Government of Western Australia
Department of Environment Regulation

Licence

Environmental Protection Act 1986, Part V

Licensee: Laminex Group Pty Limited

Licence: L7244/1997/13

Registered office: Level 4
68 Waterloo Road
MACQUARIE PARK NSW 2113

ACN: 004 093 092

Premises address: Dardanup Particleboard Plant
184 Moore Rd
DARDANUP WA 6236
Being Lot 2 on Diagram 46933 as depicted in Schedule 1

Issue date: Thursday, 9 January 2014

Commencement date: Sunday, 12 January 2014

Expiry date: Friday, 11 January 2019

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
28	Wood board manufacturing: premises on which particleboard or chipboard is fabricated or manufactured.	500 tonnes or more per year	182 250 tonnes per year

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

.....
Jonathan Bailes
Manager Licensing (Process Industries)
Officer delegated under section 20
of the *Environmental Protection Act 1986*

Contents

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
The Dardanup Particleboard Plant is located 9km southeast of Bunbury. The surrounding region includes semi-rural, industrial, residential, bushland and other land-uses. The site is located on Moore Road in the Shire of Dardanup. The site is zoned General Industrial under the Town Planning Scheme.

The Preston River is approximately 670m west of the premises boundary. The nearest town, Dardanup is 3km south-east of the premises, and the nearest resident is approximately 1.5km from the premises boundary. All neighbouring premises are zoned rural, general farming and softwood sawmill processing.

Raw materials in the form of woodchip and sawdust are dried in a rotary kiln (SPE dryer) before being combined with a resin and pressed to form boards, which are trimmed and sanded before shipment or further processed to add a melamine coat. Process heating is provided by a number of gas-fired heaters, with the dryer fired by a combination of natural gas and sander dust.

The main emissions to air are particulates and formaldehyde, primarily from the dryer and main press. All point sources have pollution abatement equipment installed. The burning of sander dust in the kiln as a fuel significantly contributes to the plant's particulate emissions and a visible plume, which has been the source of complaints from the local community. The Licensee has prepared an environmental improvement plan to implement a staged improvement of the plant's emissions.

This Licence is the result of an amendment sought by the Licensee to include the operation of a Wet Electro-Static Precipitator (WESP) on the exhaust of the SPE dryer to reduce particulate emissions. The WESP was constructed and commissioned under Works Approval W5586/2014/1 issued by DER on 29 May 2014.

The licences and works approvals issued for the Premises since January 2014 are shown below:

Instrument log		
Instrument	**Issued**	**Description**
L7244/1997/13	10/01/2014	Licence reviewed and reissued in new licence template
W5586/2014/1	29/05/2014	Works approval for the WESP
L7244/1997/13	25/02/2016	Licence amendment to include the WESP

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 October until 30 September in the following year;

'AS 3580.1.1' means the Australian Standard AS 3580.1.1 *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment;*

'AS 3580.9.3' means the Australian Standard AS 3580.9.3 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter –Total suspended particulate matter (TSP) – High volume sampler gravimetric method;*

'AS 3580.9.6' means the Australian Standard AS 3580.9.6 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM_{10} high volume sampler with size - selective inlet – Gravimetric method;*

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

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the design of sampling programs, sampling techniques and the preservation and handling of samples;*

'AS/NZS 5667.4' means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made;*

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

'CEMS' means continuous emissions monitoring system;

'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

freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

'$L_{AS90,30min}$' and **'$L_{AS10,30min}$'**means the A-weighted level exceeded for more than 90% and 10%, respectively of the time over 30 minutes with the meter set to 'Slow' time weighting;

'$L_{Aeq(20Hz-500Hz),30min}$' means the A-weighted equivalent noise level between 20 Hz and 500 Hz (one-third octave bands inclusive) averaged over 30 minutes;

'Licence' means this Licence numbered L7244/1997/13 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;

'Non-directional system' means single microphone sound measuring equipment compliant with Schedule 4 of the *Environmental Protection (Noise) Regulations 1997* and capable of recording overall and one-third octave band statistical noise levels based on the A-weighted sound pressure level with 'Slow' time weighting (L_{AS});

'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;

'NOx' means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide;

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

'PM_{10}' means particles with an aerodynamic diameter of less or equal to 10 µm;

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

'quarterly' means the 4 inclusive periods from 1 October to 31 December in the previous year, 1 January to 31 March, 1 April to 30 June and 1 July to 30 September in the current year;

'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;

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'stack test' means a discrete set of samples taken over a representative period at normal operating conditions;

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

'STP' means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively);

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

'USEPA Method 0011' means the USEPA Method 0011 *Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources*;

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

'USEPA Method 5' means the USEPA Method 5 *Determination of Particulate Matter Emissions from Stationary Sources (Using reference temperature 120°C)*;

'USEPA Method 6' means the USEPA Method 6 *Determination of Sulfur Dioxide Emissions from Stationary Sources*;

'USEPA Method 7D' means the USEPA Method 7D *Determination of Nitrogen Oxide Emissions from Stationary Sources (Alkaline-Permanganate/Ion Chromatographic Method)*;

'USEPA Method 7E' means the USEPA Method 7E *Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrument Analyser Procedure)*;

'USEPA Method 10' means the USEPA Method 10 *Determination of Carbon Monoxide Emissions from Stationary Sources (Instrument Analyser Procedure);*

'USEPA Method 10B' means the USEPA Method 10B *Determination of Carbon Monoxide Emissions from Stationary Sources*;

'USEPA Method 17' means the USEPA Method 17 *Determination of Particulate Matter Emissions from Stationary Sources (Sample at stack temperature)*;

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

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

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
(a) pollution;
(b) unreasonable emission;
(c) discharge of waste in circumstances likely to cause pollution; or
(d) being contrary to any written law.

1.2 General conditions

1.2.1 The Licensee shall 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.

1.2.3 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.[1]

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 waste material is only stored and/or treated within vessels or compounds provided within the infrastructure detailed in Table 1.3.1.

Table 1.3.1: Containment infrastructure

Vessel or compound	Material	Infrastructure requirements
Process water pond	Treated process water from the paper treaters and contaminated or potentially contaminated stormwater from process areas	Lined to achieve a permeability of at least 10^{-9} m/s or equivalent

1.3.2 The Licensee shall manage the process water pond such that:
(a) overtopping of the pond does not occur;
(b) a minimum top of embankment freeboard of 300 mm is maintained; and
(c) the integrity of the containment infrastructure is maintained.

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 and identified on the map of emission points in Schedule 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	WESP Stack	38.5	SPE dryer via WESP
A2	Main press stacks 1 to 5	22	Main press via cyclone
A3	Paper treatment oven stack 1 and bath stacks 1 and 2	14	Paper treatment
A4	Paper treatment heater stack 1	12	
A5	Melamine heater stacks 3 to 5	12	Melamine press via cyclone
A6	Cooling wheel vents west and east	14	Cooling wheel
A7	SPE dryer stack	29	SPE dryer via cyclone during start-up and shut-down when fired on natural gas only

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

Table 2.2.2: Point source emission limits to air

Emission point Reference	Parameter	Limit (including units)[1]	Averaging period
A1	PM	50 mg/m^3	Stack test (60 minute average)

Note 1: All units are referenced to STP, wet.

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 unless indicated otherwise in the relevant table.

3.1.2 The Licensee shall ensure that :
(a) monthly monitoring is undertaken at least 15 days apart;
(b) quarterly monitoring is undertaken at least 45 days apart; and
(c) annual monitoring is undertaken at least 9 months apart.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any 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[1]	Frequency[2]	Method
A1	PM	mg/m^3 g/s	Quarterly	USEPA Method 5 or 17
A1 – A3	Formaldehyde			USEPA Method 0011
	Acetone			USEPA Method 18
A4 – A5	Sulfur dioxide			USEPA Method 6 or 8
	NOx			USEPA Method 7E or 7D
	Carbon monoxide			USEPA Method 10 or 10B

Note 1: Units for emission point A1 are referenced to STP, wet.
Units for emission points A2 to A5 are reference to STP, dry.
Note 2: Monitoring shall be undertaken to reflect normal operating conditions

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 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.

3.3 Ambient environmental quality monitoring

3.3.1 The Licensee shall undertake the monitoring in Tables 3.3.1, 3.3.2 and 3.3.3 according to the specifications in those tables.

3.3.2 The Licensee shall ensure that the siting of ambient air monitoring equipment is in accordance with AS 3580.1.1.

Table 3.3.1: Monitoring of ambient air quality

Monitoring point reference and location on map of monitoring locations	Parameter	Units[1]	Averaging period	Frequency	Method
AQ1 – AQ4	Formaldehyde	µg/m^3	24 hours	Quarterly	Passive air sampler
	Benzene				
	Toluene				
AQ1 – AQ3	PM_{10}				AS 3580.9.6

Table 3.3.2: Monitoring of ambient surface water quality

Monitoring point reference and location on map of monitoring locations	Parameter	Units	Averaging period	Frequency	Method
WQ1 – WQ2	pH[1]	N/A	Spot sample	Monthly when flowing	AS/NZS 5667.1 and AS/NZS 5667.4
	Total dissolved solids	mg/L			
	Ammoniacal nitrogen as nitrogen				
	Total suspended solids				
	COD				
	Formaldehyde				

Note 1: In-field non-NATA accredited sampling permitted

Table 3.3.3: Monitoring of ambient noise

Monitoring point reference and location on map of monitoring locations	Parameter	Units[1]	Averaging period	Frequency	Method
SL1 – SL8	$L_{AS90,30min}$	dB	30 minutes	Annually	Non-directional system
	$L_{AS10,30min}$				
	$L_{Aeq(20Hz-500Hz),30min}$				
	Audio recording	N/A			N/A
	List of dominant noise sources and locations	N/A			

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.

4.1.2 The Licensee, for improvements not specifically requiring a written submission, shall write to the CEO stating whether and how the Licensee is compliant with the improvement within one week of the completion date specified in Table 4.1.1.

Table 4.1.1: Improvement program

Improvement reference	Improvement	Date of completion
IR3	The Licensee shall undertake a study to determine the emissions of formaldehyde from emission points to air A2 and A3. A report on the study shall be provided to the CEO, which shall include proposals for setting emission limits to reflect the performance capability of the plant.	31/03/2016
IR4	The Licensee shall submit to the CEO, a continuous emission monitoring system (CEMS) implementation plan to accurately measure the concentration of PM emitted from emission point to air A1.	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 by 30 November in 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 and any environmental incidents that have occurred during the annual period and any action taken	None specified
3.2.1	Monitoring of point source emissions to air	
3.3.1	Monitoring of ambient air quality	
3.3.2	Monitoring of ambient surface water quality	
3.3.3	Monitoring of ambient noise	
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
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.

Table 5.2.2: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form[1]
-	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

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.

Table 5.3.1: Notification requirements

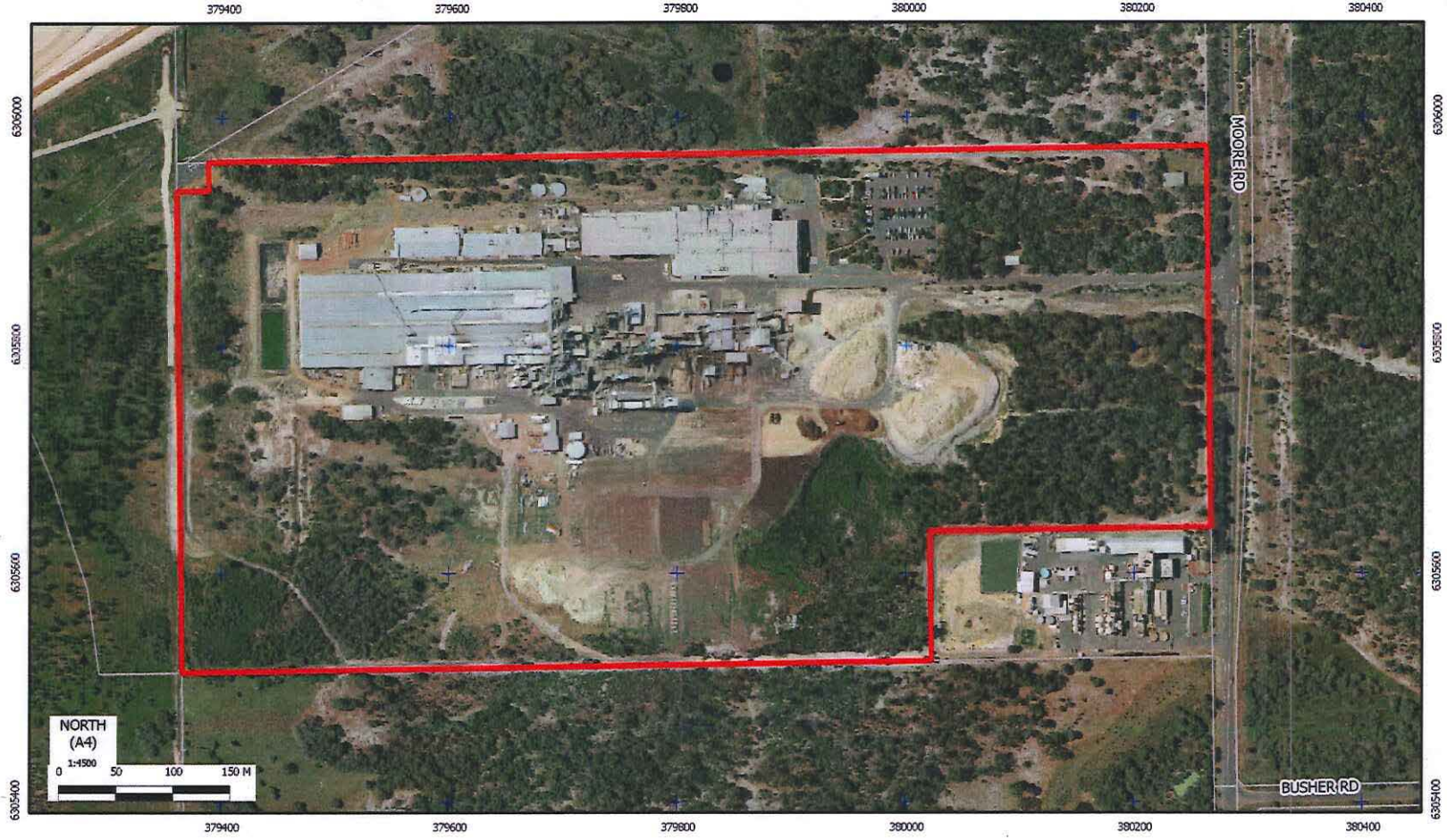
Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
3.1.5	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act
Note 2: Forms are in Schedule 2

Schedule 1: Maps

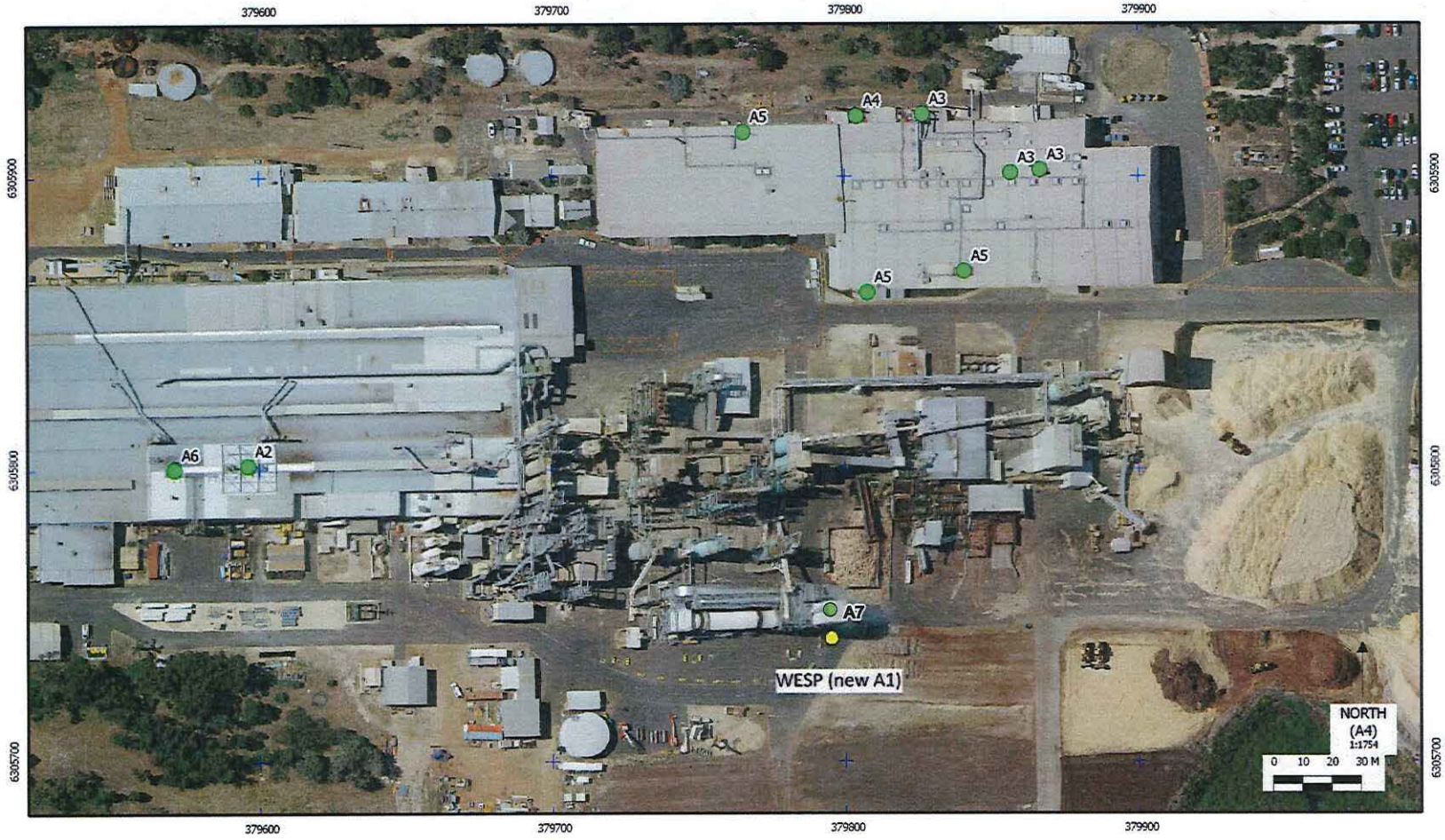
Premises map

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



Map of emission points

The locations of the emission points defined in Table 2.2.1 are shown below.



Map of monitoring locations

The locations of the monitoring points defined in Tables 3.3.1, 3.3.2, and 3.3.3 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: Trading as:	ABN:
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

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

Yes ☐ Please proceed to Section C

No ☐ Please proceed to Section B

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

Initial:

SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

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

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

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

Initial:

SECTION C

SIGNATURE AND CERTIFICATION

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

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

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	□	by the individual licence holder, or
	□	by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	□	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 Chief Executive Officer of the Department of Environment Regulation.
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 Chief Executive Officer of the Department of Environment Regulation.
a local government	□	by the chief executive officer of the licensee; or
	□	by affixing the seal of the local government.

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

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

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SEAL (if signing under seal)

Licence: L7244/1997/13
Form: N1

Licensee: Laminex Group Pty Limited
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 Laminex Group Pty Limited	
Date	

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

Decision Document

Environmental Protection Act 1986, Part V

Licensee: Laminex Group Pty Limited

Licence: L7244/1997/13

Registered office: Level 4
68 Waterloo Road
MACQUARIE PARK NSW 2113

ACN: 004 093 092

Premises address: Dardanup Particleboard Plant
184 Moore Rd
DARDANUP WA 6236
Being Lot 2 on Diagram 46933 as depicted in Schedule 1

Issue date: Thursday, 9 January 2014

Commencement date: Sunday, 12 January 2014

Expiry date: Friday, 11 January 2019

Decision

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

Decision Document prepared by: Amine Callegari
Licensing Officer

Decision Document authorised by: Jonathan Bailes
Delegated Officer

Contents

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 ☐ New Licence ☐ Licence amendment ☒ Works Approval amendment ☐	
Activities that cause the premises to become prescribed premises	**Category number(s)**	**Assessed design capacity**
	28	182 250 tonnes per year
Application verified Application fee paid	Date: Date:	
Works Approval has been complied with Compliance Certificate received	Yes☒ No☐ N/A☐ Yes☒ No☐ N/A☐	
Commercial-in-confidence claim	Yes☐ No☒	
Is the proposal a Major Resource Project?	Yes☐ No☒	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes☐ No☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Is the proposal subject to Ministerial Conditions?	Yes☐ No☒	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the *Environmental Protection Act 1986*)?	Yes☐ No☐ Department of Water consulted Yes ☐ No ☐	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes☐ No☒		
Is the Premises subject to any EPP requirements? Yes☐ No☒		

3 Executive summary of proposal and assessment

The Dardanup Particleboard Plant is located 9km southeast of Bunbury. The surrounding region includes semi-rural, industrial, residential, bushland and other land-uses. The site is located on Moore Road in the Shire of Dardanup. The site is zoned General Industrial under the Town Planning Scheme.

The Preston River is approximately 670m west of the premises boundary. The nearest town, Dardanup is 3km southeast of the premises, and the nearest resident is approximately 1.5km from the premises boundary. All neighbouring premises are zoned rural, general farming and softwood sawmill processing.

Raw materials in the form of woodchip and sawdust are dried in a rotary kiln (SPE dryer) before being combined with a resin and pressed to form boards, which are trimmed and sanded before shipment or further processed to add a melamine coat. Process heating is provided by a number of gas-fired heaters, with the dryer fired by a combination of natural gas and sander dust.

The main emissions to air are particulates and formaldehyde, primarily from the dryer and main press. All point sources have pollution abatement equipment installed. The burning of sander dust in the kiln as a fuel significantly contributes to the plant's particulate emissions and a visible plume, which has been the source of complaints from the local community. The Licensee has prepared an environmental improvement plan to implement a staged improvement of the plant's emissions.

This licence is the result of an amendment sought by the Licensee to include the operation of a Wet Electro-Static Precipitator (WESP) on the exhaust of the SPE dryer to reduce particulate emissions.

A WESP has been selected due to the high moisture content (100% relative humidity) of the dryer exhaust gas stream and is designed to reduce particulate emissions to below 20 mg/m^3. A decrease in other emissions is also expected, such as formaldehyde and volatile organic compounds.

The WESP was constructed and commissioned under Works Approval W5586/2014/1 granted by DER on 29 May 2014.

DER has considered whether the risk profile of other emissions and discharges from the premises has significantly changed since the previous licence was granted. No significant changes have occurred and, therefore, DER has not amended conditions relating to these emissions and discharges. The licence has been updated to the current template and changes have been made in accordance with administrative changes implemented in DER.

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 W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
General conditions	Previous L1.2.3	Previous condition L1.2.3 has been removed as the requirement for the Licensee to ensure that environmentally hazardous materials are stored in accordance with the Code of Practice for the Storage and Handling of Dangerous Goods is not relevant for emissions and discharges from the premises The requirement to comply with the code of practice applies regardless of the site being a prescribed premises or not.	N/A
Point source emissions to air including monitoring	L2.2.1 L2.2.2	The construction, commissioning and operation of the WESP were assessed under Works Approval W5585/2014/1 granted by DER in May 2014. The Licensee provided a compliance document to DER on 19 December 2014 confirming that the WESP had been constructed in accordance with the works approval conditions. Commissioning of the WESP commenced in March 2015 and a commissioning report provided to DER on 29 September 2015. Testing carried out during commissioning confirmed that the WESP could perform below the benchmark level of 20mg/m^3 as assessed as part of the works approval application. Results provided in the commissioning report are shown below, confirming particulate emissions between 9.4 and 21mg/m^3.	Application supporting document Compliance report, Laminex, December 2014 Commissioning Report, Laminex, September 2015

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**

Test Date	Report ID	Test Method	WESP Power kv	Dryer Feed Rate T/hr	TSP mg/m3 (Wet)
27/03/2015	R000546	USEPA 17	65	24	20
27/03/2015	R000546	USEPA 17	OFF	24	73
27/03/2015	R000546	USEPA 17	70	24	18
21/04/2015	R001009r	USEPA 5	80	30	12
28/05/2015	R001221	USEPA 5	75	24	14
29/05/2015	R001221	USEPA 5	65	24	21
29/05/2015	R001221	USEPA 5	70	24	16
29/05/2015	R001221	USEPA 5	80	24	14
29/05/2015	R001221	USEPA 5	85	24	13
2/06/2015	R001221	USEPA 5	90	24	11
2/06/2015	R001221	USEPA 5	95	24	9.4

AT NOMINAL OPERATING CONDTIONS

Through commissioning and testing of the WESP, it has been determined that two main factors directly impact the particulate emissions. The main influencing factor for the variability of particulate emissions from the WESP is the load rate of product entering the dryer. The higher the load rate of product entering the dryer, the higher the particulate emissions.

The voltage of the WESP can be changed depending on the load rate of the SPE dryer to ensure efficient particulate reduction. The Licensee is automating the WESP voltage control to match the feed rate and to ensure particulate emissions are maintained at the benchmark level. The voltage control will also ensure the WESP operation is optimised to minimise power usage and costs.

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		The moisture content of the wood also affects the particulate emissions, with drier wood leading to higher emissions. Through commissioning, the Licensee has determined that the WESP is likely to run under different control scenarios for winter and summer. This relationship is shown in Figure 1 below. Other aspects of the WESP operation were generally as described in the works approval. Dry sludge generation was found to be significantly lower than expected at 80kg/day. Wastewater generation for the winter months was higher than expected. However, the excess water (approximately 6000L per day) is captured and stored in the ponds on site and used back in the manufacturing process. *Consequence*: Insignificant *Likelihood*: Possible *Risk*: Low <u>Regulatory controls</u> Commissioning of the WESP has determined that the assessment carried out for the works approval application is valid and that the risk of particulate emissions impacting the environment is low. Table 2.2.1 has been amended to include the WESP stack as the emission point of the SPE dryer (A1). The existing SPE dryer stack has been retained as emission point A7 as the stack is used for short durations during start-up and shut-down when the dryer is fired on gas only. The original configuration of the associated pollution abatement equipment (cyclones) is still in place and functional when this emission point is in use. The works approval emissions to air target for particulates of 50mg/m^3 has been implemented as a limit in Table 2.2.2. This has been set above the benchmark level to allow some flexibility in the operation of the WESP with regard to voltage control and the moisture content of the wood. The Licensee is still investigating the installation of a PM continuous emission monitoring system (in-stack or predictive) and is required to submit an implementation plan to DER of the outcome (refer to improvements below). The requirement to carry out quarterly stack tests for PM remains on the licence as	

DECISION TABLE

<table>
<tr><th>Works Approval / Licence section</th><th>Condition number
W = Works Approval
L= Licence</th><th>Justification (including risk description & decision methodology where relevant)</th><th>Reference documents</th></tr>
<tr><td></td><td></td><td>does ambient air quality monitoring (including PM).

If the WESP is non-operational, the dryer will be fired by gas only until the WESP is operational again. If the WESP will be non-operational for a prolonged period (i.e. greater than four hours), the Licensee will initiate discussion with DER regarding alternative PM controls.</td><td></td></tr>
<tr><td>Ambient quality monitoring</td><td>Table 3.3.2</td><td>In accordance with administrative changes implemented in DER, targets relating to ambient surface water quality have been removed. The monthly monitoring (when flowing) will continue. The targets as removed are below and will be used to benchmark the monitoring data.
<table>
<tr><th>Monitoring point reference and location</th><th>Parameter</th><th>Target</th></tr>
<tr><td rowspan="4">WQ1 – WQ2</td><td>Ammoniacal nitrogen as nitrogen</td><td>15mg/l</td></tr>
<tr><td>Total suspended solids</td><td>20mg/l</td></tr>
<tr><td>COD</td><td>30mg/l</td></tr>
<tr><td>Formaldehyde</td><td>10mg/l</td></tr>
</table></td><td>www.der.wa.gov.au</td></tr>
<tr><td>Improvements</td><td>Table 4.1.1</td><td>Improvement requirement IR1 to undertake a sampling and analysis plan to determine the waste classification of all solid wastes from the glue kitchen & paper treaters has been completed. A report was provided to DER on 24 January 2014, and the improvement requirement was closed on 4 March 2014.

Improvement requirement IR2 to cease all discharges from the log yard into the stormwater system was closed on 6 March 2014 following a DER site inspection on 4 March 2015, where it was observed that the log yard was non-operational.

Improvement requirement IR3 to undertake a study to determine the emissions of formaldehyde from emission to air points A2 and A3 is ongoing with the final report due by the end of first quarter 2016. The completion date for IR3 has been extended to 31 March 2016.</td><td>DER letter dated 4 March 2014 (A731830)

DER letter dated 6 March 2014 (A732580)

Report for Laminex Improvement Program IR3, April 2014,</td></tr>
</table>

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Improvement requirement IR4 to install a continuous monitoring system to accurately measure the concentration of PM emitted from the WESP is ongoing. The Licensee has not been able to procure an in-stack system capable of monitoring in the high moisture environment of the WESP and is still investigating predictive systems. The completion date for IR3 has been extended to 30 June 2016 and the requirement changed to submission of an implementation plan. DER will review the plan and if necessary update the improvement requirement to facilitate the installation of the chosen technology/monitoring method.	Laminex Annual Environment Report (AER) 1st October 2014 to 30th September 2015, Laminex Laminex letter to DER dated 21 May 2015
Licence Duration	-	Planning permission for the WESP was granted on 13 May 2015. No expiry date has been imposed on the planning approval. No changes to the licence duration have been made as part of this licence amendment.	DER Guidance Statement: Licence Duration

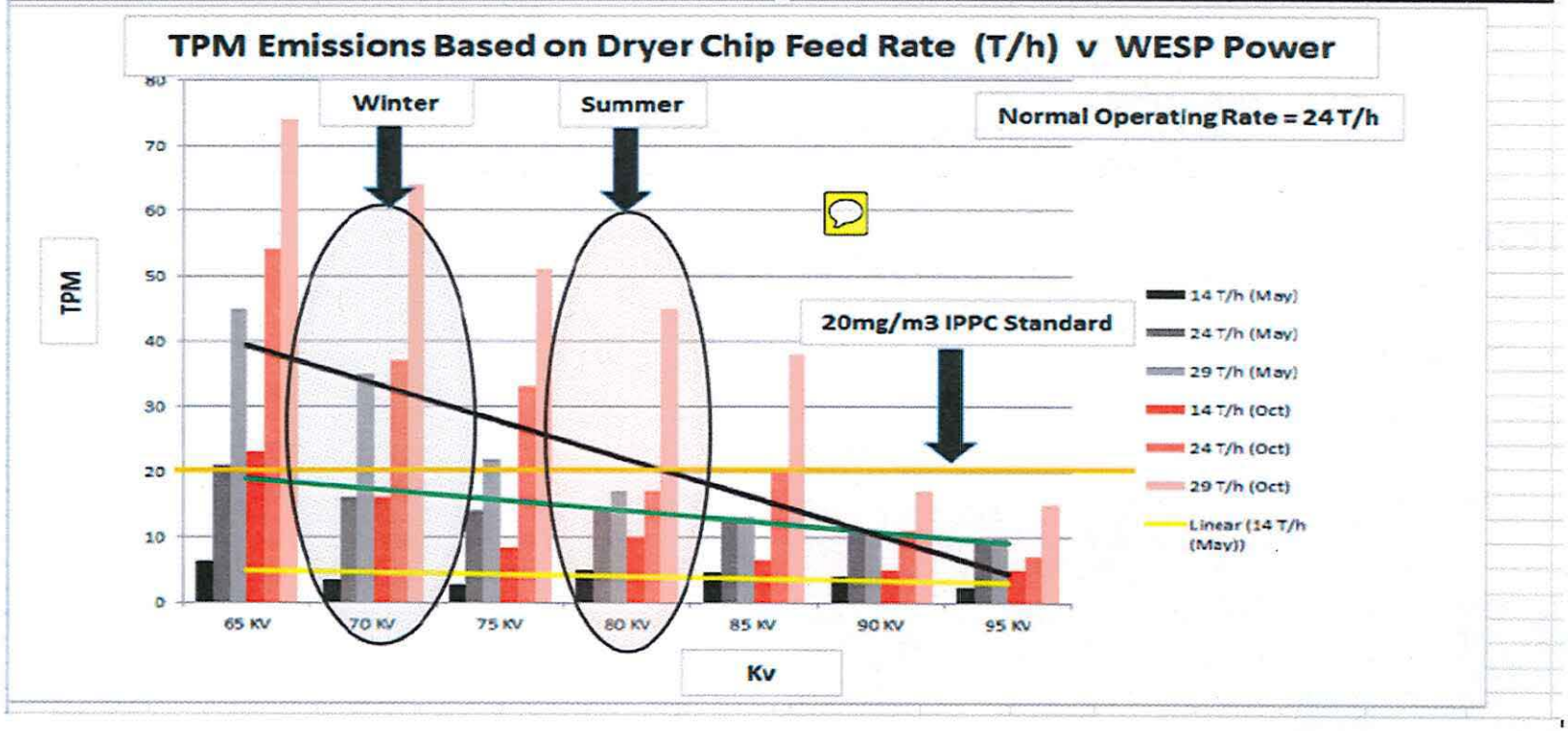
Figure 1 – Particulate Emissions, Feed Rate and WESP Power

The Laminex Group
WESP Results table - May 2015 (3mm wires)

WESP Power	65 KV	70 KV	75 KV	80 KV	85 KV	90 KV	95 KV
Dryer feed rate ton/hr	TPM	TPM	TPM	TPM	TPM	TPM	TPM
14 T/h (May)	6.3	3.5	2.6	5	4.6	3.9	2.3
24 T/h (May)	21	16	14	14	13	11	9.4
29 T/h (May)	45	35	22	17	13	11	9.8

The Laminex Group
WESP Results table - Oct 2015 (4mm wires)

WESP Power	65 KV	70 KV	75 KV	80 KV	85 KV	90 KV	95 KV
Dryer feed rate ton/hr	TPM	TPM	TPM	TPM	TPM	TPM	TPM
14 T/h (Oct)	23	16	8.4	10	6.4	4.9	4.9
24 T/h (Oct)	54	37	33	17	20	11	7
29 T/h (Oct)	74	64	51	45	38	17	15



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
18/02/2016 24/02/2016	Proponent sent a copy of draft instrument	Verbal comments received on 24/02/2016 and 25/02/2016: • Measurement benchmark of WESP monitoring is STP wet not STP dry; • The SPE dryer stack is still used as an emission point during start-up and shut-down when the dryer is fired on gas only; and • Request to change IR4 completion requirement to submission of a final report rather than installation of the CEMS. • Clarification requested on scope of implementation plan required by IR4.	• Footnotes to Tables 2.2.2 and 3.2.1 updated; • SPE dryer stack reinstated as emissions point A7; and • IR4 updated to require submission of a CEMS implementation plan. • Clarification provided by email on the requirements of IR4.

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