



# Licence

## Environmental Protection Act 1986, Part V

**Licensee:** Downer EDI Works Pty Ltd

**Licence:** L9119/2018/1

**Registered Office:** 39 Delhi Road  
NORTH RYDE NSW 2113

**ACN:** 008 709 608

**Premises Address:** Newman Quarry  
Part of tenement G52/18  
775 799 E 7417 417 N  
775 879 E 7417 935 N  
775 973 E 7417 925 N  
775 956 E 7417 867 N  
775 886 E 7417 904 N  
Zone 50 NEWMAN WA 6753  
as depicted in Schedule 1

**Issue Date:** 2 May 2018

**Commencement Date:** 2 May 2018

**Expiry Date:** 1 May 2028

**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	24,000 tonnes per annual period

**Conditions**

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

Date signed: 2 May 2018

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Caron Goodbourn  
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.

### DWER's industry licensing role

The Department of Water and Environmental Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DWER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER 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. DWER 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 owner or occupier of the premises the intention is not to replicate them in the Licence. 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 may 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 and the conditions attached to it. Non-compliance with your licence is an offence and financial penalties may apply.

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.

#### Ministerial conditions

If your Premises have 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

The Newman Asphalt plant is located within an existing quarry which has been operational since the 1970s and is located approximately 5 km north-west of the mining town of Newman in central Western Australia. Downer leases a portion of the tenement G52/18 from Holcim Pty Ltd for the operation of the asphalt plant. The asphalt plant is a pre-constructed plant which is transported to site. The plant has the capacity to produce up to 60 tonnes of asphalt per hour, however it is typically operated at 50 tonnes per hour.

The manufacturing of hot/cold asphalt involves mixing crushed or ground rock aggregate with bituminous or asphaltic materials at elevated temperatures. The aggregate (gneissic granite) is sourced from the quarry and stored in cold feed bins that have a conveyor running underneath, while the bitumen is stored in a 35 kL tank which is heated to keep the bitumen as fluid and then transferred to the main unit via transfer lines. The different aggregate grades (7 mm, 10 mm, 14 mm, sand and dust) are released onto the conveyor and fed into the main unit which consists of a diesel fuel heater and mixing drum. As the aggregate moves through the mixing drum it is mixed, dried and heated and towards the end of the mixing process bitumen is added to the drum to create asphalt. The asphalt is transported along an enclosed conveyor to the hot bin where up to 13 tonnes of asphalt can be stored before being transported offsite. A bunded pond lined with a polyethylene liner is used to operate the wet scrubber. The wet scrubber unit is located downstream from the mixing drum and an exhaust fan sucks air from the mixing drum into the wet scrubber unit.

The asphalt plant operates intermittently throughout the year, on average three times a year for two weeks each time, on average operating a total of no longer than two months per year.

The premises was originally assessed as having a stack height of 12m from top of stack to ground. The premises was constructed and has been operating with a stack height of 8.7m from top of stack to ground. This Licence is the result of an amendment sought by the Licensee to reduce the specified stack height from 12m to 8.7m to accurately reflect the height of the asphalt plant.

The licences issued for the Premises since 01/12/2011 are:

Instrument log		
Instrument	Issued	Description
L8510/2010/1	01/12/2011	New application
L8510/2010/1	12/07/2013	Amendment to REFIRE format
L8510/2010/1	15/01/2014	Amendment of stack height, premises address, air monitoring
L9119/2018/1	02/05/2018	Replacement of ceased licence



## 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 that year;

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

**'biennial'** means once in every two consecutive annual periods;

**'CEO'** means Chief Executive Officer.

CEO for the purposes of notification means:

Director General  
Department Administering the *Environmental Protection Act 1986*  
Locked Bag 33 Cloisters Square  
PERTH WA 6850  
[info@dwer.wa.gov.au](mailto:info@dwer.wa.gov.au)

**'clean water'** means water that prior to being used as scrubber feed is either fresh potable water or recirculated water that has passed through at least two stages of settling;

**'code of practice for the storage and handling of dangerous goods'** means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

**'dangerous goods'** has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

**'dark smoke'** means smoke which, when viewed from any point outside the premises boundary, at a distance of not less than 5 metres from its source, and compared with a chart known as the Australian Miniature Smoke Chart (AS 3543 1989) or, the BS Ringlemann Chart (BS 2742C), would appear darker than shade one on those charts;



'Department' means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.

'DWER' Department of Water and Environmental Regulation.

'**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;

'**Licence**' means this Licence numbered L9119/2018/1 and issued under the Act for the replacement of previously ceased licence L8510/2010/1;

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

'**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;

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

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

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

'**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 2**' means the promulgated Test Method 2 – Determination of Stack Gas Velocity and Volumetric Flow Rate (S Type Pitot Tube);

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

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

'**waste**' has the meaning defined in the *Environmental Protection Act 1986*.



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 current version of the 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.

## 1.2 General conditions

1.2.1 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.

1.2.2 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.

1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.5 The Licensee shall:

- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
- (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.<sup>1</sup>

Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

## 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 ensure that the scrubber is:

- a) only fed with clean water;
- b) operational prior to start-up of the drier; and
- c) operates continuously whilst the drier is operating.

1.3.3 The Licensee shall ensure that the lined settling ponds for the wet scrubbing system shall be maintained such that:

- a) at least 500 millimetres of freeboard or adequate total freeboard to accommodate a 72-hour, 1 in 100 year rainfall event is maintained at all times; and
- b) the depth of the deposited sludge is always less than one-third the depth of the pond.



## 2 Emissions

### 2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target 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.

Emission point reference	Emission Point	Emission point height (m)	Source, including any abatement
A1	Stack	8.7 m	Drum dryer via wet scrubber

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.

Emission point Reference	Parameter	Limit (including units) <sup>1,2</sup>	Averaging period
A1	PM	150 mg/m <sup>3</sup>	Stack Test (Minimum 60 minute average)
	Stack gas velocity	>12m/s	Stack Test (Minimum 60 minute average)

Note 1: All units are referenced to STP dry

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

2.2.3 The Licensee shall ensure that the emission of dark smoke from all stacks on the entire premises shall not continue for greater than a period of 20 minutes in aggregate in any 24 hour period.

### 2.3 Point source emissions to surface water

There are no specified conditions relating to point source emissions to surface water in this section.

### 2.4 Point source emissions to groundwater

There are no specified conditions relating to point source emissions to groundwater in this section.

### 2.5 Emissions to land

There are no specified conditions relating to emissions to land in this section.

### 2.6 Fugitive emissions

2.6.1 The Licensee shall use all reasonable and practical measures to prevent and where that is not practicable to minimise dust emissions from the Premises.

2.6.2 The Licensee shall ensure that no visible dust generated by the activities on the Premises crosses the boundary of the Premises.



## 2.7 Odour

2.7.1 The Licensee shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.

## 2.8 Noise

There are no specified conditions relating to noise in this section.

# 3 Monitoring

## 3.1 General monitoring

3.1.1 The Licensee shall ensure that biennial monitoring is undertaken at least 18 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, the requirements of the Licence and any relevant Australian standard.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS 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.

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.

<b>Table 3.2.1: Monitoring of point source emissions to air</b>				
<b>Emission point reference</b>	<b>Parameter</b>	<b>Units<sup>1,3</sup></b>	<b>Frequency<sup>2</sup></b>	<b>Method</b>
A1	Particulates (PM)	mg/m <sup>3</sup> g/s	Biennially	USEPA Method 5
	Stack Gas velocity	m/s		USEPA Method 2

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 or relevant part of the CEMS Code.





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.

### **3.3 Monitoring of point source emissions to surface water**

There are no specified conditions relating to monitoring of point source emissions to surface water in this section.

### **3.4 Monitoring of point source emissions to groundwater**

There are no specified conditions relating to monitoring of point source emissions to groundwater in this section.

### **3.5 Monitoring of emissions to land**

There are no specified conditions relating to monitoring of emissions to land in this section.

### **3.6 Monitoring of inputs and outputs**

There are no specified conditions relating to monitoring of inputs and outputs in this section.

### **3.7 Process monitoring**

There are no specified conditions relating to process monitoring in this section.

### **3.8 Ambient environmental quality monitoring**

There are no specified conditions relating to ambient environmental quality monitoring in this section.

### **3.9 Meteorological monitoring**

There are no specified conditions relating to meteorological monitoring in this section.

## **4 Improvements**

There are no specified improvement conditions in this section.

## **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:
- (a) implement a complaints management system that shall record the following information (if known or provided) about complaints received at the Premises concerning any environmental impact of the activities undertaken at the Premises:
    - (i) name and address of the complainants (if consented);
    - (ii) date and time of complaint;
    - (iii) date and time of alleged incident;
    - (iv) alleged source of the incident;
    - (v) general description of the alleged incident, including any environmental or health impacts reported by the complainant;
    - (vi) wind direction, wind speed and temperature at time of alleged incident;
    - (vii) likely source of the alleged incident; and
    - (viii) actions taken by licensee to address complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.
  - (b) complete an annual analysis and review of complaints recorded under 5.1.4(a) to identify any common factors and root cause of complaints and proposals to address these.

## 5.2 Reporting

- 5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 90 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, that was collected during the annual period.

<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 2.2.2	Limit exceedances	None specified
2.2.3	Emission of dark smoke from all stacks on the entire premises	None specified
Table 3.2.1	Particulates and Stack Gas Velocity	None specified
5.1.3	Compliance	Annual Audit Compliance Report (AACR). The AACR template can be found on DWER's website <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
5.1.4	Complaints summary	None specified
-	Plant servicing or maintenance records	None specified



### 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>
2.2.2	Limit exceedance	As soon as practicable but no later than 5pm of the next usual working day.	None specified
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.	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part B: As soon as practicable	
3.1.5	Calibration report	As soon as practicable.	None specified

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

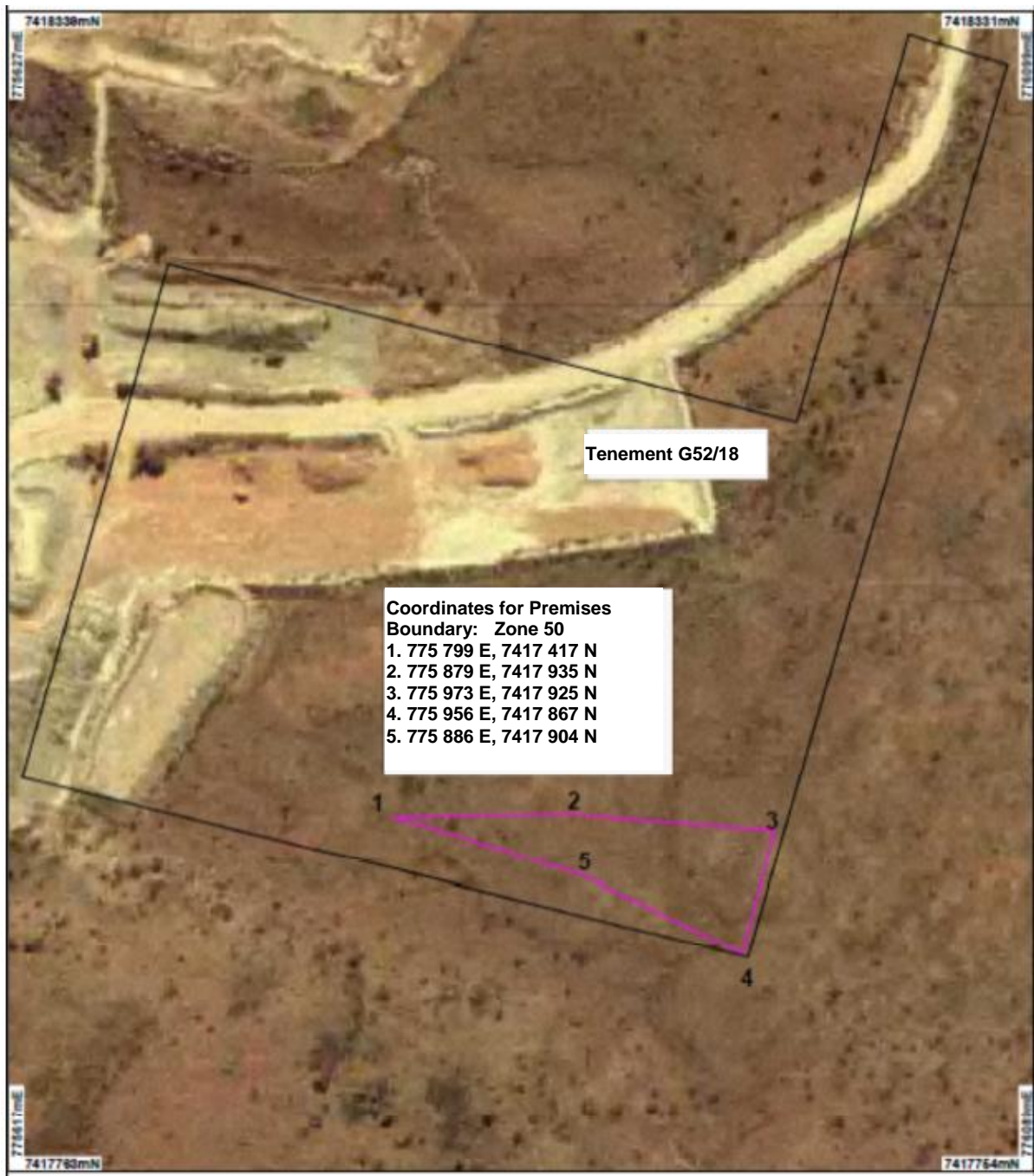
Note 2: Form in Schedule 2



## Schedule 1: Maps

### Premises map

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





## Schedule 2: Reporting & notification forms

This form is provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L9119/2018/1 Licensee: **Downer EDi Works Pty Ltd**  
Form: N1 Date of breach:

### Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

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	

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	
Description of the failure or accident	



## 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 <b>Downer Edi Works Pty Ltd</b>	
Date	