



Referral of a Proposal by the Proponent to the Environmental Protection Authority under Section 38(1) of the Environmental Protection Act 1986.

PURPOSE OF THIS FORM

Section 38(1) of the Environmental Protection Act 1986 (EP Act) provides that where a development proposal is likely to have a significant effect on the environment, a proponent may refer the proposal to the Environmental Protection Authority (EPA) for a decision on whether or not it requires assessment under the EP Act. This form sets out the information requirements for the referral of a proposal by a proponent.

Proponents are encouraged to familiarise themselves with the EPA’s General Guide on Referral of Proposals [see Environmental Impact Assessment/Referral of Proposals and Schemes] before completing this form.

A referral under section 38(1) of the EP Act by a proponent to the EPA must be made on this form. A request to the EPA for a declaration under section 39B (derived proposal) must be made on this form. This form will be treated as a referral provided all information required by Part A has been included and all information requested by Part B has been provided to the extent that it is pertinent to the proposal being referred. Referral documents are to be submitted in two formats – hard copy and electronic copy. The electronic copy of the referral will be provided for public comment for a period of 7 days, prior to the EPA making its decision on whether or not to assess the proposal.

CHECKLIST

Before you submit this form, please check that you have:

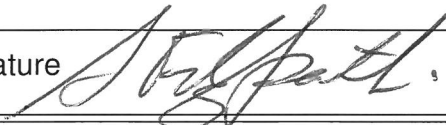
Table with 3 columns: Checklist item, Yes, No. Rows include: Completed all the questions in Part A (essential), Completed all applicable questions in Part B, Included Attachment 1 – location maps, Included Attachment 2 – additional document(s) the proponent wishes to provide (if applicable), Included Attachment 3 – confidential information (if applicable), Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but excluding confidential information.

Following a review of the information presented in this form, please consider the following question (a response is optional).

Do you consider the proposal requires formal environmental impact assessment?		
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Not sure
If yes, what level of assessment?		
<input type="checkbox"/> Assessment on Proponent Information	<input type="checkbox"/> Public Environmental Review	

**PROPONENT DECLARATION** (to be completed by the proponent)

I, STEPHEN FITZPATRICK (full name) declare that I am authorised on behalf of EMRC (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature 	Name (print) <u>STEPHEN FITZPATRICK</u>
Position <u>DIRECTOR WASTE SERVICES</u>	Company <u>EMRC</u>
Date <u>14/1/2014</u>	

## PART A - PROPONENT AND PROPOSAL INFORMATION

(All fields of Part A must be completed for this document to be treated as a referral)

### 1 PROPONENT AND PROPOSAL INFORMATION

#### 1.1 Proponent

Name	Eastern Metropolitan Regional Council
Joint Venture parties (if applicable)	N/A
Australian Company Number (if applicable)	ABN: 89 631 866 056
Postal Address (where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)	1st Floor Ascot Place 226 Great Eastern Highway, Belmont, WA, 6104
Key proponent contact for the proposal: <ul style="list-style-type: none"><li>• name</li><li>• address</li><li>• phone</li><li>• email</li></ul>	Steve Fitzpatrick Director Waste Services Eastern Metropolitan Regional Council 1st Floor Ascot Place 226 Great Eastern Highway, Belmont, WA, 6104 Ph: (08) 9424 2222 Fax: (08) 9277 7598 stephen.fitzpatrick@emrc.org.au
Consultant for the proposal (if applicable): <ul style="list-style-type: none"><li>• name</li><li>• address</li><li>• phone</li><li>• email</li></ul>	Harry Ventriss Senior Principal Strategen Environmental Consultants Level 2, 322 Hay Subiaco WA 6008 PO Box 243 Subiaco WA 6904 Phone (08) 9380 3100 Fax (08) 9380 4606

#### 1.2 Proposal

Title	Hazelmere Wood Waste to Energy Plant
Description	Expand the existing Hazelmere Recycling Centre by installing a 3 MW Wood Waste to Energy (WWTE) plant. The plant will be based on pyrolysis technology (indirect-fired pyrolysis kiln with resultant syngas used for power generation by gas engines) and would use recycled timber as the feed-source.
Extent (area) of proposed ground disturbance.	0.2 ha (no clearing of native vegetation required)
Timeframe in which the activity or development is proposed to occur (including start and finish dates where applicable).	Construction: Q4 2014 to Q2 2015 Operation: Q2 2015 onwards
Details of any staging of the proposal.	The WWTE plant is not staged.
Is the proposal a strategic proposal?	No
Is the proponent requesting a declaration that the proposal is a derived proposal? If so, provide the following information on	No

the strategic assessment within which the referred proposal was identified: <ul style="list-style-type: none"> <li>• title of the strategic assessment; and</li> <li>• Ministerial Statement number.</li> </ul>	
Please indicate whether, and in what way, the proposal is related to other proposals in the region.	The proposal is located in an area with an existing timber grinder and mattress recycling centre.
Does the proponent own the land on which the proposal is to be established? If not, what other arrangements have been established to access the land?	Yes
What is the current land use on the property, and the extent (area in hectares) of the property?	Land use is industrial and Part Lot 100 and Lot 2 Lakes Road is approximately 10 ha

### 1.3 Location

Name of the Shire in which the proposal is located.	City of Swan
For urban areas: <ul style="list-style-type: none"> <li>• street address;</li> <li>• lot number;</li> <li>• suburb; and</li> <li>• nearest road intersection.</li> </ul>	Part Lot 100 and Lot 2 Lakes Road, Hazelmere, 6055. Nearest major road intersection at Roe Highway and Great Eastern Highway Bypass.
For remote localities: <ul style="list-style-type: none"> <li>• nearest town; and</li> <li>• distance and direction from that town to the proposal site.</li> </ul>	N/A
Electronic copy of spatial data - GIS or CAD, geo-referenced and conforming to the following parameters: <ul style="list-style-type: none"> <li>• GIS: polygons representing all activities and named;</li> <li>• CAD: simple closed polygons representing all activities and named;</li> <li>• datum: GDA94;</li> <li>• projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA);</li> <li>• format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.</li> </ul>	Enclosed?: Yes / <del>No</del>

### 1.4 Confidential Information

Does the proponent wish to request the EPA to allow any part of the referral information to be treated as confidential?	<del>Yes</del> / No
If yes, is confidential information attached as a separate document in hard copy?	<del>Yes</del> / No

## 1.5 Government Approvals

Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.		<del>Yes</del> / No	
Is approval required from any Commonwealth or State Government agency or Local Authority for any part of the proposal? If yes, please complete the table below.		Yes / <del>No</del>	
Agency/Authority	Approval required	Application lodged Yes / No	Agency/Local Authority contact(s) for proposal
Department of Environmental Regulation (DER)	Part V Works Approval and subsequent Licence to Operate	Yes	Richard Wilson Swan Region Industry Regulation T: (08) 9333 7545
City of Swan	Planning Approval (MRS process)	No	NA

## PART B - ENVIRONMENTAL IMPACTS AND PROPOSED MANAGEMENT

### 2. ENVIRONMENTAL IMPACTS

Describe the impacts of the proposal on the following elements of the environment, by answering the questions contained in Sections 2.1-2.11:

- 2.1 flora and vegetation;
- 2.2 fauna;
- 2.3 rivers, creeks, wetlands and estuaries;
- 2.4 significant areas and/ or land features;
- 2.5 coastal zone areas;
- 2.6 marine areas and biota;
- 2.7 water supply and drainage catchments;
- 2.8 pollution;
- 2.9 greenhouse gas emissions;
- 2.10 contamination; and
- 2.11 social surroundings.

These features should be shown on the site plan, where appropriate.

For all information, please indicate:

- (a) the source of the information; and
- (b) the currency of the information.

#### 2.1 Flora and Vegetation

2.1.1 Do you propose to clear any native flora and vegetation as a part of this proposal?

[A proposal to clear native vegetation may require a clearing permit under Part V of the EP Act (Environmental Protection (Clearing of Native Vegetation) Regulations 2004)]. Please contact the Department of Environment and Conservation (DEC) for more information.

- (please tick)  Yes **If yes**, complete the rest of this section.  
 No **If no**, go to the next section

2.1.2 How much vegetation are you proposing to clear (in hectares)?

2.1.3 Have you submitted an application to clear native vegetation to the DEC (unless you are exempt from such a requirement)?

- Yes  No **If yes**, on what date and to which office was the application submitted of the DEC?

2.1.4 Are you aware of any recent flora surveys carried out over the area to be disturbed by this proposal?

Yes

No

**If yes**, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

**If no**, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

2.1.5 Has a search of DEC records for known occurrences of rare or priority flora or threatened ecological communities been conducted for the site?

Yes

No

If you are proposing to clear native vegetation for any part of your proposal, a search of DEC records of known occurrences of rare or priority flora and threatened ecological communities will be required. Please contact DEC for more information.

2.1.6 Are there any known occurrences of rare or priority flora or threatened ecological communities on the site?

Yes

No

**If yes**, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

2.1.7 If located within the Perth Metropolitan Region, is the proposed development within or adjacent to a listed Bush Forever Site? (You will need to contact the Bush Forever Office, at the Department for Planning and Infrastructure)

Yes

No

**If yes**, please indicate which Bush Forever Site is affected (site number and name of site where appropriate).

2.1.8 What is the condition of the vegetation at the site?

## 2.2 Fauna

2.2.1 Do you expect that any fauna or fauna habitat will be impacted by the proposal?

(please tick)

Yes

**If yes**, complete the rest of this section.

No

**If no**, go to the next section.

2.2.2 Describe the nature and extent of the expected impact.

2.2.3 Are you aware of any recent fauna surveys carried out over the area to be disturbed by this proposal?

Yes

No

**If yes**, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

**If no**, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

2.2.4 Has a search of DEC records for known occurrences of Specially Protected (threatened) fauna been conducted for the site?

Yes

No (please tick)

2.2.5 Are there any known occurrences of Specially Protected (threatened) fauna on the site?

Yes

No

**If yes**, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

### 2.3 Rivers, Creeks, Wetlands and Estuaries

2.3.1 Will the development occur within 200 metres of a river, creek, wetland or estuary?

(please tick)

Yes

**If yes**, complete the rest of this section.

No

**If no**, go to the next section.

2.3.2 Will the development result in the clearing of vegetation within the 200 metre zone?

Yes

No

**If yes**, please describe the extent of the expected impact.

2.3.3 Will the development result in the filling or excavation of a river, creek, wetland or estuary?

Yes

No

**If yes**, please describe the extent of the expected impact.

2.3.4 Will the development result in the impoundment of a river, creek, wetland or estuary?

Yes

No

**If yes**, please describe the extent of the expected impact.



2.3.5 Will the development result in draining to a river, creek, wetland or estuary?

Yes       No      **If yes**, please describe the extent of the expected impact.

2.3.6 Are you aware if the proposal will impact on a river, creek, wetland or estuary (or its buffer) within one of the following categories? (please tick)

Conservation Category Wetland	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Perth's Bush Forever site	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Environmental Protection (Swan & Canning Rivers) Policy 1998	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
The management area as defined in s4(1) of the <i>Swan River Trust Act 1988</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Which is subject to an international agreement, because of the importance of the wetland for waterbirds and waterbird habitats (e.g. Ramsar, JAMBA, CAMBA)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure

## 2.4 Significant Areas and/ or Land Features

2.4.1 Is the proposed development located within or adjacent to an existing or proposed National Park or Nature Reserve?

Yes       No      **If yes**, please provide details.

2.4.2 Are you aware of any Environmentally Sensitive Areas (as declared by the Minister under section 51B of the EP Act) that will be impacted by the proposed development?

Yes       No      **If yes**, please provide details.

An ESA overlies part of the Proposal area. It appears to be a 500 to 600 m buffer around the Bush Forever Area to the south east.

2.4.3 Are you aware of any significant natural land features (e.g. caves, ranges etc) that will be impacted by the proposed development?

Yes       No      **If yes**, please provide details.

## 2.5 Coastal Zone Areas (Coastal Dunes and Beaches)

2.5.1 Will the development occur within 300metres of a coastal area?

(please tick)

Yes

**If yes**, complete the rest of this section.

No

**If no**, go to the next section.

2.5.2 What is the expected setback of the development from the high tide level and from the primary dune?

2.5.3 Will the development impact on coastal areas with significant landforms including beach ridge plain, cusped headland, coastal dunes or karst?

Yes

No

**If yes**, please describe the extent of the expected impact.

2.5.4 Is the development likely to impact on mangroves?

Yes

No

**If yes**, please describe the extent of the expected impact.

## 2.6 Marine Areas and Biota

2.6.1 Is the development likely to impact on an area of sensitive benthic communities, such as seagrasses, coral reefs or mangroves?

Yes

No

**If yes**, please describe the extent of the expected impact.

2.6.2 Is the development likely to impact on marine conservation reserves or areas recommended for reservation (as described in *A Representative Marine Reserve System for Western Australia*, CALM, 1994)?

Yes

No

**If yes**, please describe the extent of the expected impact.

2.6.3 Is the development likely to impact on marine areas used extensively for recreation or for commercial fishing activities?

Yes

No

**If yes**, please describe the extent of the expected impact, and provide any written advice from relevant agencies (e.g. Fisheries WA).

## 2.7 Water Supply and Drainage Catchments

2.7.1 Are you in a proclaimed or proposed groundwater or surface water protection area?

(You may need to contact the Department of Water (DoW) for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

Yes       No      **If yes**, please describe what category of area.

*Site located within the Swan Proclaimed Groundwater Area.*

2.7.2 Are you in an existing or proposed Underground Water Supply and Pollution Control area?

(You may need to contact the DoW for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

Yes       No      **If yes**, please describe what category of area.

2.7.3 Are you in a Public Drinking Water Supply Area (PDWSA)?

(You may need to contact the DoW for more information or refer to the DoW website. A proposal to clear vegetation within a PDWSA requires approval from DoW.)

Yes       No      **If yes**, please describe what category of area.

2.7.4 Is there sufficient water available for the proposal?

(Please consult with the DoW as to whether approvals are required to source water as you propose. Where necessary, please provide a letter of intent from the DoW)

Yes       No      (please tick)

2.7.5 Will the proposal require drainage of the land?

Yes       No      **If yes**, how is the site to be drained and will the drainage be connected to an existing Local Authority or Water Corporation drainage system? Please provide details.

2.7.6 Is there a water requirement for the construction and/ or operation of this proposal?

(please tick)       Yes      **If yes**, complete the rest of this section.

No      **If no**, go to the next section.

2.7.7 What is the water requirement for the construction and operation of this proposal, in kilolitres per year?

*Approximately 1 300 000 kL/year (i.e. 5000 kL/day, 5 days per week).*

2.7.8 What is the proposed source of water for the proposal? (e.g. dam, bore, surface water etc.)

*There is groundwater available onsite from a production bore, scheme water will also be available by the time the plant is operational.*

## 2.8 Pollution

2.8.1 Is there likely to be any discharge of pollutants from this development, such as noise, vibration, gaseous emissions, dust, liquid effluent, solid waste or other pollutants?

(please tick)       Yes      **If yes**, complete the rest of this section.  
 No      **If no**, go to the next section.

2.8.2 Is the proposal a prescribed premise, under the Environmental Protection Regulations 1987?

(Refer to the EPA's *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* for more information)

Yes       No      **If yes**, please describe what category of prescribed premise.

2.8.3 Will the proposal result in gaseous emissions to air?

Yes       No      **If yes**, please briefly describe.

*Air emissions will result from combustion of syngas created by the pyrolysis section in gas engines/generator sets. Emissions will include usual components of fuel gas firing, such as carbon monoxide (CO), nitrous oxides, sulfur dioxide (SO<sub>2</sub>) and volatile organic compounds (VOC). Air emissions will also be produced by the SACTO.*

*Refer to the supporting document for further discussion on the air emissions.*

2.8.4 Have you done any modelling or analysis to demonstrate that air quality standards will be met, including consideration of cumulative impacts from other emission sources?

Yes       No      **If yes**, please briefly describe.

*Results of air emissions modelling show that all predicted ground level concentrations will be less than the NEPM limits and stack concentrations are under the WID threshold limits. Cumulative impacts have been considered in the context of background emissions.*

*Refer to the supporting document for further discussion on the air emissions.*

2.8.5 Will the proposal result in liquid effluent discharge?

Yes       No      **If yes**, please briefly describe the nature, concentrations and receiving environment.

*Process Wastewater will be stored onsite in a bunded tank, to be disposed of offsite at an appropriately-licensed liquid waste disposal facility.*

*Onsite sewage will be managed using an onsite sewage treatment facility.*

2.8.6 If there is likely to be discharges to a watercourse or marine environment, has any analysis been done to demonstrate that the State Water Quality Management Strategy or other appropriate standards will be able to be met?

Yes       No      **If yes**, please describe.

2.8.7 Will the proposal produce or result in solid wastes?

Yes       No      **If yes**, please briefly describe the nature, concentrations and disposal location/ method.

*Solid bio-char will be generated as a by-product. It will be re-used in the char bed and then preferably sold as an additive to brick manufacture, barbeque fuel or as a soil amendment. Only in the event that there is an insufficient market for these purposes will excess be disposed of to landfill, in which case a final beneficial use may comprise application in rehabilitation of completed landfill cells.*

2.8.8 Will the proposal result in significant off-site noise emissions?

Yes       No      **If yes**, please briefly describe.

2.8.9 Will the development be subject to the Environmental Protection (Noise) Regulations 1997?

Yes       No      **If yes**, has any analysis been carried out to demonstrate that the proposal will comply with the Regulations?

Please attach the analysis.

*Noise modelling has been undertaken which shows that noise levels are predicted to comply with assigned levels at all sensitive premises at all times under worst-case meteorological conditions (see attached document).*

*Refer to the supporting document for further discussion on the noise.*

2.8.10 Does the proposal have the potential to generate off-site air quality impacts, dust, odour or another pollutant that may affect the amenity of residents and other "sensitive premises" such as schools and hospitals (proposals in this category may include intensive agriculture, aquaculture, marinas, mines and quarries etc.)?

Yes       No      **If yes**, please describe and provide the distance to residences and other "sensitive premises".

*Residential premises are located adjacent to the current Hazelmere Recycling Centre to the west and south at 61, 53 and 54 Lakes Rd, Hazelmere. Industrial premises are located to the north and east.*

2.8.11 If the proposal has a residential component or involves "sensitive premises", is it located near a land use that may discharge a pollutant?

Yes       No       Not Applicable

**If yes**, please describe and provide the distance to the potential pollution source

## 2.9 Greenhouse Gas Emissions

2.9.1 Is this proposal likely to result in substantial greenhouse gas emissions (greater than 100 000 tonnes per annum of carbon dioxide equivalent emissions)?

Yes

No

**If yes**, please provide an estimate of the annual gross emissions in absolute and in carbon dioxide equivalent figures.

2.9.2 Further, if yes, please describe proposed measures to minimise emissions, and any sink enhancement actions proposed to offset emissions.

## 2.10 Contamination

2.10.1 Has the property on which the proposal is to be located been used in the past for activities which may have caused soil or groundwater contamination?

Yes

No

Unsure

**If yes**, please describe.

*The site is reported to have been used historically for rural living and grazing livestock, and at one time for holding stock for Midland Abattoir.*

2.10.2 Has any assessment been done for soil or groundwater contamination on the site?

Yes

No

**If yes**, please describe.

*Four sets of nested groundwater monitoring bores were installed in November 2012 to determine background groundwater quality and obtain baseline data. To date, monitoring data indicates groundwater in the deeper aquifer is uncontaminated but initial results suggest that localised surface contamination has been detected from a source beyond the site boundary. Routine groundwater monitoring has been implemented to confirm and track these results.*

2.10.3 Has the site been registered as a contaminated site under the *Contaminated Sites Act 2003*? (on finalisation of the CS Regulations and proclamation of the CS Act)

Yes

No

**If yes**, please describe.

## 2.11 Social Surroundings

2.11.1 Is the proposal on a property which contains or is near a site of Aboriginal ethnographic or archaeological significance that may be disturbed?

Yes

No

Unsure

**If yes**, please describe.

*There are no known Aboriginal heritage sites; however, four sites are within the vicinity of the site.*

2.11.2 Is the proposal on a property which contains or is near a site of high public interest (e.g. a major recreation area or natural scenic feature)?

Yes

No

**If yes**, please describe.

2.11.3 Will the proposal result in or require substantial transport of goods, which may affect the amenity of the local area?

Yes       No      **If yes**, please describe.

*The bio-char produced on site will be transported by either two 15 tonne trucks or one 30 tonne reticulated truck on a fortnightly basis (see attached document). On average, two extra truck movements are anticipated per week from the WWTE plant. This is an increase of just over 1% of traffic from the Hazelmere facility from current traffic conditions.*

*Counts sourced from the current operations at Hazelmere show that there are around 144 trucks that use Lakes Road on a daily basis, or 720 movements per week (based on a five day week). The increase of two trucks per week equates to an increase of around 0.3% from current conditions on Lakes Road.*

### 3. PROPOSED MANAGEMENT

#### 3.1 Principles of Environmental Protection

3.1.1 Have you considered how your project gives attention to the following Principles, as set out in section 4A of the EP Act? (For information on the Principles of Environmental Protection, please see EPA Position Statement No. 7, available on the EPA website)

- |  |   |                             |
|--|---|-----------------------------|
| 1. The precautionary principle.  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. The principle of intergenerational equity.  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. The principle of the conservation of biological diversity and ecological integrity. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Principles relating to improved valuation, pricing and incentive mechanisms.        | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. The principle of waste minimisation.  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

3.1.2 Is the proposal consistent with the EPA's Environmental Protection Bulletins/Position Statements and Environmental Assessment Guidelines/Guidance Statements (available on the EPA website)?

Yes       No

*Is consistent with Environmental and health performance of waste to energy technologies, EPA Section 16e of the EP Act advice, Report 1468, April 2013.*

#### 3.2 Consultation

3.2.1 Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?

Yes       No      **If yes**, please list those consulted and attach comments or summarise response on a separate sheet.

*Stakeholders that have been consulted to date are:*

- *Office of the Environmental Protection Authority*
- *Waste Management Community Reference Group (WMCRG)*
- *Community Task Force (CTF)*
- *local community groups.*

*Consultation is described further in the supporting document.*