



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L8889/2015/1
Licence Holder	Eastern Metropolitan Regional Council
File Number	DER2018/000777-1
Premises	Red Hill Waste Management Facility Toodyay Road, Red Hill 6056 Legal description – Lot 1 on Diagram 15239, Lot 2 on Diagram 68630, Lot 11 on Diagram 69105 and Lot 12 on Deposited Plan 26468 As defined by the Premises maps attached to the Revised Licence
Date of Report	04 November 2020
Decision	Revised licence granted

**MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L8889/2015/1 is held by Eastern Metropolitan Regional Council (EMRC) (Licence Holder) for the Red Hill Waste Management Facility (the Premises), located at Toodyay Road, Red Hill, being Lot 1 on Diagram 15239, Lot 2 on Diagram 68630, Lot 11 on Diagram 69105 and Lot 12 on Deposited Plan 26468.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L8889/2015/1 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 22 July 2020, the Licence Holder submitted an application to the department to amend Licence L8889/2015/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The application was in relation to the proposed shredding of treated power poles to consolidate and maximise the space within the current Class IV cell.

The power poles, either pine or hardwood, had previously been treated with CCA (copper chrome arsenate) or hydrocarbon based solutions. They also may have other pesticide treatment applications, especially PresChem pole saver rods.

It is proposed that the shredding will occur within the existing Class IV cell.

The proposed activities require the inclusion of Category 61A to be reflected on the existing licence and associated amendments to licence conditions are needed to authorise the use of infrastructure and the new waste process.

Following the completion of Conditions 1, 4 and 5 of Works Approval W6312/2019/1, in relation to groundwater bore construction and decommissioning near the Stage 14 Class III landfill cell, the department also initiated an amendment to the groundwater monitoring network within Schedule 2 of the Licence.

This amendment is limited only to the addition of Category 61A activities to the Existing Licence and the inclusion of groundwater monitoring bore SP47D to the monitoring network. No further changes to the aspects of the existing Licence have been requested by the Licence Holder.

Table 1 outlines the proposed changes to the existing Licence

Table 1: Proposed throughput changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
61A: Solid waste facility premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	N/A	15,000 m ³ per year	15,000 m ³ per year of timber power poles, meeting Class IV waste criteria, shredded (processed) on the Premises.

2.2.1 Waste characterisation

Waste characterisation sampling of the CCA treated power pole waste was conducted at 10 Western Power depots and one landfill stockpile. The results of this sampling indicated that the contamination levels of the waste are within the criteria for Class IV levels as per the *Landfill Waste Classification and Waste Definition 1999 (as amended 2019)* (Waste Definitions).

Waste characterisation data, submitted to DWER on 27 August 2020, demonstrated that 82 distinct samples of the waste were collected between May and July 2020 at the aforementioned 10 Western Power depots and one landfill stockpile. Arsenic is the main contaminant of concern which caused this waste to be considered a class IV contaminated solid waste. All samples demonstrated arsenic levels to be below both the Leachable Concentration Limit (ASLP4) of 50 mg/L and Concentration Limit (CL4) of 20,000 mg/kg for Class IV, as per Table 4 of the Waste Definitions.

It is also acknowledged that other contaminants identified within Table 4 of the Waste Definitions were sampled including metals, organochlorine pesticides, polycyclic aromatic hydrocarbons, phenols, petroleum hydrocarbons, benzene, toluene, ethylbenzene and xylenes, with all 82 samples below the Class IV CL4 for those contaminants.

The MSDS provided for the Koppers CCA Treated Timber indicates that arsenic is less than 10,000 mg/kg and is consistent with the results provided by the sampling regime.

Prior to the use of CCA as a treatment method, a mixture of aldrin (insecticide) and pentachlorophenol (fungicide) in a diesel-tar, termed 'pole mix' was applied to power pole butts to protect them from termite and fungal attack. Other treatments have historically been used to a lesser extent, with Preschem pole saver rods (slow release fungicide insecticide) the current preference.

Sampling of the power poles treated with a hydrocarbon-based application (i.e. pole mix, creosote) indicates a wide variance of contamination, with classification ranging from Class I to Class V waste due to variations in treatments over time and historical leaching rates. As such, only those power poles meeting Class IV criteria can be accepted to the Premises in accordance with the Existing Licence.

2.2.2 Groundwater monitoring network

Condition 1, Schedule 2 of Works Approval W6312/2019/1 required the works approval holder to decommission two groundwater bores (SP38D and SP44D) and install one new groundwater bore (SP47D) up hydraulic gradient from the Stage 14 landfill cell.

Correspondence was received by the department on 18 June 2020 and 10 August 2020 comprising a Monitoring bore decommissioning and completion and hydrogeological assessment report for Stage 14 landfill cell, which was submitted to satisfy the Environmental

Compliance Report requirements in Conditions 4 and 5 of Works Approval W6312/2019/1.

The department provided correspondence to EMRC on 15 October 2020 confirming that the submitted reports met the requirements of Conditions 4 and 5 in the works approval. The information provided demonstrates that SP47D was constructed in accordance with the works approval and SP38D and SP44D were decommissioned in accordance with the works approval. Where departures occurred, they were in accordance with Condition 3 of the works approval and are not considered to increase risk to public health, public amenity or the environment.

Accordingly, SP47D is proposed to be included within Table 17, Schedule of the Licence, with Figure 7 in the Licence updated to include the location of SP47D.

2.3 Part IV of the EP Act

The Premises is currently subject to five Ministerial Statements (MS) under Part IV of the EP Act. In regulating the premises under Part V, Division 3 of the EP Act, DWER will seek to avoid duplication of requirements imposed under Part IV. Pursuant to section 59B(7) of the EP Act, DWER will also not amend a Part V licence that is contrary to, or otherwise than in accordance with, an implementation agreement or decision.

A summary of the respective Ministerial Statements is provided below:

- MS 274 (15 July 1992) – Relates to the Red Hill Waste Management Facility Extension;
- MS 462 (21 November 1997) – Relates to the establishment of Class IV waste disposal cells at the existing Red Hill Waste Management Facility; and
- MS 976 (9 July 2014), MS 1092 (5 March 2019) and MS 1122 (20 January 2020) – Relate to the proposal to construct and operate a resource recovery facility within the existing Red Hill Waste Management Facility, for the processing of waste to produce energy, using either anaerobic digestion or gasification technology.

The scope of the amendment relates to MS 274 and 462. The proposed licence amendment does not propose to alter or duplicate requirements covered under these existing Statements.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below.

Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Shredding of treated timber (mainly treated using CCA and/or hydrocarbon based preservatives)	Air/windborne pathway	<p>The Hammel primary shredder possesses a water fed dust suppression system comprising water jets. These jets are located:</p> <ul style="list-style-type: none"> • on top of the shredding shaft to capture dust exiting the feed hopper (infeed area); • underneath the shredding shaft to capture dust immediately after the shredding process; • on the discharge (out feed) conveyor to capture any residual dust remaining. <p>A water cart can be used to dampen the power poles prior to shredding.</p> <p>The Licence Holder may not use the shredder water jets if sufficient dampening of the power poles prior to shredding results in minimal dust emissions.</p> <p>The shredder operates as a slow speed shredder which reduces the potential for dust emissions to be generated during operation.</p> <p>The shredding activity will occur within the existing Class IV Stage 2 cell, and will be approximately 9 to 10 meters below existing land contours, which will reduce airborne dust emissions. Figure 2 presents the proposed location of the shredder within the cross section and contours of the Class IV Stage 2 cell.</p> <p>Under all conditions including the shredding of power poles, the Class IV area is excluded to all employees and site visitors, and will have appropriate barricades and signage in place to prevent access.</p> <p>The shredder is fully functional from a remote control, with the excavator operator located within a positive pressure cabin with a High Efficiency Particulate Air (HEPA) filter installed. The operator will be also be required to wear a positive pressure respirator with an ABEK filter installed.</p> <p>As per the Hammel product specification sheet, the end shredded material size will be between 150 – 400 mm, reducing the potential for wind-blown emissions once stockpiled and disposed of.</p> <p>A water truck is available for wetting the shredded waste if required.</p>

Emission	Sources	Potential pathways	Proposed controls
Noise	Shredding of treated timber (mainly treated using CCA and/or hydrocarbon based preservatives)	Air/windborne pathway	<p>During operation of the shredder, the Class IV cell will be a set exclusion zone for all other heavy machinery and trucks, except for the excavator loading the shredder.</p> <p>The shredding activity will occur within the existing Class IV Stage 2 cell, and will be approximately 9 to 10 meters below existing land contours, which will dampen noise emissions. Figure 2 presents the proposed location of the shredder within the cross section and contours of the Class IV Stage 2 cell.</p> <p>Operation of the shredder will only occur during the prescribed hours of agreement with the City of Swan, being 6am to 6pm.</p> <p>The shredder operates at Lp 91dB(A) with a noise reducing exhaust system and the interior trim of the doors containing sound proofing.</p> <p>The Licence Holder operates the same Hammel shredder at their Hazelmere Recovery Resource Park (L9003/2016/1). Noise levels were measured in close proximity of the Hammel shredder and excavator in operation at this premises previously. The highest Sound Pressure Levels (SPL) were recorded approximately 10 meters away from the shredder operations and varied between 63.4 dB(A) and 81.5 dB(A). SPL were also recorded between 115 to 130 meters away from the operation (perimeter of premises), ranging from 50.4 dB(A) to 59.3 dB(A). The modelled results at the time indicated that noise levels were predicted to comply with assigned levels at all sensitive receptors.</p>
Contaminated water	Dust suppression controls used during the shredding of treated timber (mainly treated using CCA and/or hydrocarbon based preservatives)	Groundwater pathway	<p>While the existing Stage 2 Class IV cell containment and leachate management system will contain and manage excess contaminated water, the quantity of excess contaminated water entering the system will be minimised to reduce the burden on the containment system. This will be achieved using fine misting water sprays within the shredder. Application rates will be typical of what is used when a dusty load of waste is disposed of at the tipping face. This process will minimise the potential for the pooling of water, with the water likely absorbed by the timber or evaporated.</p>
Particulates containing CCA contaminants	Unintended fire within the Stage 2 Class IV cell	Air/windborne pathway	<p>Fire hazard management controls include:</p> <ul style="list-style-type: none"> The premises is fully fenced with entry gates locked at the close of business each day. After-hours security checks are undertaken three times per night on each day of the year by a contracted security company. These security checks include a circuit of the whole facility and in the summer months, a drive past of the actual tip face (an

Emission	Sources	Potential pathways	Proposed controls
			<p>area of elevated risk of a fire).</p> <ul style="list-style-type: none"> • Site Supervisors and machine operators are constantly monitoring areas that are being used for waste management activities. Access to the landfill area is restricted to commercial operators which minimises the risk of a fire emergency occurring at the landfill. • Specific waste acceptance controls are in place to ensure that no reactive materials likely to cause a fire are accepted at the landfill. • Site management monitor all fire restrictions placed by DFES or DPaW and on days of enforced restrictions plant and equipment use is restricted to areas of essential site operations only. • All boundaries have fire breaks as required by the City of Swan. Internal firebreaks in the form of roads, access tracks, cleared areas and easement under the power lines are also maintained and inspected to prevent the spread of a fire within the facility. • General earthmoving equipment and ancillary equipment is available on site for use in the event of a fire. In addition, dedicated fire-fighting plant include: <ul style="list-style-type: none"> - 2 Water Cart Trucks <ul style="list-style-type: none"> ▪ 15,000 L capacity tank ▪ 200 L foam injection systems fitted - 3 trailer mounted Quick Response Water Tanks (1 kL, 1.5 kL and 4.5 kL capacity) • Stormwater is collected and stored onsite and is available for fire suppression. An approximate combined capacity of up to 130 kL of water is available on site, with a further 500 kL of water are available in the clay pits adjacent to the west of the premises. • Fire management is documented in the Licence Holder's Fire and Emergency Plan. • Fires within the working face and adjacent areas will be extinguished using the stationary water tank and fire hose that is permanently located at the working face and used in conjunction with material drawn from the emergency clay stockpile.

Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

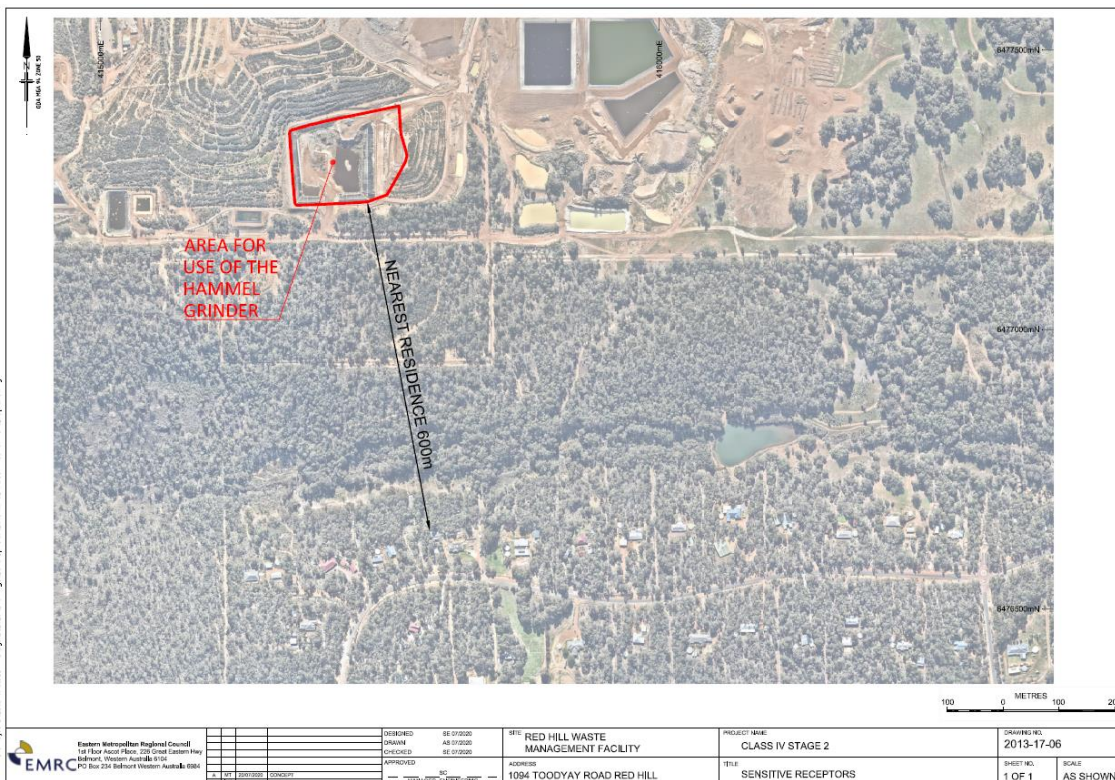
Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential premises	600 m south of the proposed shredding location. These lots are separated from the premises by a vegetation buffer (approx. 350- 440 m wide) located on Lot 501 on Plan 40105 and Lot 82 on Plan 18309, Parkerville (owned by the Licence Holder) and a conservation reserve (approx.50-125 m wide) on Lot 62 on Plan 23731 and Lot 15403 on Deposited Plan 40033, Parkerville (vested in the Department of Planning, Lands and Heritage and located in the Shire of Mundaring).
Environmental receptors	Distance from prescribed activity
Parks and Wildlife Management Lands and Waters	John Forrest National Park: adjacent to the southern boundary of the premises.
Threatened/Priority Fauna	The following species were identified within 2,000 m of the premises boundary: <ul style="list-style-type: none"> • Two endangered species (Baudin's cockatoo and Carnaby's cockatoo). • One vulnerable species (forest red-tailed black cockatoo). • One species of migratory bird protected under an international agreement (fork-tailed swift). • One Priority 4 species (quenda). • One species of special conservation interest (south-western brush-tailed phascogale).
Groundwater	There are two distinct water bearing layers underlying the site: <ul style="list-style-type: none"> • The upper layer comprises of a perched water table associated with shallow lateritic sediments mainly on low lying areas which have developed above pallid zone clays (impermeable layer of kaolinitic clays). Perched aquifers are reported to be limited in their lateral extent and considered ephemeral during and post winter. • The lower layer comprises the regional

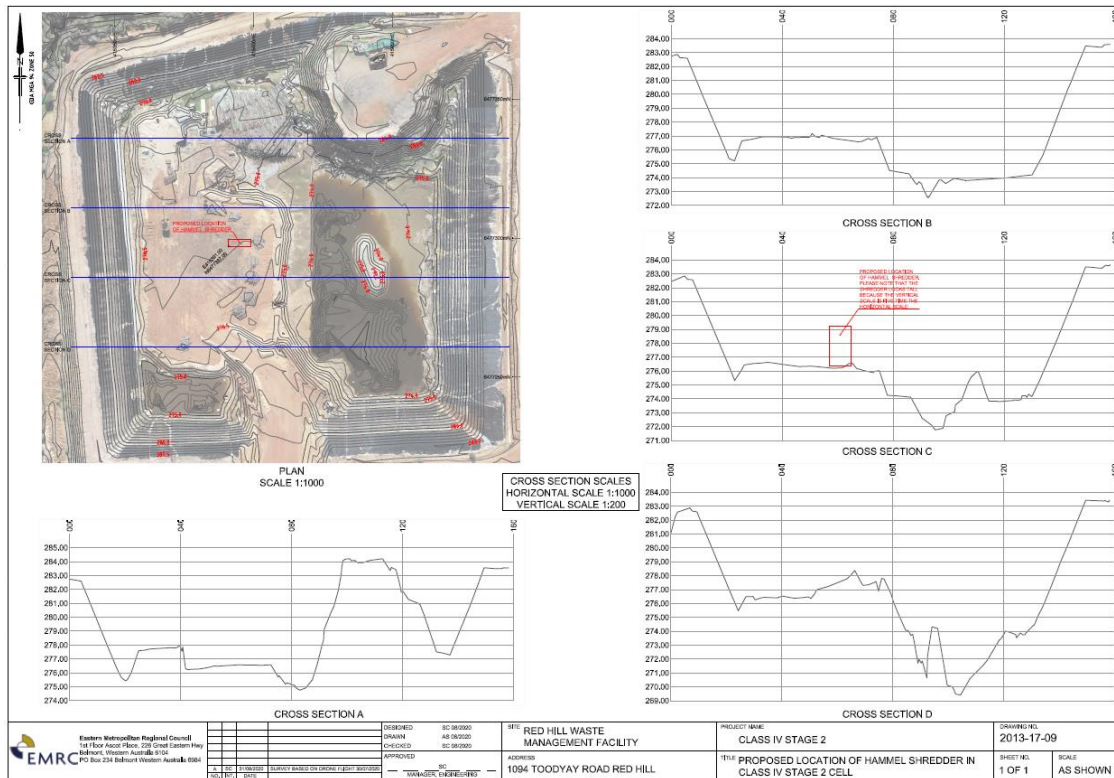
	<p>groundwater table within granite bedrock (fracture systems) or within extensive saprolite grits (porous, weathered bedrock) often semi confined by pallid zone clays.</p> <p>Based on a comparison of groundwater levels presented in the 2019 Annual Environmental Report, the inferred separation distance between the base of the Stage 2 Class IV cell liner sequence (top of subgrade) and the groundwater table ranges from about 1.5 to 8.5 m across the cell footprint. Limited groundwater bores are available immediately adjacent to the landfill cell therefore groundwater contours have been used to infer estimated separation distances.</p> <p>The Premises is not located within a <i>Rights in Water and Irrigation Act 1914</i> proclaimed Groundwater Area.</p>
Surface water	<p>Christmas Tree Creek</p> <ul style="list-style-type: none"> • 480m south of the southern boundary of the Class IV cell. • Flows in a westerly direction parallel to the southern boundary of the premises and is a tributary to the Jane Brook and Swan River.

Figure 1: Distance to sensitive receptors¹



¹ Figure supplied as part of the application

Figure 2: Location of shredder within the Class IV cell²



² Figure supplied as part of the application

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L8889/2015/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
Operation								
Shredding of treated timber.	Dust containing CCA and hydrocarbon	Air/windborne pathway causing impacts to health and amenity	Residential premises 600 m south of the proposed shredding location	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	Y	Condition 4, Table 2 Condition 5, Table 3	Refer to Section 3.3.1
	Noise	Air/windborne pathway causing impacts to health and amenity	Residential premises 600 m south of the proposed shredding location	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y	Condition 4, Table 2 Condition 5, Table 3	The modelled results at the Licence Holder's Hazelmere facility time for the same Hammel shredder indicated that noise levels were predicted to comply with assigned levels at all sensitive receptors. DWER records demonstrate that no complaints pertaining to noise have been attributed to this premises since the operation of the shredder. The distance to sensitive receptors at the Premises is significantly greater than that at the Hazelmere premises, suggesting a lower risk to sensitive receptors. The shredder will also be located 9-10 m below existing land contours within the Stage 2 Class IV cell, further dampening noise emissions. Operation of the shredder will only occur during the prescribed hours of agreement with the City of Swan, being 6am to 6pm, and no other heavy plant or equipment will operate within the Class IV cell during shredder operation (excepting a loading excavator). DWER records demonstrate that no complaints pertaining to noise have been attributed to the Premises in the last 3 years. The Licence Holder will be subject to the provisions of the <i>Environmental Protection (Noise) Regulations 1997</i> . The Delegated Officer considers the separation distance sufficient to ensure daytime noise emissions will not significantly impact upon amenity during operation.
Unintended fire within the Stage 2 Class IV cell.	Particulates containing CCA contaminants	Air/windborne pathway causing impacts to health and amenity	Residential premises 600 m south of the proposed shredding location	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	N	Conditions 1, 17 and 18 Condition 5, Table 3 Condition 13	Condition 17 requires that the licence holder shall ensure an adequate water supply and a means of distribution be provided at all times to extinguish a fire at any part of the premises. Regulatory controls relating to the management of power pole stockpiles prior to shredding, including stockpile size and separation distances, have been imposed by the department. These controls mitigate both the risk of fire occurring from the stockpiles and the timeliness risk associated with fire vehicle access. A condition relating to cover of the disposed shredded waste has been included by the department to mitigate the risk of fire emanating from the shredded waste, given the flammable nature of the waste. The department notes that Ministerial Statement 462 does not contain any requirements relating to cover within the Class IV cells. The original assessment for the Class IV cell, as identified in EPA Bulletin 867, determined that odour and dust related factors did not require EPA evaluation, based on the proposal characteristic that Class IV waste would be covered and compacted daily. However, the Class IV waste was considered likely to be predominantly contaminated soils. As such, the cover requirement proposed within this licence amendment is not contrary to MS 462, and is considered necessary to mitigate the likelihood of a fire event.
Dust suppression controls used during the shredding of treated timber.	Potentially contaminated water	Sub-surface seepage, causing impacts to ecosystem health, or increasing contaminant loads in groundwater.	Underlying groundwater and down gradient surface water receptors (which receive groundwater discharge) – refer to Table 4.	Refer to Section 3.1.1	C = Slight L = Rare Low Risk	Y	Condition 4, Table 2 Condition 6, Table 4	While the existing Stage 2 Class IV cell containment and leachate management system will contain and manage excess contaminated water, the quantity of excess contaminated water entering the system will be minimised to reduce the burden on the containment system. The application rates of fine misting water sprays within the shredder for dust suppression will minimise the potential for the pooling of water. The Delegated Officer considers the Licence Holder's controls sufficient to mitigate the generation of potentially contaminated water during operation.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Underlined text** depicts additional regulatory controls imposed by department.

3.3 Detailed risk assessment

Contaminated dust emissions

Dust emissions have the potential to impact public health when inhaled; affecting both the respiratory and cardiovascular systems. Amenity may also be impacted by the deposition of material on a variety of surfaces such as vehicles, dwellings and clothing. The shredding of CCA treated waste material would present an additional risk to receptors due to dust emissions potentially containing adverse contaminants.

The receptors which may be most affected by dust emissions from the Premises would be the occupants of residences located approximately 600 m south of the shredding activities within the Premises.

The main contaminant of concern with CCA-treated timber is arsenic, which can potentially be inhaled from airborne particulates created during the shredding activity. It is noted, however, that the general population is exposed to naturally occurring arsenic in soil, water and food, and that the human body can tolerate small amounts of arsenic.

Limited guidance on risks to receptors associated with shredding of CCA treated timber is available. In relation to risks in the immediate vicinity, the Department of Health advises⁴ to “wear a dust mask when sawing and machining treated wood” and “whenever possible, perform these operations outdoors to avoid a build up of contaminated sawdust indoors.”

The Delegated Officer considers that the combination of the proposed dust suppression controls, location of the shredding activity 9 to 10 meters below existing land contours and a 600 m separation distance will be sufficient to mitigate contaminated dust emissions.

Key findings

The Delegated Officer has reviewed the information regarding contaminated dust emissions and has found:

1. *that licence holder controls in addition to existing regulatory controls are sufficient to mitigate off-site impacts in accordance with Department of Health advice.*

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
City of Swan advised of proposal on 17 September 2020	The City of Swan replied on 26 October 2020, advising that: <ul style="list-style-type: none">• the proposal is consistent with the planning approval for a 'Waste Facility' issued for the land on 21 August 2006; and	N/A

⁴ https://healthywa.wa.gov.au/Articles/S_T/Stay-safe-around-copper-chrome-arsenate-treated-wood, accessed 23 September 2020

	<ul style="list-style-type: none"> the proposal is consistent with the City's Local Planning Scheme No. 17. 	
Department of Health (DoH) advised of proposal on 17 September 2020	<p>DoH replied on 6 October 2020, recommending:</p> <ul style="list-style-type: none"> visible and non-visible dust is managed to prevent off-site impacts; containment is satisfactory for preventing loss of leachate; measures are taken to prevent fires given that inhalation is a major pathway for toxic health effects of CCA; odour and vermin control are managed on-site; noise is managed satisfactorily. 	<p>Controls for dust mitigation proposed by the licence holder are deemed adequate to prevent off-site impacts.</p> <p>Current infrastructure requirements for the Stage 2 Class IV cell within the licence are appropriate to contain and manage leachate generation.</p> <p>Current licence conditions 15-17 relate to existing fire management controls. Further regulatory controls have been proposed relating to stockpile management and cover requirements, which are considered adequate to mitigate the risks associated with fire.</p> <p>Odour and vermin controls have been previously considered adequate during previous amendments.</p> <p>The Delegated Officer considers the separation distance sufficient to ensure daytime noise emissions will not significantly impact upon amenity during operation.</p>
Works Approval/Licence Holder was provided with draft amendment on 13 October 2020	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
4, Table 2	Inclusion of infrastructure requirements to mitigate dust emissions from shredding operations.
5, Table 3	Inclusion of processing requirements to mitigate dust, noise and fire associated emissions from shredding operations.
13	Inclusion of landfill cover requirements for waste disposed of to the Class IV cell.
Table 17, Schedule 2	Updated to include groundwater monitoring bore SP47D
Figure 7, Schedule 2	Updated to include groundwater monitoring bore SP47D

References

1. Department of Environment Regulation (DER) 2019, *Guideline: Decision Making*, Perth, Western Australia.
2. DER 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Regulatory Principles*, Perth, Western Australia.
4. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
5. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Potentially contaminated water	Additional information submitted in relation to management of potentially contaminated water generated by dust suppression activities.	Information incorporated into the Amendment Report.
Particulates containing CCA contaminants	Additional information submitted in relation to fire management and the mitigation of particulates containing CCA contaminants resulting from fires.	Information incorporated into the Amendment Report.
Cover	The cover requirements for Class IV cell referred to in the EPA Bulletin 867 relate only to odour, with the aim of 'ensuring odours are kept to a minimum' and has no relevance to fire within the Stage 2 Class IV cell. Apart from this requirement being counter productive to shredding the power poles in order to maximise airspace within the cell, the shredded power poles will not result in any odour emissions.	<p>While DWER acknowledge that EPA bulletin 867 for cover was in relation to odour, the requirement for cover in this amendment decision is based on the risks associated with the shredded power pole waste and other potential Class IV wastes. Cover of the shredded material is an important control in mitigating the risk of fire, whilst also mitigating risks associated with odour, particulate lift-off, vectors and fauna access. It is noted that this cover requirement is applicable for all Class IV wastes deposited within the Class IV cell, other than encapsulated waste which poses limited environmental or health risks.</p> <p>DWER also notes that the cover requirement is not necessarily counter productive to maximising airspace within the cell, as the Licence allows the use proprietary alternative daily cover treatments, as an alternative to the use of clean fill or other suitable soil materials, that satisfies the requirement to mitigate against potential environmental health impacts.</p>
Condition 4, Table 2: Shredder (query actually relates to Condition 5, Table	The Licence Holder acknowledges the Hammel primary shredder possesses a water fed dust suppression system comprising water jets located at various positions. The Licence Holder requests the requirement	Table 3 has been amended to allow the Licence Holder to achieve the wetting down of power poles by either the use of the shredder water spray infrastructure or the use of a water

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Condition	Summary of Licence Holder's comment	Department's response
3)	<p>for water jets on the Hammel to be used as a dust suppression system is amended to enable a degree of flexibility based on the most effective dust suppression method. The suggested change to the wording is the incorporation of the words 'and/or water cart to be available to apply dust suppression as required. The rationale behind this request is because trials undertaken during a training session using non-treated poles on the Hammel without the dust suppression (water) connected in moderate winds, resulted in extremely favourable results and demonstrated that dust was not an issue and that it was more effective to wet down the power poles before they enter the hopper to reduce dust. This result is due to the fact that the Hammel is a slow speed shredder and the nature of the material being shredded.</p>	<p>cart prior to shredding, ensuring that dust emissions are minimised.</p> <p>Table 2 still requires the shredder to be fitted with the water spray infrastructure to allow for the use of the dust suppression system as required.</p>
Condition 5, Table 3: Power pole processing (operation of equipment within the cell)	<p>The Licence Holder requests the process limits stating that '<i>The shredder must not operate when other heavy plant or heavy vehicles are operating within the Stage 2 Class IV cell, with the exception of one excavator to load the shredder</i>' be amended to state '<i>The shredder must not operate when other heavy plant or heavy vehicles are operating within the Stage 2 Class IV cell, with the exception of one excavator, one loader to load the shredder and clear piles (as required) and one water cart.</i>'</p> <p>The rationale for this is that the Loader will be required at times to push up product / clear product. Also, the operators may require the use of the loader rather than excavator in the event of break downs and/or use with smaller product.</p>	<p>The phrasing of the requirement has been amended to reflect the Licence Holder's comments.</p>
Condition 5, Table 3: Power pole processing (stockpile management)	<p>The Licence Holder requests that storage specifications related to length, height, width and separation distances are amended to not be so prescriptive and enable greater flexibility for current operational requirements.</p> <p>The requirement that the individual stockpiles have a maximum width of 20m if fire brigade vehicle access is available either side is deemed irrelevant, and recommended to be removed given:</p> <ul style="list-style-type: none"> - All historical fires that have occurred at the Red Hill Waste Management Facility have not required the assistance of external fire fighters and have been effectively dealt with using internal resources, controls, equipment and procedures that are in place as already described above. - There is access to all sides of the stockpile which enables fire fighters access from the North and North West side, from on top 	<p>Stockpile management conditions remain in place due to the risks associated with a potential fire incident. While DWER acknowledges the existing fire management controls at the premises, the stockpile regulatory controls:</p> <ul style="list-style-type: none"> - limit individual stockpile volume which reduces the fuel load available to a potential fire; and - limits the potential for fire to spread to adjacent stockpiles by reducing radiant heat transfer between stockpiles.

Condition	Summary of Licence Holder's comment	Department's response
	<p>of the batter, and South and South West from inside the cell.</p> <p>Finally, the requirement that the stockpiles is separated with at least 6m of clear ground is also deemed irrelevant, given there are no further stockpiles.</p>	

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Works approval	<input type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L8889/2015/1	
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received	22/07/2020			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Eastern Metropolitan Regional Council			
Premises name	Red Hill Waste Management Facility			
Premises location	Lot 1 on Diagram 15239, Lot 2 on Diagram 68630 and Lot 11 on Diagram 69105 Toodyay Road Red Hill and Lot 12 on Plan 26468 Toodyay Road Gidgegannup			
Local Government Authority	City of Swan			
Application documents				
HPCM file reference number:	A1916057			
Key application documents (additional to application form):	Location map Shredder brochure			
Scope of application/assessment				

<p>Summary of proposed activities or changes to existing operations.</p>	<p>EMRC is proposing to shred CCA (pine and hardwood) treated poles together with hydrocarbon based pole butts to consolidate and maximise the space within the Class IV cell.</p> <p>This will be done by the use of a Hammel Shredder, the same plant as used at the Hazelmere facility. It is proposed that the Hammel Shredder will be placed within the Class IV Cell at Red Hill and will operate during prescribed hours of agreement within the City of Swan, 6am to 6pm.</p> <p>The licence would require amendment to the existing infrastructure and waste processing tables.</p>	
<p>Category number/s (activities that cause the premises to become prescribed premises)</p>		
<p>Table 1: Prescribed premises categories</p>		
<p>Prescribed premises category and description</p>	<p>Proposed production or design capacity</p>	<p>Proposed changes to the production or design capacity (amendments only)</p>
<p>Category 61A: Solid waste facility - premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.</p>	<p>1 000 tonnes or more per year</p>	<p>61A is a new category – actual proposed volumes were not included within the application</p>
<p>Legislative context and other approvals</p>		
<p>Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/></p>
<p>Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Ministerial statement No: MS 462 EPA Report No:</p>
<p>Has the proposal been referred and/or assessed under the EPBC Act?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Reference No:</p>
<p>Has the applicant demonstrated occupancy (proof of occupier status)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input checked="" type="checkbox"/> Expiry: Demonstrated through previous applications</p>
<p>Has the applicant obtained all relevant planning approvals?</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>	<p>Approval: Expiry date: If N/A explain why? Query with City of Swan regarding planning approval for shredding</p>

Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: Priority: P1 / P2 / P3 / Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Classification: Contaminated - remediation required Date of classification: Oct 27, 2015</p>
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