

Decision Document

Environmental Protection Act 1986, Part V

Applicant: Eastern Metropolitan Regional Council

Licence: L9003/2016/1

Registered office:	226 Great Eastern Highway BELMONT WA 6104
Premises address:	Hazelmere Resource Recovery Park 77 Lakes Road HAZELMERE WA 6104 Being Lot 100 on Plan 4553 and Lot 301 on Plan 405273
Issue date:	Thursday, 10 November 2016
Commencement date:	Monday, 14 November 2016
Expiry date:	Thursday, 13 November 2036

Decision

Based on the assessment detailed in this document the Delegated Officer has decided to grant a Licence. The Delegated Officer considers that in reaching this decision, all relevant considerations have been taken into account.

Decision Document prepared by:

Amine Callegari Licensing Officer

Decision Document authorised by:

Caron Goodbourn Delegated Officer



Contents

Deci	ision Document	1
Cont	tents	2
1	Purpose of this Document	2
2	Administrative summary	3
3	Executive summary of proposal and assessment	4
4	Decision table	7
5	Advertisement and consultation table	12
6	Risk Assessment	14
Appe	endix A	15

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 applicant's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

Administrative details				
Application type	Works Approv New Licence Licence amer Works Approv	val ndment val amendn	nent	
Activities that cause the premises to become prescribed premises	Category nu	mber(s)	Assessed design capacity	
	61A 62		50 000 tonnes per annum 50 000 tonnes per annum	
Application verified	Date: 20/10/2	2016		
Application fee paid	Date: 24/10/2	2016		
Works Approval has been complied with	Yes⊠ N	IO N	/A	
Compliance Certificate received	Yes⊠ N	√o∏ N		
Commercial-in-confidence claim	Yes N	lo⊠		
Commercial-in-confidence claim outcome				
Is the proposal a Major Resource Project?	Yes N	lo⊠		
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes N	Jo⊠ Ref Mai	erral decision No: naged under Part V	
Is the proposal subject to Ministerial Conditions?	Yes N	No⊠ EP	nisterial statement No: A Report No:	
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes N Department o	lo⊠ of Water cor	nsulted 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 Eastern Metropolitan Regional Council (EMRC) (Licence Holder) operates the Hazelmere Resource Recovery Park (HRRP) situated at 77 Lakes Road Hazelmere. The HRRP opened in 2008 to manage waste for Perth's Eastern Region and its six member councils by diverting reusable products from landfill. To date activities at the premises have comprised receival and processing of waste timber and mattresses for reuse or disposal to landfill. A licence has not previously been granted for the premises although the activities undertaken fall within the definition of a Category 61A Solid waste facility.

Works Approval (W5923/2015/1) was granted on 28 January 2016 to authorise construction of a new Commercial and Industrial Waste Sorting Facility (C&I SF) at the HRRP. A construction compliance document for the works was received by DER on 13 October 2016. The Licence Holder is now seeking an operating licence for a Category 61A Solid waste facility (to authorise the existing timber and mattresses processing activities undertaken on the premises) and a Category 62 Solid waste depot (to authorise operation of the C&I SF). Activities undertaken on the premises which are included in this assessment are:

- Recovery of waste timber for processing through an Integrated Outdoor HAAS timber processing system to produce wood fines and wood chips to be sold as animal bedding and landscaping material.
- Processing and downsizing of used mattresses through a slow speed Hammel shredder prior to disposal at a licensed facility.
- Acceptance and sorting of commercial and industrial dry waste streams to recover and separate recyclable wastes. Non-recyclable wastes are separated and disposed at a licensed facility.

This Decision Document is based on an assessment of the Licence Holder's application for DER Licence dated 7 October 2016 and Addendum for Licence Application – Hazelmere Resource Recovery Park Timber Processing Facility and supporting attachments submitted 18 October 2016. In addition, DER has considered the following documents in this assessment

- Hazelmere C&I Plant Works Approval Application (October 2015) and Supplementary Information (January 2016)
- Hazelmere Wood Waste to Energy Plant Works Approval Application and Support document (October 2015)

The Licence Holder currently holds a works approval (W5916/2015/1) for construction of a Wood Waste to Energy Plant (WWTE) on Lot 301. This facility is still under construction and does not form part of this assessment. Operation of the Wood Waste to Energy Plant is not authorised under the operating licence and the Licence Holder will be required to apply for a licence amendment to include the facility at a later date.

Location and siting

The HRRP is an existing waste recycling facility located approximately 14km north east of Perth within the City of Swan. The site is zoned 'Industrial' under the *Metropolitan Region Scheme (MRS)* and 'Industrial Development' under the City of Swan *Local Planning Scheme (LPS17)*. Surrounding land comprises a variety of uses including industrial premises, rural and residential properties, environmentally sensitive areas, Westralia Airport Corporation industrial land and Department of Defence driving training land.

Existing residences and landowners: Three private residences are located to the west and south of the HRRP on Lakes Road. The residences are situated approximately 100m, 200m and 400m from the premises boundary. Industrial premises are located immediately north, east and south of the HRRP.



<u>Geology:</u> The HRRP site is underlain by superficial deposits of the Guildford Formation, comprising clayey soils with some silts, sand and gravel, grading into sandy soils at depths of 1-18m below the surface.

<u>Groundwater:</u> Groundwater is generally located 3.5m below the natural surface. Groundwater level contouring suggests that flow is generally west-northwest. The premises is located with the Swan proclaimed groundwater area therefore groundwater abstraction requires a licence under the *Rights in Water and Irrigation Act 1914*.

<u>Surface water:</u> The Hazelmere Lakes, located approximately 400m west of the premises, are the nearest ecological sensitive receptors. The lakes are classified as 'Resource Enhancement' category wetlands. The premises is outside the protection buffer for the Lakes. The Helena River is located approximately 1 km northeast of the premises.

<u>Other sensitive receptors:</u> Two Bush Forever Areas (BFA) occur within the proximity of the HRRP. These are located approximately 400m to the southeast of the premises (BFA 481: Stirling Crescent Bushland, Hazelmere) and 940m to the east of the premises (BFA 213: Bushmead Bushland, Swan).

<u>Contaminated site:</u> The HRRP has recently been classified by DER Contaminated Sites Branch as possibly contaminated following the detection of abnormal pH, sulfate and lead levels in shallow groundwater monitoring bores in the western corner of the site during routine monitoring undertaken in early 2016. The extent and source of the contamination is still under investigation.

Activities and potential emissions

The Licence Holder accepts dry commercial and industrial dry waste at the HRRP for sorting and processing. Sources of waste material include member Councils' transfer station collections, the City of Stirling's transfer station and from commercial collections by private sector waste companies. Three main activities are undertaken on the premises: sorting of waste into recyclable and non-recyclable waste streams; processing of untreated and unpainted waste timber; and processing of used mattresses.

The infrastructure, as it relates to Category 62 and 61A activities, is detailed below and with reference to the Site Plan (attached in the issued Licence) which has been established on the premises to undertake these activities is listed below:

- 40m x 60m steel fabricated Commercial and Industrial Waste Sorting Facility;
- Integrated Outdoor HAAS timber processing system;
- Hammel mattress shredder;
- Product stockpiles (wood fines and wood chips);
- Weighbridge;
- Fire service water tanks and pumps;
- 10,800 L above ground diesel storage tank;
- Offices;
- Workshop;
- Site amenities; and
- Stores building.

Mixed waste loads are unloaded into the newly constructed C&I SF for sorting and separation into recyclable and non-recyclable waste streams. The C&I SF is an enclosed steel fabricated structure on a solid concrete floor. It has four entry points along one side for trucks to enter and unload waste onto the floor of the C&I SF. Up to 50,000 tonnes of waste material can be processed through the facility per year. The non-recyclable waste stream is deposited into large skip bins and transferred to the Red Hill Waste Management facility for disposal. The recyclable waste stream is sorted via a picking station into recoverable streams including plastics, timber suitable for processing, metal, aluminium,



mixed paper and cardboard. Sorted materials are collected in large skip bins and transported to nominated recycling facilities.

Loads of used mattresses accepted on the premises or recovered from the C&I SF are downsized via shredding to reduce their volume for landfilling. Shredding is undertaken on a designated engineered hardstand by a mobile slow speed Hammel shredder. Shredded material is placed into large skip bins and sent to the Red Hill Waste Facility for disposal. Up to 8,000 mattresses are currently processed at the facility per year.

Timber waste is unloaded to a designated concrete apron to be processed through an Integrated Outdoor HAAS timber processing system to produce wood fines and woodchips suitable for sale as animal bedding or landscaping material. The HAAS timber processing system includes a primary shredder, a high speed hammer mill, screens and a dust extraction system. Up to 50 000 tonnes of timber can be processed through the HAAS timber processing system per annum. The resultant product is stored in stockpiles pending sale to customers.

Potential emissions that could reasonably be expected to arise from activities undertaken at the HRRP include:

- <u>Dust:</u> Dust emissions may arise from timber and mattress processing and storage of the wood fines product;
- <u>Noise</u>: Noise emissions may arise from operation of the C&I SF, timber and mattress processing and vehicle and equipment operation; and
- <u>Stormwater:</u> Stormwater could potentially become contaminated through contact with waste materials, sediments or wood fines product.

Further details of emissions and regulatory controls for the HRRP are detailed within the Decision Table in section 4.

Occupation and approval

The Premises is currently occupied and operated by the Licence Holder. The Licence Holder is not obliged to seek development (planning) approval from the City of Swan under the City's *Local Planning Scheme No.17*. However, in accordance with subclauses (2) and (3) of Section 6 of the *Planning and Development Act 2005*, the Licence Holder is required to consult with the local government at the time when a proposal is being formulated.

A stakeholder letter was sent to the City of Swan by DER on 25 October 2016 seeking comment on the application. Correspondence was received from the City of Swan confirming that approval is not required because it is public works.



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 TA	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises operation	L1.2.1 – L1.2.10	The risk assessments informing the regulatory controls for operation of the premises are contained in Appendix A.	Application supporting documentation Environmental Protection (Unauthorised Discharges) Regulations 2004 General provisions of the Environmental Protection Act 1986 Department of Environment Regulation 2015, Guidance Statement: Regulatory Principles Department of Environment Regulation 2015, Guidance Statement: Setting Conditions
Fugitive emissions	L2.1.1	The risk assessment informing the regulatory controls for fugitive dust emissions are contained in Appendix A.	Application supporting documentation Section 49 of the <i>Environmental</i> <i>Protection Act 1986</i>

Page 7 of 19



DECISION TA	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
			Environmental Protection (Unauthorised Discharges) Regulations 2004
Odour	NA	The Licence Holder will only accept select commercial and industrial dry waste streams and weekend kerb-side clean-up bins onto the premises. Odorous putrescible wastes are not accepted at the facility therefore odour emissions are not expected to be produced from this waste stream. It is considered that the provisions of Section 49 of the <i>Environmental Protection Act</i> <i>1986</i> are sufficient to regulate odour emissions therefore odour conditions have not been included in the licence.	Application supporting documentation Section 49 of the <i>Environmental</i> <i>Protection Act 1986</i>
Noise	NA	Emission description: Emission: Noise arising from the operation of the C&I SF, HAAS timber processing system and Hammel mattress shredder as well as associated vehicle and machinery noise. Impact: Interference with the health, welfare, convenience, comfort or amenity of sensitive residential receptors. The nearest sensitive residences are located 100-400m west of the premises boundary. Controls: The Licence Holder provided a noise assessment in the application that was undertaken in 2013 to model and assess noise emissions for the WWTE plant currently under construction (W5916/2015/1). The assessment considered noise associated with current activities at the premises, namely timber and mattress processing. It did not consider noise associated with the newly constructed C&I SF. The modelled results indicate that noise levels are predicted to comply with assigned levels at all sensitive receptors and a design goal of 5dB under the assigned levels (to provide an allowance for tonality) during daytime operations. Noise levels are, however, predicted to exceed	Application supporting documentation <i>Environmental Protection (Noise)</i> <i>Regulations 1997</i> W5916/2015/1



DECISION TA	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
	L= Licence	the design goal for 3 premises if operating at night time under worst case meteorological conditions. The Licence Holder has committed to only operating during normal business hours 7 am to 5pm Monday to Saturday. <u>Risk assessment:</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low <u>Regulatory controls:</u> DER has not received any complaints regarding noise from the premises. The noise assessment undertaken by the Licence Holder did not include noise emissions associated with the C&I SF. However, as this activity is undertaken within an enclosed building, and the building provides a barrier between the timber processing operation and sensitive receivers, it is therefore considered unlikely that noise from the C&I SF will significantly change the results of the noise assessment. Additionally the conditions of W5916/2015/1 for construction of a WWTE plant on the premises requires that the Licence Holder undertakes an updated noise assessment, including monitoring and modelling of all noise emissions from the premises, as part of the commissioning report for the works. This assessment will identify if noise emissions are likely to exceed assigned levels. Reassessment of noise emissions will be undertaken based on the results of this updated noise assessment when the Licence Holder applies for a licence amendment to include the WWTE plant on the licence. The Delegated Officer considers that the provisions of the <i>Environmental Protection</i> (<i>Noise</i>) <i>Regulations 1997</i> will be sufficient to regulate noise emissions from the premises.	
		Residual risk:	

Environmental Protection Act 1986 Decision Document: L9003/2016/1 File Number: DER2016/002031



DECISION TA	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Consequence: Minor Likelihood: Rare Risk Rating: Low	
Monitoring of inputs and outputs	L3.1.1	Condition 3.1.1 has been included in the Licence to allow DER to monitor the inputs and outputs of the premises. The Delegated Officer considers this necessary to ensure that wastes accepted and processed at the site are at a throughput that can be sufficiently managed by the premises infrastructure and controls.	Department of Environment Regulation 2015, <i>Guidance</i> <i>Statement: Regulatory Principles</i> Department of Environment Regulation 2015, <i>Guidance</i> <i>Statement: Setting Conditions</i>
Information	L4.1.1, 4.1.2 and 4.1.3 L4.2.1 L4.3.1	 Condition 4.1.1 has been included in the Licence to ensure all records required by the Licence are legible and retained for a period of at least 6 years which assists DER in regulating the conditions of this licence. Condition 4.1.2 has been included in the Licence to ensure the Licence Holder submits a Compliance Report outlining compliance with the conditions of the Licence during the reporting period. This condition assists DER in regulating the occupier's compliance with licence conditions and allows an opportunity for DER to review the occupier's environmental performance. Condition 4.1.3 has been included in the Licence to ensure a complaints management system is implemented where the Licence Holder can internally address any complaints that arise from premises operations. DER will review these complaints as reported in the Annual Environmental Report (AER) and can consider the requirement for reassessment of any regulatory controls to address the complaints. Condition 4.2.1 has been included in the Licence to ensure the Licence Holder submits an AER within 90 calendar days of the end of the reporting period. The AER is required to enable the review of monitoring data collected during the reporting period. DER 	Department of Environment Regulation 2015, <i>Guidance</i> <i>Statement: Regulatory Principles</i> Department of Environment Regulation 2015, <i>Guidance</i> <i>Statement: Setting Conditions</i>



DECISION TA	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		reviews all of the data provided in the AER to assess compliance with the licence conditions and to monitor the environmental impacts from the premises. Condition 4.3.1 has been included in the Licence to ensure the CEO is notified when there is a breach of any specified limit in the licence The notification required under this condition gives DER sufficient notice of any environmental impacts at the premises so that DER can determine if any further action is required to address the incident.	
Licence Duration	NA	This is the first Licence the Licence Holder has applied for at this premises. There are no other approval or lease arrangements with expiry dates which require consideration for this premises. The Delegated Officer has assessed the risk of the premises including controls imposed by the Licence and controls imposed by the Licence Holder. As such the licence will be granted for the maximum 20 year period. DER may reassess the duration of the Licence later.	Department of Environment Regulation 2015, <i>Guidance</i> <i>statement: Licence duration</i>

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5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into
24/10/2016	Application advertised in West Australian (or other relevant newspaper)	No comments were received.	NA
25/10/2016	Application referred to City of Swan	No comments were received.	NA
03/11/2016	Licence Holder sent a copy of draft instrument	 Comments received 7 November 2016: Licence Holder has requested that the requirement in Table 1.2.7 to store wood chips on a hardstand surface is removed as there is currently insufficient area of engineered hardstand to store the woodchip stockpiles. Engineered hardstand areas are prioritised for wood dust stockpiles. The volume of wood chip stockpiles is currently large as wood chips are being stored as feed for the WWTE plant currently under construction. When the WWTE plant is commissioned, the stockpiles will be consumed and there will be minimal wood chip stockpiling on site. Licence Holder has requested that the requirement in Table 1.2.7 to store mattresses on a hardstand surface is removed as the mattresses are stored on a compacted gravel surface with permeability of approximately 5x10⁻⁹ m/s which does not meet the definition of a hardstand. 	Table 1.2.7, Row 1 of the Licence changed to remove the requirement for wood chips to be stored on a hardstand area. The Delegated Officer considers that as waste timber has not been treated there is minimal risk of leaching of contaminants from the wood chips, which could cause contamination to land or groundwater. It is therefore not necessary for wood chips to be stored on a hardstand Table 1.2.7, Row 3 of the Licence has been amended to require mattresses to be stored on compacted gravel ferricrete surface rather than a hardstand. The Delegated Officer considers that as mattresses are an inert solid waste there is minimal risk of leaching of contaminants from the mattresses which could cause

Environmental Protection Act 1986 Decision Document: L9003/2016/1 File Number: DER2016/002031



Data	Event	Commente received/Netes	How comments were taken into
Date		Comments received/notes	
			consideration
			contamination to land or groundwater. It is
			therefore not necessary for mattresses to
			be stored on a hardstand.
		Licence Holder has requested the	The regulatory control to remove dust
		requirement in Table 2.1.1 to remove	collected by the Integrated automatic dust
		dust collected by the Integrated	extraction system on a daily basis is a dust
		Automatic Dust Extraction System on a	management control that the Licence
		daily basis be changed to on an as	Holder included in their application. The
		required basis.	Delegated Officer determined that this is an
			appropriate maintenance control to ensure
			effective operation of the dust extraction
			system to reduce the risk of dust emissions
			The Licence Holder has not provided any
			iustification to support a change to this
			requirement. Additionally the proposed
			change does not align with DEP's Guidance
			Statement: Setting Conditions
			In the absence of any additional controls
			n the absence of any additional controls
			and ashestes emissions, the Delegated
			Officer has determined that the controls for
			Oncer has determined that the controls for
			aust and aspestos emissions, including
			maintaining stockpiles being below noise
			bunds, are required to sufficiently manage
			emissions to an acceptable level. Any
			changes will require an amendment
			application to be submitted, outlining any
			alternative controls and justification for the
			amendment, to be considered by the
			Delegated Officer through a new risk
			assessment.



6 Risk Assessment

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

Table	1:	Emissions	Risk	Matrix
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Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High



Appendix A

Emission Description (Contaminated stormwater)

Emission: Contaminated stormwater runoff due to contact with stored waste materials which could potentially contain wood fines, sediments or miscellaneous toxics or chemicals.

Impact: Potentially contaminated stormwater leaving the Premises and entering adjacent properties may cause contamination to surrounding lands, impact native vegetation ecosystem health, or increase contaminant loads in surface water and/or groundwater. The closest surface water features which could potentially be impacted by contaminated stormwater are the Hazelmere Lakes approximately 400m west of the premises boundary.

Controls: A stormwater drainage design has been prepared for the entire site in accordance with City of Swan's Hazelmere Enterprise Area Stormwater Management Plan however it has not yet been implemented. Pending implementation of the drainage design, the Licence Holder intends to direct stormwater run-off generated from the roof of the C&I SF building, surrounding internal road networks and the timber and mattress processing areas via open spoon drains to a temporary stormwater basin located to the west of the C&I SF where it will recharge to groundwater.

The Licence Holder will only accept dry wastes that, by nature, pose a lower risk of contamination to the environment. The likelihood of stormwater becoming contaminated is minimised through the following controls.

- Implementation of a waste acceptance procedure to ensure only dry, non-hazardous
 materials are accepted at the facility for processing and sorting reducing the likelihood of
 stormwater coming into contact with toxics or chemicals. Vehicles identified to be carrying
 unacceptable waste produces are redirected to an alternative suitable waste disposal facility.
 Any unacceptable material which does make its way onto the premises is identified and
 removed to a designated storage area pending disposal to an appropriate alternative facility.
- All wastes associated with the C&I SF will be received and stockpiled undercover within a steel fabricated building with a bunded concrete floor eliminating the ingress of rainfall and stormwater.
- Timber and mattress processing activities are undertaken on engineered hardstands reducing the likelihood of stormwater infiltration. The Licence Holder aims to process materials within 72 hours of acceptance limiting the time material is stockpiled and potentially in contact with stormwater.
- To minimise the potential for stormwater to collect sediment internal roads have been sealed and the Licence Holder engages a road sweeper on a twice weekly basis to remove residual sediments from trafficable areas. Due to the sealing of trafficable areas stormwater is likely to flow across the premises rather than infiltrate the groundwater.

Risk assessment:

Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate

Regulatory controls:

Condition 1.2.1 has been included in the Licence to ensure, in the absence of a stormwater drainage system, all stormwater is directed to a storage basin. Condition 1.2.2 has also been included to specify management measures for the stormwater storage basin to ensure its integrity. The Delegated Officer considers these conditions necessary to prevent potentially contaminated stormwater being discharged from the premises.

Condition 1.2.3 has been included on the licence to limit the types and quantities of waste that can be accepted at the premises to those that have been assessed as suitable and can be sufficiently managed through the premises infrastructure and controls. Condition 1.2.4 requires the Licence



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Holder to visually inspect all loads to identify those containing unacceptable materials and condition 1.2.5 requires the Licence Holder to refuse entry to vehicles carrying wastes not authorised by condition 1.2.3 or remove unacceptable wastes within a defined period. The Delegated Officer considers these conditions necessary to assist in mitigating the risk of stormwater contamination from stockpiling non-conforming waste.

Condition 1.2.8 has been included in the Licence to ensure the Licence Holder has adequate security measures at the premises to prevent unwanted access when the premises is unattended. The Delegated Officer considers this condition necessary to reduce potential for illegal dumping of potentially hazardous waste materials which could lead to stormwater contamination.

Condition 1.2.9 has been included in the Licence to ensure the Licence Holder installs and maintains signage at the premises which includes a list of prohibited materials. The Delegated Officer considers this condition necessary to minimise the likelihood of inappropriate or hazardous materials being delivered to the Premises which could contaminate stormwater.

Residual risk:

Consequence: Insignificant Likelihood: Unlikely Risk Rating: Low

Emission Description (Asbestos)

Emission: Asbestos and asbestos fibres may become airborne or spread through soils if material containing asbestos or ACM are inadvertently accepted at the Premises.

Impact: Asbestos fibres can pose a significant health risk (such as development of asbestosis or mesothelioma) if people are exposed to them. The nearest sensitive residences are located 100-400m west of the premises boundary. Other industrial premises are located around the remainder of the premises boundary.

Controls: Asbestos and ACM are not proposed to be accepted at the Premises. The Licence Holder has committed to implementing a Waste Acceptance Procedure which will include the following measures to identify materials which cannot be accepted by the Premises.

- A controlled site entrance that includes a weighbridge staffed by experienced personal trained to identify non-compliant loads.
- Signage at the entrance to the HRRP outlining accepted and non-accepted wastes.
- A data management system at the weighbridge that records the type, weight, source and customer for each waste load.
- A radio communication system linking the weighbridge staff and the operational staff at the tipping area within the C&I building.
- Trained 'spotters' at the tipping area to identify non-compliant materials within waste loads
- Training for mobile machinery operators to identifying contaminated non-compliant materials
- Incoming loads which are identified to contain non-compliant waste will be refused entry and re-directed to another suitable waste disposal facility.
- non-compliant waste identified after unloading will be segregated from the main waste stream to a dangerous goods storage area whilst the source of the material is identified and alternative disposal organised

<u>Risk Assessment</u> Consequence: Major Likelihood: Unlikely Risk Rating: Moderate

Regulatory Controls



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Condition 1.2.3 has been included in the Licence to ensure no visible asbestos or asbestos containing material (ACM) is accepted onto the premises. The Delegated Officer considers this condition necessary to assist in mitigating the risk of asbestos or asbestos containing material entering the site.

Condition 1.2.4 has been included in the Licence to ensure all incoming loads are inspected. The Delegated Officer considers this condition necessary to ensure loads containing asbestos or ACM are able to be identified.

Condition 1.2.5 has been included in the Licence which requires wastes not meeting acceptance criteria to be removed from the Premises. The Delegated Officer considers this condition necessary to prevent asbestos fibres being released from the premises due to handling asbestos or ACM.

Condition 1.2.6 has been included in the Licence which sets out containment, labelling and disposal requirements for asbestos which does make its way onto the premises. The Delegated Officer considers this condition to be necessary to prevent the release of asbestos fibres from inadvertent acceptance and handling of asbestos or ACM.

Condition 1.2.8 has been included in the Licence to ensure the Licence Holder has adequate security measures at the premises to prevent unwanted access when the premises is unattended. The Delegated Officer considers this condition necessary to reduce potential for illegal dumping of asbestos or ACM at the premises when it is unattended.

Condition 1.2.9 has been included in the Licence to ensure the Licence Holder installs and maintains signage at the premises which lists prohibited materials. The Delegated Officer considers this condition necessary to minimise the likelihood of asbestos or ACM being delivered to the Premises.

Risk Assessment Consequence: Minor Likelihood: Rare Risk Rating: Low

Emission Description (Fires)

Emission: Smoke, including particulates and air emissions potentially containing hydrocarbons and heavy metals released in the event of a fire. Firefighting foam may contain hazardous materials including surfactants, emulsifiers and modifiers.

Impact: Degradation of local air quality due to smoke, particulates and air emissions generated in the event of a fire affecting the comfort and amenity of adjacent residences and industrial premises. Contamination of surrounding land and surface water drainage systems can also occur from the release of firefighting wastewater and foam. The nearest sensitive residences are located 100-400m west of the premises boundary. Other industrial premises are located around the remainder of the premises boundary.

Controls: The Licence Holder submitted a Fire and Emergency Plan with their application that details actions to be undertaken in the event of a fire. In accordance with the plan the Premises has an established fire control system. The system comprises fire hydrants, hose reels and extinguishers around the premises connected to a fire suppressant ring main. The Licence Holder has stated that the ring main has sufficient pressure and coverage for DFES to control fires at all vulnerable locations on site. In addition to these measures, a water truck with firefighting capability is on site at all times and mobile equipment carries fire extinguishers.



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An independent CSIRO assessment of the combustibility of wood fines found that the materials have a low risk of self-combustion and require significant external heat to initiate combustion. The wood fines and wood chip stockpiles do not therefore pose a significant fire risk.

The Licence Holder has noted that one major fire has occurred on site since operations commenced in 2008. The fire was caused by a spark in the timber grinding operation which ignited dust in the plant. Upgrades to the dust extraction system and design changes have been implemented to prevent reoccurrence of this type of event.

Risk Assessment Consequence: Moderate Likelihood: Unlikely Risk Rating: Moderate

Regulatory Controls

Condition 1.2.3 has been included on the licence to limit the types and quantities of waste that can be accepted at the premises to those that have been assessed as suitable and can be sufficiently managed through the premises infrastructure and controls. Condition 1.2.4 requires the Licence Holder to visually inspect all loads to identify those containing unacceptable materials and condition 1.2.5 requires the Licence Holder to refuse entry to vehicles carrying wastes not authorised by condition 1.2.3 or remove unacceptable wastes within a defined period. The Delegated Officer considers these conditions necessary to assist in mitigating the risk fire associated with stockpiling of hazardous wastes.

Condition 1.2.8 has been included in the Licence to ensure the Licence Holder has adequate security measures at the premises to prevent unwanted access when the premises is unattended. The Delegated Officer considers this condition necessary to reduce potential for unauthorised fires and illegal dumping of waste materials at the premises when it is unattended.

Condition 1.2.9 has been included in the Licence to ensure the Licence Holder installs and maintains signage at the premises which details contact numbers for the premises and the hours of operation and list of prohibited materials. The Delegated Officer considers this condition necessary to minimise the likelihood of inappropriate or hazardous material being delivered to the Premises which could present a fire/explosive risk.

Condition 1.2.10 has been included in the Licence to ensure there is adequate fire prevention equipment on the premises to contain a fire. The Delegated Officer considers this condition necessary to ensure measures are in place to contain a fire at the Premises which could impact nearby receptors.

Residual Risk Consequence: Moderate Likelihood: Rare Risk Rating: Moderate

Emission Description (Fugitive emissions - dust)

Emission: Dust arising from unloading of waste materials, vehicle movements, timber and used mattress processing and stockpiling of wood fines.

Impact: Reduced local air quality from airborne particulates is possible causing nuisance impacts on the comfort, amenity and health and wellbeing of sensitive receptors. The closest residences are 100-400m to the west of the premises and industrial premises are located around the remainder of the premises boundary.



Controls: Unloading and sorting of C&I wastes is undertaken within a large enclosed steel fabricated shed therefore dust emissions are unlikely to occur from this activity.

The internal road network has been sealed and road sweeping is undertaken twice weekly to reduce the potential for dust emissions due to vehicle movements. Timber grinding and mattress shredding are undertaken on designated hardstand areas to minimise the likelihood of dust emissions due to machinery movements on the working apron. A water cart is used to wet the working aprons where timber processing, stockpiling and mattress processing are undertaken.

The potential for dust emissions from the timber processing activity is controlled via spraying of feedstock prior to shredding and operation of an integrated automatic dust collection and extraction system which is fitted to the HAAS timber grinder. Dust continually discharges from the extraction system into a dust bunker. Collected dust is removed on a daily basis for disposal at the Red Hill landfill. Dust extraction pipework can become blocked due to dust build up. Jet washing of the pipework is undertaken on a two weekly basis to prevent blockages

The Licence Holder undertakes real time dust monitoring using an 'Osirs' dust monitor to monitor ambient dust concentrations. Total Suspended Particulates, PM_{10} and $PM_{2.5}$ dust fractions are measured at 10-minute intervals via a telemetry system. An E-Sampler PM_{10} Particulate Monitor (high volume) has also recently been installed immediately north of the HAAS timber processor to target monitoring of dust emissions from timber processing.

The Licence Holder has not provided details of any dust controls for stockpiling of wood fines and wood chips produced by the timber processing activity.

Risk assessment:

Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate

Regulatory controls:

A search of DER records indicates that there has been only one dust complaint made in relation to the HRRP, which was unsubstantiated.

Condition 1.2.7 has been included in the Licence which specifies limits on timber and product stockpile locations and sizes and dust suppression requirements for the timber processing activity and product stockpiles. The Delegated Officer considers this condition necessary to reduce the risk of dust emissions from stockpiles and timber processing activities.

Condition 2.1.1 has been included in the licence to specify dust control infrastructure and equipment required for the premises. The Delegated Officer considers this condition necessary to ensure appropriate dust control measures are available to prevent fugitive dust emissions.

Residual risk: Consequence: Minor Likelihood: Rare Risk Rating: Low