Government of **Western Australia**
Department of **Environment Regulation**

Your ref: L8648/2012/1
Our ref: 2012/003065
Enquiries: Damian Thomas
Phone: 9168 4218
Fax: 9168 2179
Email: damian.thomas@der.wa.gov.au

The Manager
Warmun Works Depot
Main Roads Western Australia
PMB 959
DERBY WA 6728

Dear Sir/Madam

***ENVIRONMENTAL PROTECTION ACT 1986* - AMENDMENT TO LICENCE**
Licence: L8648/2012/1
Premises: Warmun Works Depot

Further to my letter dated 7 June 2013, please find enclosed your amended *Environmental Protection Act 1986* licence.

If you have any questions or objections relating to the licence, please do not hesitate to contact the enquiries officer above on 9168 4218 for clarification or discussion of any grievances you have.

If you are concerned about, or object to any aspect of the amendment, you may lodge an appeal with the Minister for the Environment within 21 days from the date on which this licence is received. The Office of the Appeals Convenor can be contacted on 6467 5190 to find out the procedure and fee.

Members of the public may also appeal the amendments. The Appeals Registrar at the Office of the Appeals Convenor can be contacted after the closing date of appeals to check whether any appeals were received.

Yours sincerely

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

25 July 2013

Government of **Western Australia**
Department of **Environment Regulation**

Licence

Environmental Protection Act 1986, Part V

Licensee: Main Roads Western Australia

Licence: L8648/2012/1

Registered office:	20 Wodehouse Street DERBY WA 6728
Premises address:	Warmun Works Depot Lot 21 on Plan 184384 WARMUN WA 6743
Issue date:	Thursday, 23 August 2012
Commencement date:	Monday, 27 August 2012
Expiry date:	Saturday, 26 August 2017
Date of Amendment:	Thursday, 25 July 2013

Prescribed Premises Category
Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Premises productio 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	Approx 650 tonnes per year

Conditions of Licence
Subject to the conditions of the licence set out in the attached pages.

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

Government of **Western Australia**
Department of **Environment Regulation**

Contents

Introduction

This Introduction is not part of the Licence conditions.

Who we are
The Department of Environment and Conservation (DEC) is a Government Department in the portfolio of the Minister for the Environment. Our purpose is to protect and conserve the State's environment on behalf of the people of Western Australia.

Our industry licensing role
DEC has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. We 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 with the licence relate to the prevention, reduction or control of emissions and discharges 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. These 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 should comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply. Additional guidance on pollution prevention can be found in the Department of Water's Water Quality Protection Guidelines and Codes of Practice accessed through:
http://www.water.wa.gov.au/Managing+water/Water+quality/Water+quality+protection+guidelines/default.aspx

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 the Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary
The Warmun Asphalt Plant (WAP) is located on Lot 21 on Plan 184344 (Crown Reserve 37146), Great Northern Highway, Warmun. Warmun is located in the East Kimberley region of Western Australia, approximately 200 kilometres (km) south-west of Kununurra. The nearest sensitive receptor is the Warmun Roadhouse located adjacent to the site. Approximately 500 metres (m) to the south of the premises is the Warmun Community, one of the East Kimberley Regions' largest Indigenous communities with a population exceeding 400.

The WAP is located on flat ground and there are no nearby permanent watercourses or rivers. The closest environmental sensitive receptor is a minor non-perennial watercourse 350 m to the north-east of the premises. This minor watercourse appears to be a small tributary of Turkey Creek (minor river), which is located 1.2km east of the premises.

The WAP produces asphalt predominantly by utilising a 'cold mix' process. Cold mix batches are achieved on-site by spraying bitumen onto the mixture of sand and aggregate that has been deposited on the existing bitumen hardstand pad. The resultant material is blended using a grader blade which simply folds the material onto itself to absorb the bitumen. Bitumen is consistently applied to the sand and aggregate blend until the correct consistency has been achieved to apply as cold mix. Cold mix batches usually occur twice a year in May and September. It is expected that a maximum of 400 tonnes of cold mix will be produced per year.

This licence is the result of an amendment sought by DEC to convert the existing licence to a new format REFIRE licence.

The licences issued for the Premises since 23/08/2012 are:

Instrument log		
Instrument	**Issued**	**Description**
L8648/2012/1	23 Aug 2012	New application
L8648/2012/1	23 May 2013	Amendment to incorporate conditions to allow "hot mixing" of asphalt and incorporate REFIRE licence format
L8648/2012/1	25 July 2013	Amendment to incorporate changes made to condition 5.2.1

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 In the Licence, unless the contrary intention appears:

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

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

"Code of Practice for the Storage and handling of dangerous goods" means the Storage and handling of dangerous goods, Code of Practice, Department of Mines and Petroleum, Government of Western Australia;

"Contact Address" for the purpose of correspondence and advice means:

Regional Leader, Industry Regulation, Kimberley Region
Department of Environment Regulation
PO Box 942
KUNUNURRA WA 6743
Telephone: (08) 9168 4200
Facsimile: (08) 9168 2179
Email: Kununurra@der.wa.gov.au

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

"Director" means Director, Environmental Regulation Division of the Department of Environment Regulation for and on behalf of the Chief Executive Officer as delegated under Section 20 of the *Environmental Protection Act 1986;*

"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;

"fugitive emissions" means all emissions not arising from point sources

"Licence" means this Licence numbered L8648/2012/1 and issued under the *Environmental Protection Act 1986;*

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

"placard quantity" has the meaning defined in the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007;

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

"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 current version of that standard.

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 maintain all pollution control and monitoring equipment to the manufacturer's specification or any internal management system.

1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall only store substances that are classed as dangerous goods below placard quantities or environmentally hazardous materials not classified as dangerous goods if they 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.

Stormwater control

1.2.5 The Licensee shall ensure that uncontaminated stormwater is kept separate from contaminated or potentially contaminated stormwater. Where stormwater has come into contact with a possible source of contamination, it should be treated as contaminated.

1.3 Premises operation

1.3.1 The licensee shall only undertake mixing of asphalt paving mixes on the sealed asphalt hardstand area on-site, as depicted in Schedule 1.

1.3.2 The licensee shall direct stormwater away from all active asphalt manufacturing areas within the premises.

2 Emissions

2.1 General

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

2.2 Point source emissions to air

There are no specified conditions relating to emissions in this section

2.3-2.4 Point source emissions to surface water and groundwater

There are no specified conditions relating to point source emissions to surface water or 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 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 of 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.

Monitoring

3.1 General monitoring

There are no specified conditions relating to monitoring.

3 Improvements

3.1 Improvement programme

There are no specified conditions relating to Improvements.

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 Director at the Contact Address an annual environmental report by 31 August each year. 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 form[1]
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and any action taken.	None specified
5.1.3	Compliance	AACR
5.1.4	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 Director at the Contact Address and in accordance with the notification requirements of the table.

Table 5.3.1: Notification requirements

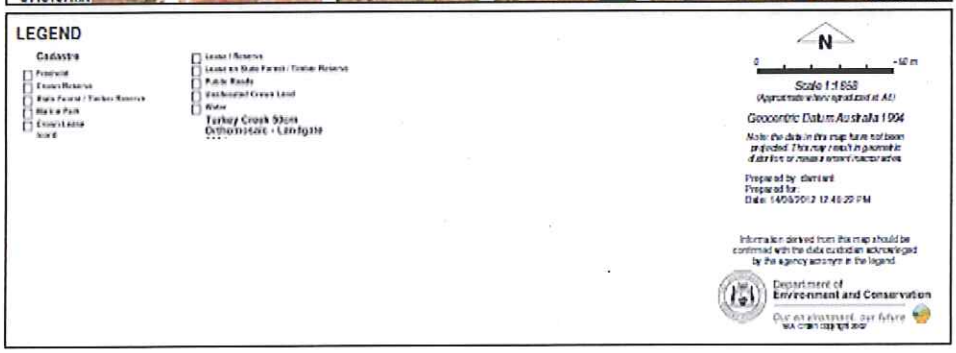
Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
-	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	Part A: As soon as practicable but no later than 5PM of the next usual working day. Part B: As soon as practicable	N1

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

Government of **Western Australia**
Department of **Environment Regulation**

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

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.

Copies of the original monitoring reports must also be submitted.

Licence:	L8648/2012/1	Licensee:	Main Roads Western Australia
Form:	AACR		Period :
Name:	Annual audit compliance report		

Annual audit compliance report

Section A: Statement of compliance with Licence conditions

Were all conditions of licence complied with within the reporting period?		
Yes	□	Initial Sections A & B, then proceed to Section C
No	□	Initial Section A, then 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:

Government of **Western Australia**
Department of **Environment Regulation**

Section B: Details of non-compliance with Licence condition

a) Licence condition not complied with?	
b) Date(s) b) Date(s) and time(s) the non compliance occurred, if applicable?	
c) Was this non compliance reported to DEC?	
☐ Yes, and ☐ Reported to DEC verbally Date ☐ Reported to DEC in writing Date	☐ No
d) Has DEC taken, or finalised any action in relation to the non compliance?	
e) Summary of particulars of 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	

Please use a separate page for each Licence condition that was not complied with. Each page must be initialled by the person(s) who signs Section C of this AACR
Initial:

Section C: Signature and certification

This AACR may only be signed by a person(s) with legal authority to sign it as defined 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 AACR must be signed and certified:
an individual	□	by the individual Licence holder, or
	□	by a person approved in writing by the Chief Executive Officer (CEO) of DEC to sign on the Licensee's behalf.
a corporation	□	by affixing the common seal of the Licensee in accordance with the Corporations Act 2001; 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 CEO of DEC.
A public authority (other than a local government)	□	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 CEO of DEC.
a local government	□	by the CEO 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 AACR 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)

Government of **Western Australia**
Department of **Environment Regulation**

Licence:	L8648/2012/1	Licensee:	Main Roads Western Australia
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	
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	

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
To be notified as soon as practicable and no later than 5PM of the next working day	
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 - to be submitted as soon as practicable

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	
Date	

Government of **Western Australia**
Department of **Environment Regulation**

ENVIRONMENTAL ASSESSMENT REPORT

LICENCE NUMBER: L8648/2012/1
LICENCE FILE NUMBER: 2012/003065
APPLICATION DATE: 26/04/2012
EXPIRY DATE: 26/8/2017

PREMISES DETAILS

LICENSEE
Main Roads Western Australia
Don Aitken Centre
Waterloo Crescent
EAST PERTH WA 6004
ABN: 50 860 676 021

PREMISES
Warmun Works Depot
Lot 21 on Plan 184344 Great Northern Highway
WARMUN WA 6743

PRESCRIBED PREMISES CATEGORY

Category number*	Category Description*	Category Production or Design Capacity*	Premises Production or Design Capacity#	Premises Fee Component**
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 places or premises other than those premises.	Not applicable	650 tonnes per year	Not more than 2 000 tonnes per year

* From Schedule 1 of the Environmental Protection Regulations 1987
# From application
** From Schedule 4 of the Environmental Protection Regulations 1987

This Environmental Assessment Report (EAR) has been drafted for the purposes of detailing information on the management and mitigation of emissions and discharges from the prescribed premises. The objective of the EAR is to provide a risk assessment of emissions and discharges, and information on the management of other activities occurring onsite which are not related to the control of emissions and discharges from the prescribed premises activity. This does not restrict the Department of Environment and Conservation (DEC) to assessing only those emissions and discharges generated from the activities that cause the premises to become prescribed premises.

Basis of Assessment
The Warmun Asphalt Plant (WAP) has been assessed as "prescribed premises" category number 35, under Schedule 1 of the Environmental Protection Regulations 1987.

Category 35: Asphalt manufacturing: premises on which hot or cold mix asphalt is produced using crushed or ground rock aggregates mixed with bituminous or asphaltic materials used at places or premises other than those premises.

Main Roads are currently producing 400 tonnes of cold mix asphalt annually. This EAR provides an assessment for the operation of the premises and subsequent justification for conditions to be placed on a licence for the premises.

1.0 BACKGROUND

1.1 GENERAL COMPANY DESCRIPTION

The occupier and operator at the WAP is Main Roads Western Australia (MR). MR is a State Government organisation that is responsible for Western Australia's highways and main roads which represent almost 30% of the State's total assets. MR are one of the largest geographically spread road agencies in the world, covering 2.5 million square kilometres.

1.2 LOCATION OF PREMISES

The WAP is located on Lot 21 on Plan 184344 (Crown Reserve 37146), Great Northern Highway, Warmun. Warmun is located in the East Kimberley region of Western Australia, approximately 200 kilometres (km) south-west of Kununurra. Lot 21 is directly north of the Great Northern Highway and east of Lot 21 is the Warmun Roadhouse (includes several residential buildings, motel accommodation and caravan park). Apart from the Roadhouse next door there is no other industry in the immediate vicinity. Approximately 500 metres to the south of the premises is the Warmun Community, one of the East Kimberley Regions' largest Indigenous communities with a population exceeding 400.

The premises have been manufacturing asphalt for approximately 30 years. The WAP is located on flat ground and there are no nearby permanent watercourses or rivers. Most watercourses in the general vicinity are ephemeral and only flow after sufficient rain for a short period of time.

The closest environmental sensitive receptor is a minor non-perennial watercourse 350 m to the north-east of the premises. This minor watercourse appears to be a small tributary of Turkey Creek (minor river), which is located 1.2km east of the premises.

While the Environmental Protection Authority 'Guidance for the Assessment of Environmental Factors, Separation Distances between Industrial and Sensitive Land Uses, No.3 June 2005' document requires a buffer distance of 1000m for category 35 premises it is noted that operations at the WAP are only intermittent (mixing campaigns occur two to three times per year for up to two weeks at a time). Due to the very small window of operations at the WAP, it is not envisioned that this decrease in buffer distance will result in any adverse impacts.

1.3 PROCESS DESCRIPTION

MR is predominantly producing asphalt by utilising a 'cold mix' process. Cold mixes are mainly used for strengthening and re-profiling lightly trafficked roads. They have several advantages, including the absence of fumes by using emulsion rather heating the aggregate.

Cold mix batches are achieved on-site by spraying bitumen onto the mixture of sand and aggregate that has been deposited on the existing bitumen hardstand pad. The resultant material is blended using a grader blade which simply folds the material onto itself to absorb the bitumen. Bitumen is consistently applied to the sand and aggregate blend until the correct consistency has been achieved to apply as cold mix. The WAP operates twice a year in May and September to mix cold asphalt. At each time WAP will mix approximately 200 tonnes of cold mix so a total of 400 tonnes per year using the cold mix method.

Bitumen is transported to Warmun from suppliers in Perth. It is transported in bulk tankers that are licensed to transport the material. The bitumen is Class 170 Bitumen and the total quantity used is 5% of the total amount of cold mix material produced.

Nothing requires to be constructed at the WAP. Due to previous operations there is an existing asphalt hardstand pad and bitumen will continue to be mixed here.

There are no other activities occurring on-site and the only infrastructure is ancillary to general MR operations in the area.

1.4 REGULATORY CONTEXT

1.4.1 Part IV *Environmental Protection Act 1986*, Environmental Impact Assessment

The proposal has not been referred to the Office of the Environmental Protection Authority for assessment under Part IV of the *Environmental Protection Act 1986*.

1.4.2 Part V *Environmental Protection Act 1986*, Environmental Management

The proposal has been assessed under category 35 within Schedule 1 of the Environmental Protection Regulations 1987, as detailed in Table 1.

The WAP has been operating intermittently for approximately 30 years but has done so without authorisation under Part V, Division 3 of the EP Act. Main Roads who operate the site may have potentially been in breach of section 52 and 56 of the EP Act; i.e. failure to construct in accordance with a works approval and failure to operate in accordance with a licence. The issue of operating the premises without a licence, and not constructing in accordance with a works approval are enforcement matters and will be dealt with by DEC independently of this application.

In addition to the EP Act a number of State environmental legislation and Environmental Protection Regulations may apply to activities to be undertaken on site. These regulations may include:

- Environmental Protection Regulations 1987;
- Environmental Protection (Unauthorised Discharges) Regulations 2004;
- Environmental Protection (Noise) Regulations 1997;
- Environmental Protection (Controlled Waste) Regulations 2004;and
- *Contaminated Sites Act 2003.*

1.4.3 Other Decision Making Authorities' Legislation which applies

The storage of any chemicals and dangerous goods on-site may be covered by the following legislation:

- *Dangerous Goods Safety Act 2004;*
- Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007; and
- Storage and handling of dangerous goods, Code of Practice, Department of Mines and Petroleum (2010), Government of Western Australia.

1.4.4 *Rights in Water Irrigation Act 1914*

MR do not hold a Groundwater Licence (GWL) under *the Rights in Water Irrigation Act1914* for this premises.

1.4.5 Local Government Authority

The Local Government Authority (LGA) is the Shire of Halls Creek.

2.0 STAKEHOLDER AND COMMUNITY CONSULTATION

SUBMISSIONS RECEIVED DURING 21 DAY PUBLIC COMMENT PERIOD

The Application for Licence details for this facility was advertised in the West Australian newspaper on 16 July 2012 as a means of advising stakeholders and to seek public comments. No submissions were received.

3.0 EMISSIONS AND DISCHARGES RISK ASSESSMENT

DEC considers that conditions should focus on regulating emissions and discharges of significance. Where appropriate, emissions and discharges which are not significant should be managed and regulated by other legislative tools or management mechanisms.

The following section assesses the environmental risk of potential emissions from the Warmun Asphalt Plant. In order to determine the site's appropriate environmental regulation, an emissions and discharges risk assessment was conducted of the Warmun Asphalt Plant using the environmental risk matrix outlined in Appendix B. The results of this are summarised in Table 2.

Table 2: Risk assessment and regulatory response summary table.

Risk factor	Significance of emissions	Socio-Political Context of Each Regulated Emission	Risk Assessment	DEC Regulation (EP Act - Part V)	EAR Reference	Other management (legislation, tools, agencies)
Air emissions (point source)	Not Applicable (N/A). There are no stack air emissions for the WAP.	N/A	N/A	LIC – no conditions	N/A	General Provisions of the *Environmental Protection Act 1986.*
Dust emissions	**Operation – Significance of 2** Coarse sand and aggregate are used in the development of the bitumen mix. All materials for asphalt manufacturing are transported to site and blended over a couple of days so the potential for dust emissions is low. The existing premises consist of a bitumen hardstand pad that greatly reduces the likelihood of generating dust. Vehicle movements are minimal on site; however, movements may generate visible dust.	Low – closest sensitive receptor is immediately adjacent, to the north of the premises (Warmun Roadhouse + associated residential and accommodation facilities)	Operation – D Licence conditions	LIC – Standard dust control condition preventing dust crossing the premises boundary.	Appendix A	General Provisions of the *Environmental Protection Act 1986.* Environmental Protection (Unauthorised Discharge) Regulations 2004
Odour emissions	**Operation – Significance of 2** Odour will be produced when asphalt manufacturing occurs due to the nature of the materials used. However, due to the small window of operations which will be for a few days in May and September each year, the cold mixing of asphalt and given that at this time prevailing winds are from the South East, which will blow odour away from the adjacent Roadhouse and nearby Warmun community, odour emissions should not be significant.	Low – closest sensitive receptor is immediately adjacent, to the north of the premises (Warmun Roadhouse + associated residential and accommodation facilities)	Operation – D Licence conditions	LIC– Standard licence condition regarding odour.	Appendix A	General Provisions of the *Environmental Protection Act 1986.*

Risk factor	Significance of emissions	Socio-Political Context of Each Regulated Emission	Risk Assessment	DEC Regulation (EP Act - Part V)	EAR Reference	Other management (legislation, tools, agencies)
Noise emissions	**Operation – Significance of 1** MR will comply with the Environmental Protection (Noise Regulations) 1997.	Low – closest sensitive receptor is immediately adjacent, to the north of the premises (Warmun Roadhouse + associated residential and accommodation facilities)	Operation – E No regulation, other management mechanisms	LIC– No licence conditions	N/A	Environmental Protection (Noise Regulations) 1997
Light emissions	N/A There will be no operations at night.	N/A	N/A	LIC– no conditions	N/A	General Provisions of the *Environmental Protection Act 1986.*
Discharges to water	N/A There will be no discharges to water.	N/A	N/A	LIC – no conditions	N/A	General Provisions of the *Environmental Protection Act 1986.*
Discharges to land	**Operation – Significance of 2** All cold mixing occurs on a sealed asphalt hardstand. No cold mixing occurs outside this area. Potential discharges to land will occur from contaminated stormwater runoff from the asphalt hardstand pad. There is no mixing of asphalt during the wet season. Uncontaminated stormwater is diverted away from the bitumen hardstand pad and runoff generated around the WAP is dispersed into adjacent Highway diversion drains.	Low – closest sensitive receptor is immediately adjacent, to the north of the premises (Warmun Roadhouse + associated residential and accommodation facilities)	Operation – D Licence conditions	LIC – licence condition stipulating that cold mixing is to occur only on the sealed asphalt hardstand. Condition to divert stormwater away from the existing asphalt hardstand pad	Appendix A	General Provisions of the *Environmental Protection Act 1986.*
Solid / liquid wastes	**Operation – Significance of 1** MR advises there is no solid waste generated from operating the WAP. All asphalt manufactured on-site is used in MR operations in the Region so there is no residual waste left on-site that requires disposal.	Low – closest sensitive receptor is immediately adjacent, to the north of the premises (Warmun Roadhouse + associated residential and accommodation facilities)	Operation – E No regulation, other management mechanisms	LIC – No licence conditions	N/A	General Provisions of the *Environmental Protection Act 1986.*

Risk factor	Significance of emissions	Socio-Political Context of Each Regulated Emission	Risk Assessment	DEC Regulation (EP Act - Part V)	EAR Reference	Other management (legislation, tools, agencies)
Hydrocarbon/ chemical storage	**Operation – Significance of 1** MR advises there will be a dedicated roofed shed to house the small amount of hydrocarbons (less than 200 litres) and the hydrocarbons will be bunded within portable bunds. Any Hydrocarbons will be stored in accordance with Australian Standard 1940.2004.	Low – closest sensitive receptor is immediately adjacent, to the north of the premises (Warmun Roadhouse + associated residential and accommodation facilities)	Operation – E Licence conditions	LIC – Licence conditions required. Any discharge of hydrocarbons will be regulated by the Environmental Protection (Unauthorised Discharge) Regulations 2004	Appendix A	Dangerous Goods storage licence and relevant legislation (DOCEP), Australian Standards 1940.2004 Environmental Protection (Unauthorised Discharge) Regulations 2004
Native vegetation clearing	N/A There is no requirement to clear native vegetation	N/A	N/A	LIC – no conditions	N/A	General Provisions of the *Environmental Protection Act 1986*
Contaminated site identification	The WAP is not a registered Contaminated Site	N/A	N/A	LIC – no conditions	N/A	*Contaminated Sites Act 2003* (DEC),

4.0 GENERAL SUMMARY AND COMMENTS

MR proposes to batch up to 400 tonnes cold mix asphalt paving mixes twice a year, in May and September. Outside this period the premises will only be used for ancillary Mains Roads operations not related to asphalt manufacturing.

The manufacturing of asphalt will not pose any significant emissions to the environment. The emissions of note will be Dust, Odour and Discharges to Land as Stormwater. As such the licence will only have limited conditions regulating operations to mitigate these emissions from entering the environment. Appendix A discusses the licence conditions in more detail.

It is recommended that the licence be issued for 5 years.

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APPENDIX A: EMISSIONS AND DISCHARGES OF SIGNIFICANCE

1.1 DUST EMISSIONS

Coarse sand and aggregate are used in the development of the asphalt paving mix. All materials for asphalt manufacturing are transported to site and blended over a couple of days so the potential for dust emissions is low. The existing premises consist of an asphalt hardstand pad that greatly reduces the likelihood of generating dust. Vehicle movements are minimal on-site; however, movements may generate visible dust.

DUST EMISSIONS RISK ASSESSMENT

The environmental risk of dust emissions from the WAP is seen to be moderately significant due to the potential impacts from the various operations in manufacturing asphalt. The potentially significant nature of dust emissions from WAP is therefore rated as "2" in accordance with Table 2 "Measure of Significance of Emissions".

The socio-political context was classed as "Low" as the Warmun Roadhouse and associated residential and accommodation facilities are located immediately adjacent the premises to the north. No public submissions where received in response to advertising WAP application.

The closest environmental sensitive receptor is a minor non-perennial watercourse 350m to the north-east of the premises. This minor watercourse appears to be a small tributary of Turkey Creek (minor river), which is located 1.2km east of the premises.

The risk assessment therefore gives a Priority Matrix Action Descriptor of "D" – EIPs, other management mechanisms / licence conditions (monitoring/reporting) / other regulatory tools.

RECOMMENDED STRATEGY FOR MANAGING DUST EMISSIONS

The issue of dust emissions is suitable for licence conditions. It is recommended that a licence condition be included on the licence to ensure that visible dust generated within the premises does not cross the boundary of the premises.

1.2 ODOUR EMISSIONS

The development of the asphalt paving cold mix does have an odour as bitumen is used in this process of asphalt manufacturing. Although all materials for asphalt manufacturing are transported to site and blended over a couple of days, due to the presence of bitumen in the cold mix there is the potential for odour emissions, however it is expected that it is moderate.

ODOUR EMISSIONS RISK ASSESSMENT

The environmental risk of odour emissions from the WAP is seen to be moderately significant due to the use of bitumen in the operation in manufacturing of asphalt. The potentially significant nature of dust emissions from WAP is therefore rated as "2" in accordance with Table 2 "Measure of Significance of Emissions".

The socio-political context was classed as "Low" as the Warmun Roadhouse and associated residential and accommodation facilities are located immediately adjacent the premises to the north. No public submissions where received in response to advertising WAP application.

The closest environmental sensitive receptor is the adjacent Warmun Roadhouse and associated accommodation units / caravan park; east of the premises. This Warmun community is approximately 500m to the south.

The risk assessment therefore gives a Priority Matrix Action Descriptor of "D" – EIPs, other management mechanisms / licence conditions (monitoring/reporting) / other regulatory tools.

RECOMMENDED STRATEGY FOR MANAGING ODOUR EMISSIONS

The issue of odour emissions is suitable for licence conditions. It is recommended that standard licence conditions be included on the licence to ensure that odour does not impede the amenity of the community.

1.3 DISCHARGES TO LAND

Potential discharges to land will occur from contaminated stormwater runoff from the bitumen hardstand pad. There is no mixing of asphalt during the wet season.

To accommodate the potential for discharges to land any un-contaminated stormwater should be diverted away from the bitumen hardstand pad and any resultant runoff generated around the WAP will be dispersed into the adjacent Great Northern Highway diversion drains.

Contaminated Stormwater should be retained on-site and remediated on-site, however given the small volume of asphalt manufacturing and the fact that no solid waste is generated there is a very low potential for the generation of contaminated stormwater.

DISCHARGES TO LAND RISK ASSESSMENT

The environmental risk of emissions from discharges to land from the WAP is seen to be moderately significant due to the potential impacts from the various operations in manufacturing asphalt. The potentially significant nature of dust emissions from WAP is therefore rated as "2" in accordance with Table 2 "Measure of Significance of Emissions".

The socio-political context was classed as "Low" as the Warmun Roadhouse and associated residential and accommodation facilities are located immediately adjacent the premises to the north. No public submissions where received in response to advertising WAP application.

The closest environmental sensitive receptor is a minor non-perennial watercourse 350m to the north-east of the premises. This minor watercourse appears to be a small tributary of Turkey Creek (minor river), which is located 1.2km east of the premises.

The risk assessment therefore gives a Priority Matrix Action Descriptor of "D" – EIPs, other management mechanisms / licence conditions (monitoring/reporting) / other regulatory tools.

RECOMMENDED STRATEGY FOR MANAGING DISCHARGES TO LAND

The issue of discharge to land emissions is suitable for licence conditions. It is recommended that three licence conditions be included on the licence; one to ensure cold mixing of asphalt is only undertaken on the sealed asphalt hardstand area, the second to ensure that un-contaminated stormwater is directed away from the asphalt manufacturing hardstand pad at the premises and thirdly to maintain the stormwater drains to ensure stormwater flow is not impeded.

APPENDIX B: EMISSIONS AND DISCHARGES RISK ASSESSMENT MATRIX

Table 3: Measures of Significance of Emissions

Emissions as a percentage of the relevant emission or ambient standard		Worst Case Operating Conditions (95th Percentile)			
		>100%	50 – 100%	20 – 50%	<20%*
Normal Operating Conditions (50th Percentile)	>100%	5	N/A	N/A	N/A
	50 – 100%	4	3	N/A	N/A
	20 – 50%	4	3	2	N/A
	<20%*	3	3	2	1

*For reliable technology, this figure could increase to 30%

Table 4: Socio-Political Context of Each Regulated Emission

		Relative proximity of the interested party with regards to the emission				
		Immediately Adjacent	Adjacent	Nearby	Distant	Isolated
Level of Community Interest or Concern*	5	High	High	Medium High	Medium	Low
	4	High	High	Medium High	Medium	Low
	3	Medium High	Medium High	Medium	Low	No
	2	Low	Low	Low	Low	No
	1	No	No	No	No	No

Note: These examples are not exclusive and professional judgement is needed to evaluate each specific case

*This is determined by DEC using the DEC "Officer's Guide to Emissions and Discharges Risk Assessment" May 2006.

Table 5: Emissions Risk Reduction Matrix

		Significance of Emissions				
		5	4	3	2	1
Socio-Political Context	High	A	A	B	C	D
	Medium High	A	A	B	C	D
	Medium	A	B	B	D	E
	Low	A	B	C	D	E
	No	B	C	D	E	E

PRIORITY MATRIX ACTION DESCRIPTORS
A = Do not allow (fix)
B = licence condition (setting limits + EMPs - short timeframes)(setting targets optional)
C = licence condition (setting targets + EMPs - longer timeframes)
D= EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools
E = No regulation, other management mechanisms

Note: The above matrix is taken from the DEC Officer's Guide to Emissions and Discharges Risk Assessment May 2006.