Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number	L9041/2017/1
Licence Holder	Elan Energy Matrix Pty Ltd
ACN	611 714 580
File Number	DER2017/000368-1
Premises	Elan Energy Management 9 Fargo Way WELSHPOOL WA 6106
	Legal description –
	Lot 60 on Deposited Plan 13025 Certificate of Title Volume 1549 Folio 111 As defined by the Premises map attached to the Revised Licence
Date of Report	Certificate of Title Volume 1549 Folio 111 As defined by the Premises map attached to the Revised

Abbie Crawford A/Manager, Waste Industries

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

Table of Contents

1.	Decis	ion summary	1
2.	Scope	e of assessment	1
	2.1	Regulatory framework	1
	2.2	Amendment summary	1
	2.3	Operational aspects	2
	2.4	Consolidation of Licence	2
3.	Legis	lative Context	3
	3.1	Part IV of the EP Act	3
	3.2	Environmental Protection (Controlled Waste) Regulations 2004	3
	3.3	Development approval	3
4.	Risk a	assessment	4
	4.1	Source-pathways and receptors	4
		4.1.1 Emissions and controls	4
		4.1.2 Receptors	6
	4.2	Risk ratings	7
5.	Consi	ultation10	D
6.	Concl	usion10	0
	6.1	Summary of amendments1	1
Refe	rences	512	2
Appe	endix ²	I: Application validation summary1	3
Table	1: Ass	essed production capacity	1
Table	2: Lice	enses consolidated in this amendment	2
Table	3: Loc	ation and EPA authorised extent of physical and operational elements	3
Table	4: Lice	ence Holder controls	5
Table	5: Ser	sitive human and environmental receptors and distance from prescribed activity.	6
		c assessment of potential emissions and discharges from the Premises during	8
Table	7: Cor	sultation10	0
Table	8: Sun	nmary of licence amendments1	1
Figur	e 1: Dis	tance to sensitive receptors	6

1. Decision summary

Licence L9041/2017/1 is held by Elan Energy Matrix Pty Ltd (Licence Holder) for Elan Energy Management (the Premises), located at 9 Fargo Way, Welshpool.

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 L9041/2017/1 has been granted.

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 Amendment summary

The Licence Holder operates Elan Energy Management under Licence L9041/2017/1 issued under Part V of the *Environmental Protection Act 1986* (EP Act), granted on 11 May 2017. Used tyres are collected from tyre retailers for the purpose of shredding and on-sale. Whole used tyres are stored inside the tyre storage and shredding building in bins placed on a concrete floor and in overflow stockpile pods. Shredded tyres are transferred to containers located outside the tyre storage and shredding building for transport off-site. The tyre shredder is located and operated within the tyre storage and shredding building.

The premises suffered damage during a fire in 2020 and subsequent reconstruction activities have made improvements to infrastructure at the premises. On 20 May 2022, the Licence Holder submitted an application to the department to amend Licence L9041/2017/1 under section 59 and 59B of the EP Act to amend wording of licence conditions to adequately reflect the improved infrastructure.

This amendment is limited only to modification of the licence conditions. There are no proposed changes to Categories 57 or 61A activities from the previously assessed in Existing Licence L9041/2017/1, as outlined in Table 1.

Category	Assessed production capacity
Category 57 – Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	Maximum of 10 000 whole used tyres and a maximum of 7 560 EPU shredded tyres, conveyor belts and rubber at any one time within the premises
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.	Up to 20 000 tonnes per year (tyre shredding)

Table 1: Assessed production capacity

2.3 **Operational aspects**

Used tyres from tyre retailers are collected by the Licence Holder and transported to the premises by a vehicle on a 'just-in-time' basis. In this way, large numbers of tyres will not be stored on the site. It is planned that seven deliveries of tyres per day will be received, each containing up to 500 tyres of different sizes including passenger, light truck, heavy vehicle and off-road tyres.

The delivery trucks will be unloaded, and the tyres will be stored inside the tyre storage and shredding building in one of two used tyre receival bins (72m³ capacity each) before being directly fed into the tyre shredder located within the Tyre Storage and Shredding Building.

The shredder has the capacity to shred up to 900 tyres per hour. On a normal production day (about 8 hours) approximately 7,000 tyres can be shredded. The Licence Holder expects to process up to 20,000 tonnes of tyres per year.

Following the shredding process, the shredded material (rubber and steel fragments) will be conveyed to one of three enclosed shipping containers (76m³ capacity each) located within the yard area. Once the containers are full, the shredded material will be transported offsite.

An area to store excess tyres will be maintained to manage times when the receival bins are full at the time of a new delivery or in the event that the shredder is not operational. Provision will be made for up to four excess storage stockpile pods for used passenger tyres, each with a proposed maximum capacity of 158 m³. One storage pod will be maintained for off road tyres with a proposed maximum capacity of 158 m³.

Stormwater generated outside the building is collected within the premises and is then discharged to the City of Canning's storm water system.

The external yard area comprises of a concrete and bitumen hardstand with above ground containment areas and subsurface sumps in a containment-drainage system so that, in the event of a fire at the premises, contaminated firefighting water will be contained on site. The containment volume of the above ground and subsurface areas has been based on the use of three fire hydrants operating at a discharge rate of 10L/sec water for a period of 90 minutes, as required by Fire and Rescue NSW guideline, "Guideline for bulk storage of rubber tyres", 2014. A shut-off valve is located on the discharge pipe from the final drain to prevent potentially contaminated firefighting water discharging from the premises into the stormwater drainage system.

2.4 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the Amendment Notices as summarised in Table 2.

Instrument	Issued	Summary of approval			
L9041/2017/1	11/05/2017	Licence granted			
L9041/2017/1	16/05/2022	Notice of Amendment to remove the requirement to submit an Annual Environmental Report (AER)			
L9041/2017/1	27/09/2022	Amendment to licence conditions after reconstruction works			

Table 2: Licenses consolidated in this amendment

The obligations of the Licence Holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence; and
- revised licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency;

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 6.1. Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

3. Legislative Context

3.1 Part IV of the EP Act

Ministerial Statement 1064 was issued to the Licence Holder for this premises by the Environmental Protection Authority on 2 October 2017. Conditions of the statement relevant to this Licence include:

Condition 1-1 When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Table 3 below, unless amendments to the proposal and the authorised extent of the proposal have been approved under the EP Act.

Element	Location	Authorised Extent		
Tyre Resource Recovery Facility	Lot 60, 9 Fargo Way Welshpool	Up to 0.46 hectares on cleared land, within existing buildings.		
End-of-life tyres processed	Lot 60, 9 Fargo Way Welshpool	Up to 60 tonnes per day		

Table 3: Location and EPA authorised extent of physical and operational elements

3.2 Environmental Protection (Controlled Waste) Regulations 2004

As a result of the fire at the premises in December 2020, the waste facility profile in the DWER Controlled Waste Tracking System for the premises was deactivated on 16 December 2020, whereby the premises could no longer accept controlled waste. The Licence Holder will be required to re-activate their profile in the Controlled Waste Tracking System prior to recommencing waste acceptance at the premises.

3.3 Development approval

The City of Canning granted development approval on 5 July 2021 for the reconstruction works, subject to conditions. The conditions relevant to this licence include:

- All developments onsite to be connected to the sewer to the satisfaction of the City.
- Within 90 days of commencing operation, ground truthing of all noise sources from the development, is to be carried out by a suitably qualified acoustic consultant, and a report provided to the City that demonstrates all noise emissions from the site comply in all respects with the with the *Environmental Protection (Noise) Regulations 1997*, to the

satisfaction of the City.

- All stormwater drainage lines that discharge from the development site, into the City's Stormwater network, are to be fitted with isolation valves and each valve is to be maintained in good working order at all times, to the satisfaction of the City.
- Prior to occupation or use of the development provide the City with an up to date as constructed stormwater drainage plan, to the satisfaction of the City, identifying all drainage lines, soak wells, and isolation valves.
- Stormwater drains with the potential to be impacted by rubber fines to have suitable filtering/capturing devices installed, to the satisfaction of the City.
- Within 90 days of issuance of the Development Approval, provide the City with an emergency response plan, responding to the risk of fire and addressing the control measures in place to contain all contaminated stormwater and prevent it being discharged to the City's drainage network.
- Tyres are not permitted to be stored outside of building, unless otherwise approved by the City or the DWER.
- Storm water from all roofed and paved areas must be collected and discharged via the existing approved drainage system. Storm water must not affect or be allowed to flow onto or into any other property. Drainage systems must be in accordance with the Building Code of Australia.

Conditions of the existing licence are consistent with the development approval.

4. 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 *Guideline: Risk* assessments (DWER 2020).

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.

4.1 Source-pathways and receptors

4.1.1 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 4 below. Table 4 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Sources	Emission	Potential pathways	Proposed controls
Waste acceptance and handling	Noise	Air / wind dispersion	 Noise monitoring completed in 2017 in accordance with licence conditions, and implementation of recommendations to meet EP Noise Regs.
Vehicle movements			 Requirement of City of Canning to conduct noise monitoring once operational.
Waste storage and	Smoke resulting from	Air / wind dispersion	 The premises will be secured when unattended;
processing	unauthorised fires		 Tyre stockpiles will be a minimum distance of 1 m from the roof;
			 Tyre stockpiles will be a minimum of 3 m from other tyre storage; and
			• Tyre stockpiles will be a minimum of 3 m from any wall of the building.
	Contaminated firefighting	Overland flow Subsurface	 The entire premises is surfaced with concrete/bitumen;
	water resulting from unauthorised fires	seepage	 Bunding is installed along all boundaries of the premises to prevent the egress of firefighting water off-site;
			• The bunded yard area has been constructed to contain at least 162,000 L of firewater as outlined in "Guideline for bulk storage of rubber tyres", Fire and Rescue NSW, dated 5 December 2014.
			• A shut-off valve has been installed on the discharge pipe from the final drain to ensure that during a fire the discharge point can be closed off to prevent firefighting water from entering the stormwater system.
			The stormwater shut-off valve will be closed in the event of a fire.
			• Contaminated firefighting water contained in the bunded yard area will be collected, transported and disposed of off-site by a licensed contractor.
			• An up to date stormwater drainage plan has been provided that depicts the installation of stormwater manholes.

4.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 5 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 (*Guideline: Environmental siting* (DWER 2020)).

Table 5: Sensitive human and environmental receptors and distance from prescribed	
activity	

Human receptors	Distance from prescribed activity
Residential premises	600 m south-east of the premises boundary 850 m west of the premises boundary
Environmental receptors	Distance from prescribed activity
Bush Forever sites	Site No 2842 is 640 m east of the premises boundary Site No 4242 is 730 m west of the premises boundary
Conservation site	785 m south of the premises boundary



Figure 1: Distance to sensitive receptors

4.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 4.1. 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 4.1), 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 6.

The Revised Licence L9041/2017/1 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).

Risk Event					Risk rating ¹	Licence	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	Holder's controls sufficient?		
Operation					·			•
Waste acceptance and handling Vehicle movements	Noise	Air / wind dispersion Impacts to amenity	Residential premises	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Yes	N/A	The Licence Holder has satisfactorily met the noise monitoring requirements of the original Licence, therefore the Delegated Officer has removed existing noise conditions. The development approval from the City of Canning to require noise monitoring upon commencement of operations is sufficient to ensure noise emissions meet the requirements of the EP Noise Regs. No further regulatory controls are required.

Table 6. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event	Risk Event R			Risk rating ¹	Licence		Justification for	
Source / Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	additional regulatory controls
	Smoke resulting from unauthorised fires	Air / wind dispersion Impacts to air quality and amenity	Residential premises	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Yes	Conditions 2, 3 and 7	N/A
Waste storage and processing	Contaminated firefighting water resulting from unauthorised fires	Overland flow Subsurface seepage Impacts to surface water and groundwater quality	Bush Forever sites Conservation reserves	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Yes	Conditions 3 and 7	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

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

5. Consultation

Table 7 provides a summary of the consultation undertaken by the department.

Table 7: Consultation

Consultation method	Comments received	Department response
City of Canning advised of proposal (27/06/2022)	The City of Canning advised planning approval was granted on 26 August 2021 and provided the following comments on this application: Firefighting water storage/containment amendment – The applicant proposes to change a licence condition to include the onsite stormwater network into the sites firefighting water storage capacity. The City of Canning's preference is that the onsite stormwater network does not form part of the firefighting water storage capacity. The stormwater drainage plan provided within attachment 2 shows the onsite stormwater system consists of approximately 31 interconnected stormwater pits (existing and new), 9 of these are soak wells that allow fluids to directly soak/leach into the environment, thereby not contain firefighting water and instead allowing it to leach from the site. The stormwater drainage plan shows 18 pits, including 8 soak wells to be situated within the 103m ³ above ground storage area, which means it would be difficult preventing firefighting water enter these drains. No firefighting water storage is shown within the buildings, could the buildings be bunding to accommodate the required capacity or a portion of the capacity required. Containing the firefighting water or a portion of it before it escaped the buildings would have a better outcome than allowing it to escape.	The applicant confirmed on 22/07/2022 there have been no soak wells installed at the premises and provided an up to date stormwater drainage plan which depicts the installation of stormwater manholes. The Delegated Officer has considered this alteration within the scope of the risk assessment.
Licence Holder was provided with draft amendment (22/08/2022)	On 21 September 2022 the applicant provided a correction to the description of the external yard area regarding above ground and subsurface sumps for firefighting water containment, and advised they are happy to proceed to granting.	Correction made

6. 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.

L9041/2017/1

Summary of amendments 6.1

Table 8 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.

Condition no.	Previous condition no.	Proposed amendments		
N/A	Schedule 2 Table 2	Primary Activities moved to front page of Licence as per current licensing format.		
N/A	Condition 1 Table 1	Redundant condition. Revised to current licensing format.		
Condition 1 Table 1	Condition 8	Incorporated into Condition 1 Table 1, as per current licensing format.		
	Condition 9	Incorporated into Condition 1 Table 1, as per current licensing format.		
Condition 2	Condition 10	Renumbered.		
Condition 3 Table 2	Condition 7	Incorporated into Condition 3 Table 2, as per current licensing format.		
	Condition 11	Incorporated into Condition 3 Table 2, as per current licensing format.		
	Condition 12	Amendment of condition to accurately reflect the upgraded stormwater management system, and incorporated into Condition 3 Table 2, as per current licensing format.		
	Schedule 2 Table 2	Infrastructure and equipment table updated as requested, and incorporated into Condition 3 Table 2, as per new licensing format.		
Condition 4	Condition 13	Renumbered.		
Condition 5	Condition 3	Condition revised to current licensing format.		
Condition 6	Condition 4	Condition revised to current licensing format.		
Condition 7	Condition 6	Renumbered.		
Condition 8	Condition 2	Condition revised to current licensing format.		
Condition 9	Condition 3	Condition revised to current licensing format.		
N/A	Condition 5	Redundant condition. Revised to current licensing format.		

Table 8: Summary of licence amendments

L9041/2017/1

N/A	Condition 14	Deletion of conditions due to completion of noise monitoring requirements in 2017.
	Condition 15	
	Condition 16	
Schedule 1	Schedule 1	Map updated as requested.
Premises Layout Plan	Premises Layout Plan	
Schedule 1 Stormwater drainage plan	N/A	New plan inserted.
Schedule 1 Fire and emergency management plan	N/A	New plan inserted.

References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLIC	ATION S	UMMARY					
Application type							
Works approval							
Licence		Relevant works approval number:		None			
		Has the works approval been complied with?		Yes 🗆 No 🗆			
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes No N/A			
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes 🗆 No 🗆			
		Date Report received:					
Renewal		Current licence number:					
Amendment to works approval		Current works approval number:					
Amendment to		Current licence number:	L9041/2017/4				
licence		Relevant works approval number:		N/A			
Registration		Current works approval number:		None			
Date application received		20 May 2022					
Applicant and Prem	ises deta	ils					
Applicant name/s (full legal name/s)		Elan Energy Matrix Pty Ltd					
Premises name		Elan Energy Management					
Premises location		9 Fargo Way Welshpool WA 6106					
Local Government Authority		City of Canning					
Application docume	ents						
HPCM file reference number:		DER2017000368-1					
Key application documents (additional to application form):		Supporting document					
Scope of application	n/assess	ment					
Summary of proposed activities or changes to existing operations.		Licence amendment					
		Amendment of Licence to reflect modifications and upgrades of tyre shredding facility after fire damage and reconstruction					

Prescribed premises category and description	Assessed product design capacity	produc		sed changes to the ction or design ty (amendments only)	
Category 57 Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	Not more than 10,000 wh tyres and a maximum of 7, EPU shredded tyres at a one time within the premise		N/A		
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.	Not more than 20, of tyres shredded p		N/A		
egislative context and other app	rovals				
Has the applicant referred, or do the their proposal to the EPA under Pa as a significant proposal?		Yes 🗆 🛛	lo 🖂		
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?		Yes 🛛 N	lo 🗆	Statement 1064	
Has the proposal been referred an under the EPBC Act?	Yes 🗆 🛛 N	lo 🖂			
Has the applicant demonstrated or occupier status)?		lo 🗆	Certificate of title		
Has the applicant obtained all relevation approvals?	Yes ⊠ N N/A □	lo 🗆	Approval: 05/07/2021		
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal? Has the applicant applied for, or have an existing		Yes 🗆 🛛	No 🖂	No clearing is proposed.	
CAWS Act clearing licence in relati Has the applicant applied for, or ha	Yes 🗆 N	lo 🛛	No clearing is proposed. Licence / permit no		
Act licence or permit in relation to t Does the proposal involve a discha	Yes 🗆 N	lo 🛛	required.		
designated area (as defined in se Act)?	Yes 🗆 N	o 🛛			
Is the Premises situated in a Pul Source Area (PDWSA)?	Yes 🗆 No 🖂				
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004,</i> <i>Environmental Protection (Controlled Waste)</i> <i>Regulations 2004, State Agreement Act xxxx</i>)		Yes 🗆 N	0 ⊠		
Is the Premises within an Environn Policy (EPP) Area?	Yes 🗆 No	\bowtie			
Is the Premises subject to any EPI	Yes 🗆 No	\mathbf{D}			
Is the Premises a known or suspect					