ENVIRONMENTAL SCOPING DOCUMENT

PROPOSAL NAME:	**TYRE RESOURCE RECYCLING FACILITY**
ASSESSMENT NUMBER:	**2093**
LOCATION:	**LOT 90, 9 FARGO WAY, WELSHPOOL**
LOCAL GOVERNMENT AREA:	**CITY OF CANNING**
PROPONENT:	**ELAN ENERGY MATRIX PTY LTD**
PUBLIC REVIEW PERIOD:	**4 WEEKS**

1. Introduction

The above proposal is being assessed by the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986* (EP Act) at the level of Public Environmental Review (PER). This Environmental Scoping Document (ESD) sets out the requirements for the environmental review of the proposal. The purpose of an ESD is to:

- provide proposal-specific guidelines to direct the proponent on the preliminary key environmental factors or issues that are to be addressed during the environmental review and preparation of the environmental review report;
- identify the required work that needs to be carried out; and
- timing of the environmental review.

The proponent must conduct the environmental review in accordance with this ESD and then report to the EPA in an environmental review report (PER document). As well as the proposal-specific requirements for the environmental review identified in this ESD, the PER document must also address the generic information requirements listed in section 10.2.4 of the EPA's *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012* (Administrative Procedures). When the EPA is satisfied that the PER document adequately addresses both of these requirements, the proponent will be required to release the document for a public review period of four weeks.

The EPA is currently in the process of updating its Administrative Procedures. If application of these new procedures to the assessment of this proposal is neither appropriate nor practicable, the Administrative Procedures applying at the time the decision was made on the level of assessment for the proposal will apply to that proposal.

This ESD has been prepared by the EPA in consultation with the proponent, decision-making authorities and interested agencies consistent with EPA Environmental Assessment Guideline (EAG) 10 – *Scoping a proposal*. ESDs prepared by the EPA are not subject to public review. The ESD will be available on the EPA website (www.epa.wa.gov.au) upon endorsement and must be appended to the PER document.

2. The proposal

The subject of this ESD is Elan Energy Matrix Pty Ltd's (Elan Energy Matrix) proposal for the construction and operation of a Tyre Resource Recycling Facility. The proposal is located at Lot 60, 9 Fargo Way Welshpool, approximately 12 kilometres (km) south-east of Perth in the City of Canning. The land is zoned for industrial purposes. The regional location of the proposal is shown in Figure 1.

The proponent has an existing tyre storage and shredding operation nearby at Lot 106, 101 Dowd Street Welshpool, which is licensed by the Department of Environment Regulation (DER). The proponent intends to relocate the storage and shredding components to Lot 60, 9 Fargo Way Welshpool and this is currently being addressed through Part V of the EP Act by the DER. The tyre storage and shredding operation is existing and is not part of the current proposal under assessment by the EPA.

The proposal involves processing of shredded waste tyres using an indirect fired Thermal Conversion Unit (TCU) to produce carbon black, steel wire, oil and process gas. The residual carbon from thermal processing of the tyres and the oil will be recovered, with the char upgraded to carbon black for sale.

The key characteristics of the proposal are set out in Table 1, in accordance with EAG 1 – *Defining the key characteristics of a proposal*. The development envelope encompassing the physical elements of the proposal is delineated in Figure 2.

It should be noted that the key proposal characteristics may change as a result of implementation of the mitigation hierarchy by the proponent on account of the findings of studies and investigations conducted as part of the environmental review.

Table 1. Key Proposal Characteristics

Summary of the proposal	
Proposal Title	Tyre Resource Recycling Facility
Proponent Name	Elan Energy Matrix Pty Ltd
Short Description	The proposal is to construct and operate a Tyre Resource Recycling Facility at Lot 60, 9 Fargo Way Welshpool, approximately 12 kilometres southeast of Perth in the City of Canning. The proposal includes processing of shredded tyres using a thermal conversion unit to produce carbon black, steel wire, oil and gas.

Physical Elements		
Element	**Location**	**Proposed Extent**
Tyre Resource Recycling Facility (including a char upgrading plant)	Lot 60, 9 Fargo Way, Welshpool (Figure 1)	Constructed on 0.45 hectares cleared land within existing buildings.
Operational Elements		
Element	**Location**	**Proposed Extent**
Waste tyres processed	Lot 60, 9 Fargo Way, Welshpool (Figure 1)	Up to 60 tonnes per day.

3. Preliminary key environmental factors and scope of work

The key proposal characteristics in Table 1 have informed the identification of the preliminary key environmental factors for the proposal, in accordance with EAG 8 – *Environmental factors and objectives*. The preliminary key environmental factors for this proposal and the EPA's objective for each of those factors are identified in Table 2.

To provide context to the preliminary key environmental factors, Table 2 also identifies the aspects of the proposal that cause the factors to be key factors, and the potential impacts and risks likely to be relevant to the assessment. All of this in turn has informed the work required to be conducted in the environmental review.

Finally, Table 2 identifies the policy documents that establish how the EPA expects the environmental factors to be addressed in the environmental review and the PER document that follows. Impacts associated with proposals are to be considered at a local and regional scale, including evaluation of cumulative impacts, and provide details of proposed management/mitigation measures. This includes whether environmental offsets are required by application of the mitigation hierarchy, consistent with the Government of Western Australian (2014) WA Environmental Offsets Guidelines.

The EPA expects that the proponent will consider all relevant contemporary policy documents, including revisions or updates of the policy documents listed and any new, relevant policy that is published during the development of the PER.

Table 2 Preliminary key environmental factors and required work

Air Quality and Atmospheric Gases	
EPA objective	To maintain air quality for the protection of the environment and human health and amenity, and to minimise the emission of greenhouse and other atmospheric gases through the application of best practice.
Relevant aspects	Thermal processing of used tyres using an indirect fired Thermal Conversion Unit.

Potential impacts and risks	Emissions generated may impact residential areas and neighbouring industrial premises. Emissions include nitrogen oxides, sulphur dioxide, carbon monoxide, particulates (TSP, PM_{10} and $PM_{2.5}$) acid gases, metals, dioxins, volatile organic compounds.
Required work	1. Identify all atmospheric emissions from all potential points of discharge from the proposal. 2. Establish and predict the background pollutant levels to be used in cumulative modelling for particulates (PM_{10} and $PM_{2.5}$), oxides of nitrogen and sulphur dioxide, carbon monoxide, acid gases, volatile organic compounds, metals, zinc oxide, dioxins and furans at residential areas and neighbouring industrial premises, including the impacts of existing and proposed facilities. Where reliance is placed on historical data, modelling should contain a high degree of conservatism and interannual variation of historical data should be taken into account. 3. Detail the expected emissions of particulates (PM_{10} and $PM_{2.5}$), oxides of nitrogen and sulphur dioxide, carbon monoxide, acid gases, organic compounds, metals, zinc oxide (nanoparticles), dioxins and furans under normal operation, worst case conditions and during commissioning. Describe how the expected emissions were predicted. 4. Model the ground level concentrations of particulates (PM_{10} and $PM_{2.5}$), oxides of nitrogen and sulphur dioxide, carbon monoxide, metals, acid gases, organic compounds, dioxins and furans from the proposal in isolation and cumulatively using the background pollutant levels established in work item 2 at residential and neighbouring premises, taking into account any potential local industrial point sources, under normal operation, worst case conditions and during commissioning, as necessary. 5. Compare predicted emissions and ground level concentrations with appropriate standards. 6. Describe proposed management, monitoring and validation of predictions for all air emissions. 7. Outline the outcomes/objectives, management, monitoring, trigger and contingency actions to ensure impacts are not greater than predicted, and do not pose an unacceptable risk to the health and amenity of the public or the environment. 8. An application of the mitigation hierarchy to the impacts from the proposal upon identified environmental values and an assessment of the residual impacts after the mitigation measures have been implemented. 9. Discussion of residual impacts, including as appropriate, monitoring programmes to measure residual impacts, and management programmes to further mitigate these residual impacts and to deal with circumstances where outcomes fall short of intended objectives. 10. Describe the potential for odour to occur and the proposed management. 11. Describe how the chosen technology meets best practice, and detail its track record of reliable operation (at a similar scale) in treating waste tyres. 12. Describe the extent to which the EPA Advice to the Minister for Environment on the *Environmental and Health Performance of Waste to Energy Technologies* is applicable to the pyrolysis component of this proposal.
Relevant policy	<u>EPA Policies and Guidance</u> EPA and Waste Authority (2013), Section 16(e) advice on the *Environmental and Health Performance of Waste to Energy Technologies* (Report 1468), Perth

	Western Australia. (This document provides guidance on the EPA's expectations for proposals that utilise pyrolysis technology). EPA (2003) *Guidance Statement No. 55: Implementing Best Practice in Proposals Submitted to the Environmental Impact Assessment Process*, Perth, Western Australia. Other Policies and Guidance Department of Environment (2006), Air Quality Modelling Guidance Notes, Perth, Western Australia. National Environment Protection Measures standards and goals. World Health Organisation Air Quality and Health guidelines. Department of Health and DER, Relevant policy and air quality guidelines.

4. Stakeholder consultation

The EPA expects that the proponent will consult with stakeholders who are interested in, or affected by, the proposal. This includes decision-making authorities (DMAs), other relevant State government departments and local government authorities, environmental non-government organisations and the local community.

The proponent must document the stakeholder consultation undertaken and the outcomes, including any adjustments to the proposal and any future plans for consultation. This is to be addressed in a specific section of the PER document and, in addition, key outcomes of consultation are to be reported against the preliminary key environmental factors as relevant.

It is expected that as a part of the consultation with DMA's there will be discussion around each agency's specific regulatory approvals, and a demonstration that other factors can be managed by another regulatory body.

5. Other factors or matters

During assessment of proposals, other factors or matters will be identified as relevant to the proposal, but not of significance to warrant further assessment by the EPA, or impacts can be regulated by other statutory processes to meet the EPA's objectives.

These factors do not require further work as part of the environmental review, or detailed discussion and evaluation in the PER document, although they must be included in the PER document in a summarised, tabular format noting that the PER document will be subject to public review.

In some circumstances other factors, while not being considered as preliminary key environmental factors, may require greater emphasis in the PER document. This may be due to high public interest or at the request of another stakeholder, so that the potential impacts and management measures associated with the other factor are sufficiently articulated for the public review. For this assessment, the other factors that need to be concisely described and discussed in the PER document are:

- Inland Waters Environmental Quality – discharge of liquid wastes; and
- Amenity – generation of noise and odour.

It is also important that the proponent be aware that other factors or matters may be identified during the course of the environmental review that were not apparent at the time that this ESD was prepared. If this situation arises, the proponent must consult with the EPA to determine whether these factors and/or matters are to be addressed in the PER document, and if so, to what extent.

6. Agreed assessment timeline

Table 3 sets out the timeline for the assessment of the proposal agreed between the EPA and the proponent. Proponents are expected to meet the agreed timeline, and in doing so, provide adequate, quality information to inform the assessment.

Table 3 Assessment Timeline

Key Stages of Assessment	Draft Agreed Completion Date
EPA approval of ESD	9 November 2016
Proponent submits first adequate draft PER document	28 November 2016 (3 weeks)
Office of the Environmental Protection Authority (OEPA) provides comment on first adequate draft PER document	23 January 2017 (6+2 weeks)
Proponent submits adequate revised draft PER document	30 January 2017 (1 week)
EPA authorises release of PER document for public review	13 February 2017 (2 weeks)
Proponent releases authorised PER document for public review	20 February 2017 (1 week)
Public review of PER document	20 March 2017 (4 weeks)
EPA provides Summary of Submissions	10 April 2017 (3 weeks)
Proponent provides Response to Submissions	17 April 2017 (1 weeks)
OEPA reviews the Response to Submissions	15 May 2017 (4 weeks)
OEPA assesses proposal for consideration by EPA	3 July 2017 (7 weeks)
Preparation and finalisation of EPA assessment report (including two weeks consultation on draft conditions with proponent and key Government agencies)	7 August 2017 (5 weeks)

If any stage in the agreed timeline is not met or inadequate information is submitted by the proponent, the timing for the completion of subsequent stages of the process will be revised. Equally, where the EPA is unable to meet an agreed completion date in the timeline, the proponent will be advised and the timeline revised.

The proponent should refer to EPA's EAG 6 – *Timelines for environmental assessment of proposals* for information regarding the responsibilities of proponents and the EPA for achieving timely and effective assessment of proposals.

7. Decision-making authorities

At this stage, the EPA has identified the authorities listed in Table 4 as DMAs for the proposal. Additional DMAs may be identified during the course of the assessment.

Table 4 Decision-making authorities

Decision-making authority	Relevant legislation
Department of Environment Regulation	Part V of *Environmental Protection Act 1986* Works approval and licence
City of Canning	*Planning and Development Act 2005* Development approval

8. Parallel processing

The EP Act constrains DMAs from making any decision that could have the effect of causing or allowing the proposal to be implemented. However, the proponent is encouraged to pursue other approvals in parallel with the EPA's assessment noting that the constraint only relates to making an approval decision.

9. PER document

When the EPA is satisfied with the standard of the PER document (refer to section 4.4 of EAG 6) it will provide written authorisation for the release of the document for public review. The proponent must not release the PER document for public review until this authorisation is provided.

The proponent is responsible for advertising the release and availability of the PER document in accordance with instructions that will be issued to the proponent by the EPA. The EPA must be consulted on the timing and details for advertising.

Figure 1 – Regional location

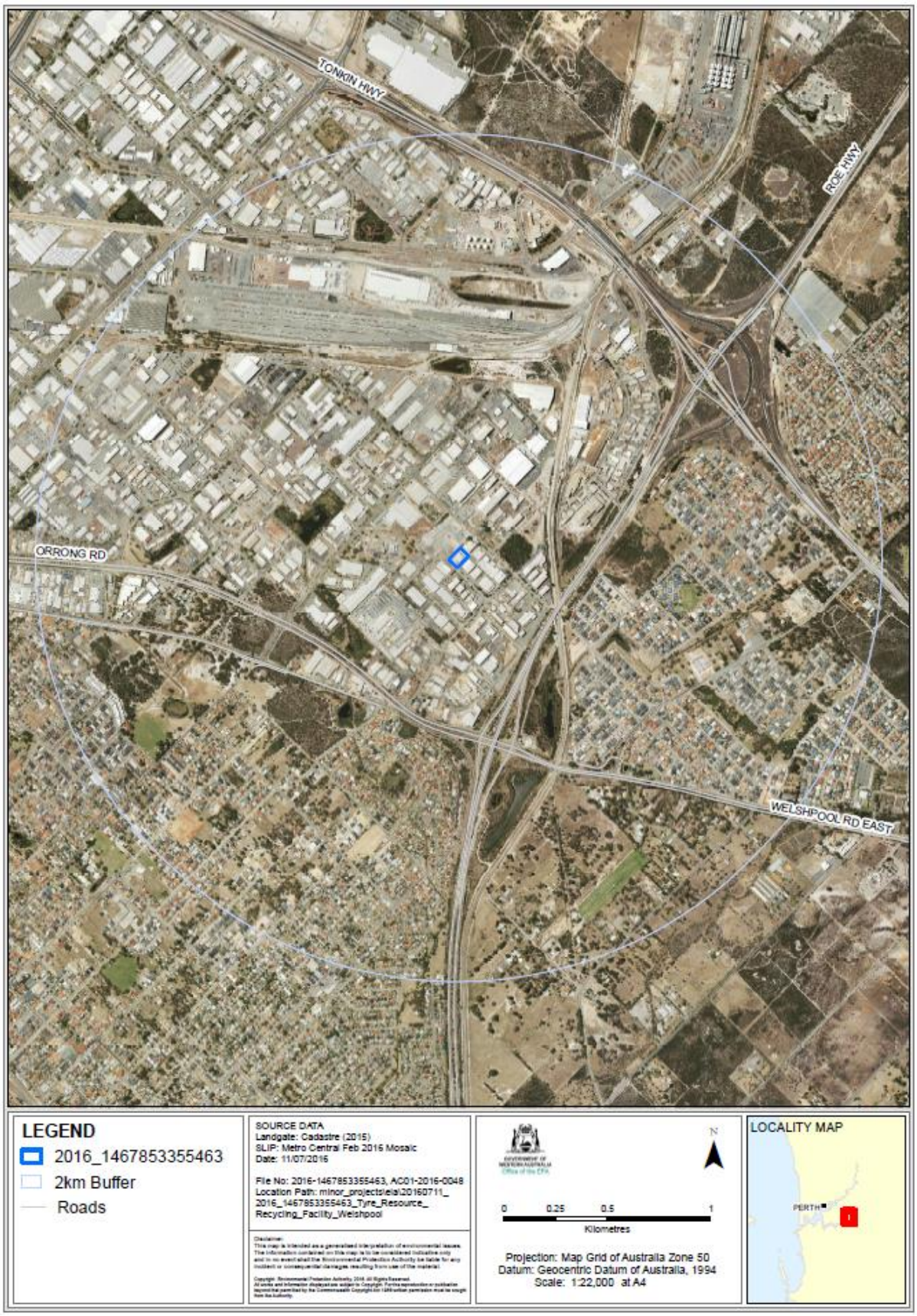

Figure 2 – Development envelope

Figure 1: Proposal area – Lot 60, 9 Fargo Way, Welshpool.

Scale 1:2,000 at A4

0 10 20 30 40 50 m

N

Coordinate System: GDA 1994 MGA Zone 50
Note that positional errors may occur in some areas
Date: 12/05/2016
Author: JCrute
Source: Aerial Image: ESRI, approx. 2012. Existing cadastre: SLIP, Landgate 2016.

Legend

- Lot 60 boundary
- Existing cadastre
- Roads

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Path: Q:\Consult\2016\EEM\EEM16113\ArcMap_documents\R002\EEM16113_01_R002_RevA_F001.mxd