infrastructure to prevent or minimise stormwater contamination;</li> <li>(g) Information on maintenance schedule and procedures for existing infrastructure for stormwater conveyance and containment; and</li> <li>(h) Identification of improvements required to stormwater management on the premises, including requirement of any monitoring regime, implementation proposal for the improvements identified and timeframe for the same.</li> </ul> | 30/06/2016         |





## 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 waters.
- 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 annual period.
- 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 an Annual Environmental Report within 60 calendar days after 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.

| <b>Table 5.2.1: Annual Environmental Report</b> |   |                                       |
|---|---|---------------------------------------|
| <b>Condition or table (if relevant)</b>         | <b>Parameter</b>  | <b>Format or form<sup>1</sup></b>     |
| -   | 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 3.2.1                                     | PM, stack velocity  | AR1                                   |
| Condition 5.1.3                                 | Compliance  | Annual Audit Compliance Report (AACR) |
| Condition 5.1.4                                 | Complaints summary  | None specified                        |

Note 1: Forms are in Schedule 2

- 5.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under Condition 3.1.3; and
  - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.



5.2.3 The Licensee shall submit the information in Table 5.2.2 to the CEO according to the specifications in that table.

| <b>Table 5.2.2: Non-annual reporting requirements</b> |  |                         |   |  |
|---|--|-------------------------|---|--|
| <b>Condition or table (if relevant)</b>               | <b>Parameter</b>   | <b>Reporting period</b> | <b>Reporting date (after end of the reporting period)</b> | <b>Format or form<sup>1</sup></b>              |
| -   | Copies of original monitoring reports submitted to the Licensee by third parties | Not Applicable          | Within 14 days of the CEOs request                        | As received by the Licensee from third parties |

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 in accordance with the notification requirements of the table.

| <b>Table 5.3.1: Notification requirements</b> |  |   |                                   |
|---|--|---|-----------------------------------|
| <b>Condition or table (if relevant)</b>       | <b>Parameter</b>                             | <b>Notification requirement<sup>1</sup></b>   | <b>Format or form<sup>2</sup></b> |
| 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.<br><br>Part B: As soon as practicable | N1                                |

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

Note 2: Forms are in Schedule 2



## Schedule 1: Maps

### Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.





### Map of emission points and RAP processing area

The location of the emission point in condition 2.2.1 and RAP processing area in condition 1.3.3 are shown below.





## 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:<br>Trading as:        | ABN:                 |
| Reporting period:<br>_____ 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 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"/><br><input type="checkbox"/>   | by the individual licence holder, or<br>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"/><br><input type="checkbox"/>   | by the principal executive officer of the licensee; or<br>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"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/> | by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or<br>by two directors of the licensee; or<br>by a director and a company secretary of the licensee, or<br>if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or<br>by the principal executive officer of the licensee; or<br>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 public authority (other than a local government) | <input type="checkbox"/><br><input type="checkbox"/>   | by the principal executive officer of the licensee; or<br>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"/><br><input type="checkbox"/>   | by the chief executive officer of the licensee; or<br>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: L5882/1976/13  
Form: N1

Licensee: Downer EDI Works 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**

|   |  |
|---|--|
| 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 previous N1 notifications for the Premises in the preceding 24 months.   |  |

|                        |  |
|------------------------|--|
| Name                   |  |
| Post                   |  |
| Signature on behalf of |  |
| Date                   |  |





# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Downer EDI Works Pty Ltd

**Licence:** L5882/1976/13

---

**Registered office:** 39 Dehli Road  
NORTH RYDE NSW 2113

**ACN:** 008 709 608

**Premises address:** Emoleum Gosnells Asphalt Plant  
89 Cockram Road  
MARTIN WA 6110

Being Part of Lot 3 on Plan 14769  
Certificate of Title Volume 1683 Folio 198; and

Part of Lot 5003 on Plan 28867  
Certificate of Title Volume 2521 Folio 509

**Issue date:** Thursday, 28 January 2016

**Commencement date:** Friday, 29 January 2016

**Expiry date:** Sunday, 28 January 2018

### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER) has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by:

Lauren Trott  
Senior Licensing Officer

Decision Document authorised by:

Jonathan Bailes  
Delegated Officer



## Contents

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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"/>    | New Licence <input checked="" type="checkbox"/>                     |
|  | Licence amendment <input type="checkbox"/> | Works Approval amendment <input type="checkbox"/>                   |
| Activities that cause the premises to become prescribed premises   | <b>Category number(s)</b>                  | <b>Assessed design capacity</b>                                     |
|  | 35   | 150,000 tonnes per annual period                                    |
|  | 61A  | 25,000 tonnes per annual period                                     |
| Application verified   | Date: 16 November 2015                     |   |
| Application fee paid   | Date: 10 December 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**

Downer EDI Works Pty Ltd (Downer) operates an asphalt manufacturing plant (the 'facility') within a quarry owned and operated by Holcim Australia Pty Ltd.

The nearest sensitive receptor is a residential area located approximately 450 metres (m) north of the facility and there is a Roman Catholic precinct located approximately 700m south-west. These receptors are located within 1 kilometre (km) of the site and are considered to be at an increased risk of exposure from emissions and discharges from this facility.

The facility is located within an Environmentally Sensitive Area, which imposes clearing restrictions. There is a large Bush Forever site 1.2km south-west of the facility which is also located within the buffer of multiple threatened ecological sites.

The facility is designed to produce 150,000 tonnes of asphalt per year. Aggregate material is dried in a gas-fired rotary drum dryer and mixed with bitumen in a rotary mixer. Exhaust gases from the drum dryer are emitted to atmosphere via a baghouse which is designed to minimise particulate emissions. The key emissions and discharges from this facility are air emissions, namely particulates, combustion gases and Volatile Organic Compounds (VOCs), and the discharge of potentially contaminated stormwater.

Downer operates a wastewater treatment system on site to treat potentially contaminated stormwater. Previous inspections by DER identified issues with potentially contaminated stormwater discharges from the site. It should be noted that this licence does not authorise the discharge of treated stormwater into the environment.

This Licence is the successor to Licence L5882/1976/12 and includes changes to conditions for the receipt, storage and reprocessing of Reclaimed Asphalt Pavement (RAP) and update into the current licence template



## 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><u>Emission Description</u><br/> <i>Emission:</i> Stormwater contaminated with sediment and hydrocarbons from aggregate storage, RAP storage, and processing and loading areas.<br/> <i>Impact:</i> The nearest residential area is approximately 450m north of the asphalt plant. It is unlikely these receptors will be impacted by contaminated stormwater as there are no surface water courses which lead from the premises to this area. The asphalt plant is located in an environmentally sensitive area with a number of threatened ecological communities located nearby, within 500m. There is also a large Bush Forever site 1.2km south-west of the plant. Contaminated stormwater runoff may present short-term, localised impacts if it reaches these areas. Discharge of contaminated stormwater is more likely in winter periods or during high rainfall events. The release of contaminated stormwater was identified by DER in 2013 during a scheduled inspection. This resulted in an improvement condition requiring a stormwater improvement plan being included in licence 5882/1976/12, granted on 6 January 2011. Whilst Downer submitted the plan required by this condition DER understands improvements identified in the report were not implemented. Instead, pipework was installed to direct treated water to a retention basin on site. DER has limited information regarding general management of stormwater on site, the permeability of the retention basin, or the design specifications or capacity of a triple interceptor installed on site.<br/> <i>Controls:</i> DER is unaware of any site-specific controls to minimise stormwater contamination other than treatment through a triple interceptor which discharges into a retention basin of unknown specification.</p> | <p>Previous licence L5882/1976/12</p> <p>2013 Inspection Report, DEC</p> <p>Supporting documentation</p> |



| DECISION TABLE                   |                  |  |                     |
|----------------------------------|------------------|--|---------------------|
| Works Approval / Licence section | Condition number | Justification (including risk description & decision methodology where relevant)   | Reference documents |
|                                  |                  | <p><u>Risk Assessment</u><br/><i>Consequence:</i> Minor<br/><i>Likelihood:</i> Possible<br/><i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u><br/>Condition 1.2.2 of the previous licence, L5882/1976/12, regarding storage of environmentally hazardous materials in accordance with the relevant code of practice has been removed. Condition 1.2.3 of the previous licence has been retained which ensures spills likely to contaminate stormwater are recovered and disposed of. The intent of this condition covers that of previous condition 1.2.2.</p> <p>Condition 1.2.4 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. DER has insufficient information to assess the adequacy of wastewater treatment system(s) on site, including the capacity of the stormwater retention basin, therefore, is unable to determine if design criteria are appropriate to treat the volume of potentially contaminated stormwater generated on site. The <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> regulates the discharge of contaminated stormwater off site.</p> <p>Improvement condition 4.1.1 has been included which requires the licensee to design a stormwater management plan. This condition addresses the lack of information available to DER regarding treatment of potentially contaminated stormwater on site and any likely discharges. The inclusion of this requirement is appropriate given the moderate risk of potentially contaminated stormwater emissions.</p> <p>Table 1.3.1 details requirements for processing materials on site, including RAP. These requirements are designed to minimise the potential for environmental impacts posed by processing activities, including potential stormwater contamination.</p> |                     |



| DECISION TABLE  |                               |   |  |
|---|-------------------------------|---|--|
| Works Approval / Licence section                          | Condition number              | Justification (including risk description & decision methodology where relevant)  | Reference documents  |
|   |                               | <u>Residual Risk</u><br><i>Consequence:</i> Minor<br><i>Likelihood:</i> Possible<br><i>Risk Rating:</i> Moderate  |  |
| <b>Premises operation</b>                                 | 1.3.3<br>Table 1.3.1<br>1.3.4 | <p>Condition 1.3.3 has been updated to detail requirements for the receipt, storage and processing of unprocessed and processed RAP. These requirements relate to potential emissions to stormwater, air and fugitive emissions to groundwater. Refer to relevant sections of the decision table for DER's assessment.</p> <p>Condition 1.3.4 of the previous licence has been removed. The intent of this condition is covered by the requirements in Table 1.3.1. It has been replaced with a condition that allows the licensee to remove and relocate crushing and screening equipment within the area defined in Schedule 1.</p>   | Previous licence L5882/1976/12<br><br>Supporting documentation   |
| <b>Emissions general</b>                                  | 2.1.1                         | Descriptive limits have been set in condition 2.2.2 of the licence and, therefore, the condition regarding recording and investigation of exceedances of limits has been included. This has been retained from the existing licence.  |  |
| <b>Point source emissions to air including monitoring</b> | 2.2.1<br>2.2.2                | <u>Emission Description</u><br><i>Emission:</i> Combustion gases (NO <sub>x</sub> , CO and particulates) and Volatile Organic Compounds (VOCs) from the drum dryer via Stack A1 (normal operation).<br><i>Impact:</i> Reduced local air quality. The nearest residential area is located approximately 450m north of the plant.<br><i>Controls:</i> Air emissions from the drum dryer are treated by a baghouse for the removal of particulates. A baghouse will reduce particulate emissions to less than 50mg/m <sup>3</sup> , which should ensure any impact at the nearest residence is minimised. Bitumen is added to a rotary mixer (separate to drum dryer) to mitigate VOC generation. Processed RAP is not directly heated by the burners, but introduced via a conveyor belt into the mixing drum where it mixes with hot aggregate and bitumen is added. The moisture content of RAP is managed which minimises VOC generation. Downer deems | Boral Asphalt – licence L6265/1983/8<br><br>BGC Asphalt – licence L6533/1993/10<br><br>Supporting documentation<br><br>Downer EDI Gosnells |



| DECISION TABLE                   |                  |   |   |
|----------------------------------|------------------|---|---|
| Works Approval / Licence section | Condition number | Justification (including risk description & decision methodology where relevant)  | Reference documents   |
|                                  |                  | <p>RAP unusable if the moisture content is above 3%.</p> <p>Production of VOC emissions is minimised in the plant design by utilising a rotary mixer to combine bitumen with heated aggregates which is separate to the aggregate drying drum. This assists in preventing ignition of bitumen which generates VOC and odour emissions.</p> <p><u>Risk Assessment</u><br/> <i>Consequence:</i> Minor<br/> <i>Likelihood:</i> Possible<br/> <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u><br/>           Condition 2.2.2 has been updated to reduce the particulate limit from 150mg/m<sup>3</sup> to 50mg/m<sup>3</sup> which is considered an appropriate limit based on the risk and is achievable for the abatement technology used. Historical stack monitoring results show the licensee can achieve emissions less than 20mg/m<sup>3</sup>. A limit of 50mg/m<sup>3</sup> is consistent with other asphalt manufacturing plants utilising this technology (e.g. Boral Asphalt licence L6265/1983/8 and BGC Asphalt licence L6533/1993/10).</p> <p>The controls for the use of Processed RAP detailed in Table 1.3.1 are designed to minimise air emissions such as VOC generation. These controls include the requirement to ensure RAP is free of contaminants which may result in increased air emissions if heated and mixed in the asphalt manufacturing process.</p> <p><u>Residual Risk</u><br/> <i>Consequence:</i> Minor<br/> <i>Likelihood:</i> Unlikely<br/> <i>Risk Rating:</i> Moderate</p> | <p>Emission Testing Report, 2008</p> <p>Downer EDI Gosnells Emission Testing Report, 2013</p> <p>Gosnells Asphalt Plant - Annual Environmental Report, Downer EDI, 2014</p> |





| 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 licensee does not have any point source emissions to surface water. No conditions are considered necessary.   |                                |
| Point source emissions to groundwater including monitoring   | N/A              | The licensee does not have any point source emissions to groundwater. No conditions are considered necessary.   |                                |
| Emissions to land including monitoring                       | N/A              | The licensee does not have any emissions to land. No conditions are considered necessary.   |                                |
| Fugitive emissions (including odour)                         | 1.3.3<br>4.1.1   | <p><u>Emission Description</u><br/> <i>Emission:</i> Fugitive dust and odour emissions generated by the storage of aggregates, RAP and production of asphalt.<br/> <i>Impact:</i> Fugitive dust and odour emissions are likely to have a short-term localised impact in reducing air quality and pose potential amenity impacts. The nearest residential area is located approximately 450m north of the plant.<br/> <i>Controls:</i> DER is unaware of any specific controls implemented by the licensee above those required by previous licence conditions.</p> <p><u>Risk Assessment</u><br/> <i>Consequence:</i> Minor<br/> <i>Likelihood:</i> Likely<br/> <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u><br/>           Condition 1.3.1 has been retained from the previous licence to minimise the potential for odour (VOC) emissions which are generated if bitumen ignites.</p> | Previous licence L5882/1976/12 |



| DECISION TABLE                   |                  |  |                     |
|----------------------------------|------------------|--|---------------------|
| Works Approval / Licence section | Condition number | Justification (including risk description & decision methodology where relevant)   | Reference documents |
|                                  |                  | <p>The management actions specified in Table 1.3.1 are included as storage of aggregate materials pose a moderate risk of fugitive dust emissions. Table 1.3.1 specifies storage and processing requirements of raw materials, bulk fillers and RAP (including the location of RAP processing area). Many of these specifications have been retained from the previous licence and ensure that the risk of fugitive dust emissions are minimised. DER has delineated the RAP storage and processing area to ensure these dust-generating activities are confined to a restricted, controllable area.</p> <p>Conditions 2.3.1, 2.3.2 and 2.3.3 of the previous licence have been removed. The intent of these conditions is covered by the general provisions of the EP Act and the requirements in Table 1.3.1.</p> <p><u>Residual Risk</u><br/><i>Consequence:</i> Minor<br/><i>Likelihood:</i> Possible<br/><i>Risk Rating:</i> Moderate</p> <p><u>Emission Description</u><br/><i>Emission:</i> Fugitive emissions to groundwater from seepage of water contaminated with hydrocarbons generated in the asphalt manufacturing process and loading facilities.<br/><i>Impact:</i> Monitoring bores located within 600m of the plant indicate the depth to groundwater is approximately 4-5m; therefore contaminants are at risk of infiltrating groundwater. The impact on groundwater may pose a minor, localised impact, particularly in terms of hydrocarbon contamination.<br/><i>Controls:</i> DER is aware the licensee has a wastewater treatment system on site which is designed to remove hydrocarbons. There is currently inadequate information to assess the adequacy of this system (see stormwater risk assessment under 'General Conditions').</p> |                     |



| DECISION TABLE                          |                  |   |   |
|---|------------------|---|---|
| Works Approval / Licence section        | Condition number | Justification (including risk description & decision methodology where relevant)  | Reference documents   |
|   |                  | <p><u>Risk Assessment</u><br/> <i>Consequence:</i> Minor<br/> <i>Likelihood:</i> Possible<br/> <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u><br/>           This licence does not authorise the discharge of treated stormwater into the environment. Given the absence of information regarding stormwater treatment on site and the moderate risk to the receiving environment, improvement condition 4.1.1 has been included which requires the licensee to provide details of stormwater management on site to the CEO. On receipt of this information, DER will reassess fugitive emissions to groundwater and potential discharges of contaminated stormwater.</p> <p><u>Residual Risk</u><br/> <i>Consequence:</i> Minor<br/> <i>Likelihood:</i> Possible<br/> <i>Risk Rating:</i> Moderate</p> |   |
| <b>Noise</b>                            |                  | The previous licence did not contain specific noise conditions. There is no evidence to suggest that the licensee cannot comply with assigned levels in Regulation 8 of the <i>Environmental Protection (Noise) Regulations 1997</i> with the addition of RAP processing on site.   | <i>Environmental Protection (Noise) Regulations 1997 – Regulation 8</i> |
| <b>Monitoring general</b>               |                  | Monitoring requirements have been retained from the previous licence. The risk assessment of point source emissions to air has not identified any cause to include requirements to amend current monitoring conditions.   |   |
| <b>Monitoring of inputs and outputs</b> |                  | There were no requirements to monitor the input and outputs on the previous licence. The risk assessment of emissions, discharges and impacts has not identified any cause to include requirements to monitor inputs and outputs in this licence.   |   |



| <b>DECISION TABLE</b>                   |                         |   |                                |
|---|-------------------------|---|--------------------------------|
| <b>Works Approval / Licence section</b> | <b>Condition number</b> | <b>Justification (including risk description &amp; decision methodology where relevant)</b>   | <b>Reference documents</b>     |
| <b>Process monitoring</b>               |                         | There were no requirements for process monitoring on the previous licence. The risk assessment of emissions, discharges and impacts has not identified any cause to include requirements for process monitoring in this licence.                            |                                |
| <b>Ambient quality monitoring</b>       |                         | There were no requirements for ambient monitoring on the previous licence. The risk assessment of emissions, discharges and impacts has not identified any cause to include requirements for ambient monitoring requirements in this licence.               |                                |
| <b>Meteorological monitoring</b>        |                         | There were no requirements for meteorological monitoring on the previous licence. The risk assessment of emissions, discharges and impacts has not identified any cause to include requirements for meteorological monitoring requirements in this licence. |                                |
| <b>Improvements</b>                     | 4.1.1                   | DER has included condition 4.1.1 which requires the licensee to submit a stormwater management plan to the CEO. Refer to Fugitive Emissions for DERs assessment of potential emissions to groundwater.  |                                |
| <b>Information</b>                      | 5.1-5.3                 | Reporting requirements have been retained from the previous licence.  | Previous licence L5882/1976/12 |
| <b>Licence Duration</b>                 |                         | The licensee has a lease agreement to operate at this location until 30 June 2018. As such it is recommended this licence be granted for a 2 year period to align with this agreement.  | Supporting documentation       |



## 5 Advertisement and consultation table

| Date       | Event   | Comments received/Notes   | How comments were taken into consideration  |
|------------|---|---|---|
| 21/12/2015 | Advertisement of the application for licence      | No comments received  | N/A   |
| 20/01/2016 | Draft documents provided to licensee for comments | <p>The Licensee identified the following:</p> <ol style="list-style-type: none"><li>1. Stormwater is directed to an onsite storage pond and is no longer discharged from site.</li><li>2. Concern that the particulate limit has decreased from 150mg/m<sup>3</sup> to 50mg/m<sup>3</sup> given recent stack testing results.</li><li>3. Query regarding the applicability of category 13 on the licence which formed part of the original application.</li></ol> | <ol style="list-style-type: none"><li>1. The decision documented has been updated based on the most recent information available to DER. Downer has confirmed contaminated stormwater is treated by a triple interceptor and discharged to a stormwater retention basin on site. This change was implemented following submission of the stormwater improvement plan in 2013. DER does not have any information regarding the capacity or permeability of this basin. Furthermore, DER does not have any information regarding the general management of stormwater on site or design specifications of the triple interceptor including its capacity. Given there is no direct discharge offsite, condition 1.2.4 of the previous licence has been removed as proposed in draft documents. Improvement condition 4.1.1 requiring the submission of a stormwater management plan has been included which will allow DER to further assess fugitive emissions to groundwater and potential discharges of contaminated stormwater once received.</li><li>2. Normal operating concentrations below 50mg/m<sup>3</sup> are achievable for the baghouse technology installed and Downer EDI historical data confirms it is achievable for this installation. The 2014 AER reported a 28/11/14 value of 54.3mg/m<sup>3</sup> with the comment that it was expected as the baghouse bags were due for replacement. It is assumed this is indicative of a specific issue with the baghouse at</li></ol> |



| Date | Event | Comments received/Notes | How comments were taken into consideration   |
|------|-------|-------------------------|--|
|      |       |                         | <p>the time of testing. Routine maintenance in accordance with manufacturer's specifications and timely identification, troubleshooting and resolution of faults or failures (e.g. broken bags, damaged bags, cleaning system faults) should allow the limit to be met. The new limit is consistent with other asphalt licences (which have been also recently changed where necessary) and with the risk posed by particulate emissions.</p> <p>3. The licence permits crushing and screening of RAP and is covered by the addition of category 61A (solid waste depot). The further addition of category 13 is not necessary. Column 2 in Table 1.3.1 says <i>Receipt, storage and processing (crushing and screening)</i> for unprocessed RAP and specifications for crushing and screening are in Column 3. Condition 1.3.4 allows the Licensee to bring the crushing and screening equipment on and off the site as required.</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    |