



## MINUTES

### CERTIFICATION OF CONFIRMATION OF RESOURCE RECOVERY COMMITTEE MINUTES

20 November 2014

I, Cr Charlie Zannino, hereby certify that the minutes from the Resource Recovery Committee Meeting held on 20 November 2014 pages 1 to 20 were confirmed at a Committee meeting held on 9 April 2015.

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke, positioned above a solid horizontal line.

**Signature**

Cr Charlie Zannino  
**Person presiding at Meeting**

## MINUTES

20 November 2014

(REF: D2014/13550)

A meeting of the Resource Recovery Committee was held at the EMRC Administration Office, 1<sup>st</sup> Floor, 226 Great Eastern Highway, BELMONT WA 6104 on **Thursday, 20 November 2014** The meeting commenced at **5:00pm**.

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## 1 DECLARATION OF OPENING AND ANNOUNCEMENT OF VISITORS

The Chairman opened the meeting at 5:00pm.

## 2 ATTENDANCE, APOLOGIES AND LEAVE OF ABSENCE (PREVIOUSLY APPROVED)

### Committee Members

Cr Tony Cuccaro ( <b>Chairman</b> )	EMRC Member	Shire of Mundaring
Cr Charlie Zannino ( <b>Deputy Chairman</b> )	EMRC Member	City of Swan
Cr Jennie Carter	EMRC Member	Town of Bassendean
Cr Mike Anderton	EMRC Member	City of Bayswater
Cr Janet Powell ( <b>from 5:03pm</b> )	EMRC Member	City of Belmont
Cr Frank Lindsey	EMRC Member	Shire of Kalamunda
Mr Simon Stewert-Dawkins	Director Operational Services	Town of Bassendean
Mr James Riley (Deputising for Mr Pearson)	Manager Environmental Health Services	City of Bayswater
Mr Ric Lutey	Director Technical Services	City of Belmont
Mr Charles Sullivan	Director Development and Infrastructure Services	Shire of Kalamunda
Mr Shane Purdy	Director Infrastructure Services	Shire of Mundaring
Mr Colin Pumphrey (Deputising for Mr Coten)	Manager Fleet and Waste Services	City of Swan
Mr Peter Schneider	Chief Executive Officer	EMRC

### Apologies

Mr Doug Pearson	Director Technical Services	City of Bayswater
Mr Jim Coten	Executive Manager Operations	City of Swan

### Deputy Committee Members - Observers

Cr Gerry Pule	EMRC Member	Town of Bassendean
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### EMRC Officers

Mr Stephen Fitzpatrick	Director Waste Services
Mr Dave Beresford	Manager Resource Recovery
Ms Giulia Bono	Administration Support Officer (Minutes)

## 3 DISCLOSURE OF INTERESTS

### 3.1 CR MIKE ANDERTON – DISCLOSURE OF FINANCIAL AND PROXIMITY INTERESTS:

Item:	11.3
Subject:	Item 11.3 – Implementation of Resource Recovery Facility Project
Nature of Interest:	Disclosure of Financial and Proximity Interests Local Government Act 1995 Sections 5.60B, 5.65, 5.70 and 5.71. Subject matter of the Report directly applies to New Energy Corporation who are a client of Cr Anderton's employer, which provides insurance around Australia (Renewal 4 January 2015).

## 4 ANNOUNCEMENTS BY THE CHAIRMAN OR PRESIDING MEMBER WITHOUT DISCUSSION

Nil

## 5 PETITIONS, DEPUTATIONS AND PRESENTATIONS

Nil



**6 CONFIRMATION OF MINUTES OF PREVIOUS MEETINGS**

**6.1 MINUTES OF THE RESOURCE RECOVERY COMMITTEE MEETING HELD ON 7 AUGUST 2014**

That the Minutes of the Resource Recovery Committee meeting held on 7 August 2014, which have been distributed, be confirmed.

**RRC RESOLUTION(S)**

MOVED CR ZANNINO                      SECONDED MR LUTEY

THAT THE MINUTES OF THE RESOURCE RECOVERY COMMITTEE MEETING HELD ON 7 AUGUST 2014, WHICH HAVE BEEN DISTRIBUTED, BE CONFIRMED.

**CARRIED UNANIMOUSLY**

**7 QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN**

Nil

**8 QUESTIONS BY MEMBERS WITHOUT NOTICE**

Nil

**9 ANNOUNCEMENT OF CONFIDENTIAL MATTERS FOR WHICH MEETINGS MAY BE CLOSED TO THE PUBLIC**

Nil

**10 BUSINESS NOT DEALT WITH FROM A PREVIOUS MEETING**

Nil



## 11 REPORTS OF EMPLOYEES

### 11.1 UPDATE OF HAZELMERE WOOD WASTE TO ENERGY PROJECT

REFERENCE: D2014/13551

#### PURPOSE OF REPORT

To update Council on the progress of the Hazelmere Wood Waste to Energy Plant (WWTE).

#### KEY ISSUES AND RECOMMENDATION(S)

- A peer review of the Hazelmere Wood Waste to Energy Plant proposal has been conducted as agreed with the Environmental Protection Authority (EPA).
- The peer review was conducted by Enertech and WSP Consultants, both being located in the UK.
- Results of the peer review are being incorporated into the Response to Submissions report to the EPA.
- The EPA will consider the proposal at its meeting in December 2014 provided the EMRC Response to Submissions is completed in time.

#### Recommendation(s)

That the report be received.

#### SOURCE OF REPORT

Director Waste Services

#### BACKGROUND

The 8 December 2011 meeting of Council (Ref: DMDOC/156538) considered the proposed investigation into the feasibility of pyrolysing wood waste and other residuals at EMRC's Hazelmere site and resolved:

*"THAT:*

1. *COUNCIL APPROVE EMRC PARTICIPATION IN A PROJECT TO ESTABLISH THE FEASIBILITY OF PYROLYSIS OF WOOD WASTE AND OTHER RESIDUALS AT HAZELMERE TIMBER RECYCLING CENTRE INVOLVING AN INITIAL FEASIBILITY STUDY FOLLOWED BY A SECOND STAGE DETAILED ENGINEERING STUDY.*
2. *THE OUTCOMES OF THE FIRST STAGE FEASIBILITY STUDY WILL BE REPORTED TO COUNCIL AND APPROVAL SOUGHT TO PROCEED WITH THE SECOND STAGE FEASIBILITY STUDY."*

The 19 April 2012 meeting of Council (Ref: DMDOC/159154) resolved:

*"THAT COUNCIL, BY ABSOLUTE MAJORITY:*

1. *APPROVES EXPENDITURE OF \$80,000 FOR THE SECOND STAGE DETAILED ENGINEERING STUDY INTO A PYROLYSIS PLANT AT EMRC'S HAZELMERE SITE INVOLVING THE SPECIFICATION OF THE PLANT EQUIPMENT REQUIRED AND A BETTER COST ESTIMATE.*
2. *APPROVES THE REALLOCATION OF \$80,000 FROM 24399/00.JH (CONSTRUCT AND COMMISSION RESOURCE RECOVERY PARK) TO 72884/00.JF (EVALUATE RESOURCE RECOVERY PARK OPTIONS) TO COVER THE COSTS OF THE SECOND STAGE DETAILED ENGINEERING STUDY.*
3. *SUPPORTS A GRANT APPLICATION TO THE CLEAN TECHNOLOGY INNOVATION FUND IN JULY 2012, TO BE PREPARED AND SUBMITTED BY ANSAC WITH INPUT FROM EMRC AND UWA AND SEEKING PROJECT FUNDING SUPPORT FOR A DEMONSTRATION WOOD WASTE PYROLYSIS FACILITY AT HAZELMERE."*



*Item 11.1 continued*

The 20 June 2013 meeting of Council (Ref: DMDOC/180018) resolved:

*“THAT COUNCIL:*

1. *PROCEED WITH THE HAZELMERE WOOD WASTE PYROLYSIS PROJECT.*
2. *BY ABSOLUTE MAJORITY IN ACCORDANCE WITH SECTION 5.42 OF THE LOCAL GOVERNMENT ACT 1995 AUTHORISE THE CEO TO ENTER INTO A CONTRACT BETWEEN EMRC AND ANSAC FOR THE ENGINEERING, PROCUREMENT, CONSTRUCTION AND COMMISSIONING OF THE HAZELMERE WOOD WASTE PYROLYSIS PLANT TO THE VALUE OF \$7,440,000 SUBJECT TO A, B, AND C;*
  - a) *EXECUTION OF A FUNDING AGREEMENT BETWEEN THE COMMONWEALTH GOVERNMENT AND ANSAC PTY LTD FOR GRANT FUNDING UNDER THE CLEAN ENERGY INNOVATION FUND;*
  - b) *RECEIPT OF ENVIRONMENTAL AND OTHER STATUTORY APPROVALS FOR THE PROJECT; AND*
  - c) *DEVELOPMENT OF A POWER PURCHASE AGREEMENT BETWEEN EMRC AND AN ELECTRICITY RETAILER.”*

The 19 September 2013 meeting of Council (Ref: DMDOC/184939) provided an update on the project progress and also resolved:

*“THAT THE CHIEF EXECUTIVE OFFICER BE AUTHORISED TO MAKE THE FIRST QUARTERLY PAYMENT OF \$230,016.60 TO ANSAC PTY LTD FOR THE HAZELMERE PYROLYSIS PROJECT”.*

The April 2014 meeting of Council resolved:

*“THAT COUNCIL:*

1. *ACKNOWLEDGES THAT BECAUSE OF STRATEGEN ENVIRONMENTAL CONSULTANTS PTY LTD'S EXISTING INVOLVEMENT AND EXPERIENCE, IT HAS GOOD REASON TO BELIEVE THERE IS UNLIKELY TO BE ANY OTHER SUPPLIER WHO CAN PROVIDE A SIMILAR VALUE FOR MONEY OUTCOME TO COMPLETE THE REQUIREMENTS OF THE PER PROCESS FOR THE HAZELMERE WOODWASTE TO ENERGY PROJECT.*
2. *NOTES THE EXPENDITURE OF UP TO \$150,000 FOR THE CONSULTING FEES REQUIRED TO COMPLETE THE ENVIRONMENTAL SCOPING DOCUMENT, THE PER DOCUMENTATION, EPA LIAISON, RESPONSE TO PUBLIC SUBMISSIONS AND ANY APPEALS AND ATTENDANCE AT COMMUNITY INFORMATION SESSIONS BY STRATEGEN, TO BE FUNDED FROM THE SECONDARY WASTE RESERVE.”*

## **REPORT**

### Peer Review

Following the 17 July 2014 meeting with the EPA, discussions were held with the Office of the EPA (OEPA) to progress the assessment process. It was agreed that the EMRC would undertake an independent peer review of some aspects of the proposal to satisfy the EPA in relation to its Section 16(e) advice on waste to energy technologies.

A scope of work for the peer review was developed and agreed with the EPA together with the independent consultants nominated for the review – Mr Gerald Tetchner and Dr Frank Hardwick of Enertech Engineering Consultants Limited and Dr Kevin Whiting and Steven Wood of WSP UK Ltd.

Because of the availability of these personnel, the review has taken longer to complete than anticipated. The final peer review report is expected by 14 November 2014 which will enable the amended Response to Submissions to be submitted to the OEPA. The OEPA will then complete its assessment report and recommendations for consideration by the EPA.



*Item 11.1 continued*

### Community Engagement

Further community engagement with the Hazelmere community is planned nearer to the release of the EPA report and recommendations.

A project advertorial was placed in the regional community newspapers during October 2014 (Attachment) and more are planned over the next few months to provide information on the project.

### **STRATEGIC/POLICY IMPLICATIONS**

Key Result Area 1 – Environmental Sustainability

- 1.1 To provide sustainable waste disposal operations
- 1.3 To provide resource recovery and recycling solutions in partnership with member Councils
- 1.4 To investigate leading edge waste management practices

### **FINANCIAL IMPLICATIONS**

Funds are provided in the annual budget for 2014/2015 and 2015/2016 to undertake capital works for the project and once in operation the plant will reduce wood chip stockpiles.

### **SUSTAINABILITY IMPLICATIONS**

The Hazelmere Wood Waste to Energy plant is aimed at reducing waste to landfill and therefore greenhouse gas emissions and producing renewable electricity and biochar. This is consistent with the State Waste Strategy for reduction of waste to landfill.

### **MEMBER COUNCIL IMPLICATIONS**

<b>Member Council</b>	<b>Implication Details</b>
Town of Bassendean	} Nil
City of Bayswater	
City of Belmont	
Shire of Kalamunda	
Shire of Mundaring	
City of Swan	

### ATTACHMENT(S)

EMRC Advertorial – Hazelmere Resource Recovery Park Update (Ref: D2014/13754)



*Item 11.1 continued*

**VOTING REQUIREMENT**

Simple Majority

**Discussion ensued**

The Director Waste Services provided a brief overview of the report together with a short presentation on the project.

**RECOMMENDATION(S)**

That the report be received.

**RRC RECOMMENDATION(S)**

MOVED CR ZANNINO

SECONDED CR ANDERTON

That the report be received.

**CARRIED UNANIMOUSLY**



# Hazelmere Resource Recovery Park Update

The Hazelmere Resource Recovery Park is part of the Eastern Metropolitan Regional Council's (EMRC) integrated plan for sustainable waste management in Perth's Eastern Region. The overall aim of the park is to divert significant portions of waste from landfill and process it into reusable products.

## Current Operations

The Hazelmere Resource Recovery Park has been operating at the Hazelmere site on Lakes Road since 2008. Current operations include timber and mattress recycling.

## Future plans

EMRC's vision for the current Hazelmere site is to progressively convert it into a hub of resource recovery activities, illustrated below. It is proposed that the park will incorporate a wood waste to energy plant, a commercial and industrial waste sorting facility, a materials recovery facility to sort recyclables, a public refuse transfer station, an education centre and a re-use store. The Hazelmere Resource Recovery Park will provide a base for recycling, reuse and recovery of valuable resources from the waste stream.

### Community members will be able to:

- Drop off greenwaste for processing;
- Drop off household hazardous waste;
- Drop off household goods for reuse and recycling;

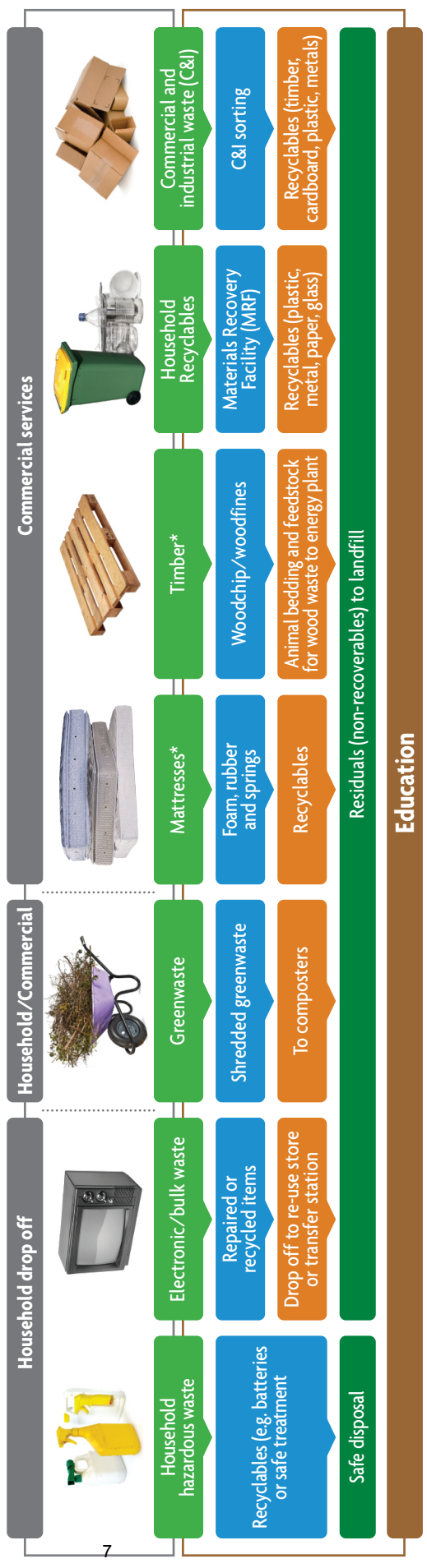
- Purchase pre-loved household items from the re-use store;
- Visit the education centre to find out more about better waste management; and
- Drop off waste at the transfer station (for a fee).

The Hazelmere Resource Recovery Park will also receive and sort commercial and industrial waste.

The EMRC plans to construct and operate a small wood waste to energy plant to convert untreated wood waste to renewable electricity and biochar. This proposal is being assessed by the Environmental Protection Authority.

The Park will create employment opportunities both during the construction stages and from on-going operations.

## Future integrated waste management concept plan



The EMRC is committed to keeping the community informed about development across the Hazelmere Resource Recovery Park. More information is available on the EMRC's website at [www.emrc.org.au/hrp.html](http://www.emrc.org.au/hrp.html). For project updates please register via [hazelmere@emrc.org.au](mailto:hazelmere@emrc.org.au) or speak with project staff – EMRC's Manager, Resource Recovery, Dave Beresford at [dave.beresford@emrc.org.au](mailto:dave.beresford@emrc.org.au) or phone (08) 9474 2222.

\*Refers to EMRC's current operations





## 11.2 UPDATE OF HAZELMERE RESOURCE RECOVERY PARK DEVELOPMENT

REFERENCE: D2014/13552

### PURPOSE OF REPORT

To advise Council on the status of the Hazelmere Resource Recovery Park development.

### KEY ISSUES AND RECOMMENDATION(S)

- Engineering infrastructure and landscape design of the site is progressing.
- The scheme water connection construction tender has closed. Evaluation of the tender submissions has commenced.
- The Commercial and Industrial (C&I) recycling facility tender is being prepared for release in early 2015. This project has Regional Funding Program funding support from the Waste Authority.

#### Recommendation(s)

That the report be received

### SOURCE OF REPORT

Director Waste Services  
Manager Resource Recovery

### BACKGROUND

A report to Council in August 2011 (Ref: DMDOC/150840) on the regional funding program resolved:

*“THAT:*

- 1. THE INFORMATION BE NOTED.*
- 2. MEMBER COUNCILS BE REQUESTED TO CONFIRM THE EMRC IS TO BE THE ENTITY REPRESENTING THE MEMBER COUNCILS IN REGARDS TO THE REGIONAL FUNDING PROGRAMME.*
- 3. THE CITY OF STIRLING BE INVITED TO JOIN WITH THE MEMBER COUNCILS IN THE REGIONAL FUNDING PROGRAMME CONDITIONAL UPON WRITTEN AGREEMENT TO UNDERTAKE A PROJECT OR PROJECTS THAT BENEFIT BOTH THE CITY OF STIRLING AND THE EMRC”.*

In April 2012, Council (Ref: DMDOC/161988) resolved:

*“THAT:*

- 1. MEMBER COUNCILS BE REQUESTED TO SUPPORT THE APPLICATION FOR FUNDING TO CONSTRUCT A BUILDING IN WHICH WASTE AUDITS BE UNDERTAKEN.*
- 2. MEMBER COUNCILS BE REQUESTED TO SUPPORT THE PURCHASE OF HOOK LIFT BINS INTO WHICH MATERIALS THAT CAN BE RECYCLED CAN BE COLLECTED.*
- 3. MEMBER COUNCILS BE REQUESTED TO SUPPORT THE PURCHASE OF THE EQUIPMENT TO PROCESS MATERIALS COLLECTED FOR RECYCLING.*
- 4. MEMBER COUNCILS BE REQUESTED TO NOMINATE OTHER PROJECTS THAT THEY WISH TO HAVE INCLUDED IN THE SUBMISSION.*
- 5. THE CITY OF STIRLING BE REQUESTED TO NOMINATE OTHER PROJECTS THEY WISH TO HAVE INCLUDED IN THE SUBMISSION”.*



*Item 11.2 continued*

## **REPORT**

### Engineering Infrastructure and Landscape Design

Opus International Consultants were awarded the contract for engineering infrastructure and landscape design on 1 October 2013.

Following feasibility studies on the original concept plan, meetings with City of Swan engineering staff, and the undertaking of a detailed geotechnical investigation a draft stormwater design was produced. Following an internal review adjustments have been made to the engineering design to incorporate on-site storage requirements prior to discharge to the City of Swan network.

Design levels for building platforms and the internal road network are currently being detailed incorporating service corridors for underground services.

A draft landscape design has been submitted for review and comments will be provided to the consultants to allow a final design to be established working closely with the engineering designers for storm water and waste water efficiencies. Irrigation considerations have also been accounted for in the landscape plan.

### Scheme Water Connection Design

A scheme water connection to the site is required to supply portable water and process water for the Wood Waste to Energy plant and for future development needs for fire protection of buildings and infrastructure. Currently the water supply to the Hazelmere site is from an abstraction bore that serves a dual storage tank and fire suppression ring main system and also the minor supply to the site house and reticulation system.

An engineering design has been produced for a suitable pipeline and connection to the Water Corp network in Stirling Crescent. This has been approved for construction by Water Corp and a tender has been prepared and lodged via the WALGA e-quote system for responses by selected suitable contractors.

The tender has closed and evaluation of submissions is underway.

### Commercial and Industrial Recycling Facility

As reported previously, the EMRC was successful in receiving a grant under the Regional Funding Program of the Waste Authority for the sum of \$388,000.00 (ex. GST) (Ref: D2014/03073). Under this grant application, the EMRC proposed to install a concrete pad with temporary storage shelters, purchase hook lift bins and purchase or hire equipment for sorting to determine the most efficient way of sorting commercial waste. The total commitment for the project was \$1.025 million including the \$388,000 Regional Funding grant.

Following advice from a specialist consultant in the sorting of commercial waste, the project team decided to develop a tender for the design and construction of a building and supply of equipment for a small scale materials recovery facility for dry commercial waste. The methodology for sorting waste of this type is well established but to prove the concept, the proposed C&I waste sorting plant would be developed in stages.

Once the concept is proven, it is intended for the facility to be extended in size and capacity following a period of consolidation and analysis of material quantities recovered. The Waste Authority have agreed to this change of purpose in principle and the amended payment milestones and purpose are being formalised with the Authority.



*Item 11.2 continued*

Assumptions made in the financial model for the C&I plant include the following:

Item	Assumption
Capital cost for building, plant and equipment	\$2.48 million (ex. GST)
Cost of capital	8.5%
Project Life	20 years
Initial throughput (tonnes per annum)	20,000 tonnes
Maximum throughput	50,000 tonnes
Throughput per shift	Up to 150 tonnes
Year capacity reached	Year 3

The preliminary financial indicators are as follows:

Parameter	Result
Gate fee	\$100/tonne (ex. GST)
NPV	\$1.3 million
Payback	4 years
IRR	20.9 %
No of years of negative cash flow	1

The financial indicators are encouraging but need to be re-examined before the capital cost is committed. The economics are based on the gate fee income which is conservatively set at \$100/tonne (ex. GST) in the above summary, comparable with the cheapest landfill gate fee in the metropolitan area. Revenue is also based on recovered materials including plastics, metals, paper and cardboards using current price information. Once the tender process is completed, the financial model will be updated and a business case and report brought to the Resource Recovery Committee for approval.

## STRATEGIC/POLICY IMPLICATIONS

Key Result Area 1 – Environmental Sustainability

- 1.1 To provide sustainable waste disposal operations
- 1.3 To provide resource recovery and recycling solutions in partnership with member Councils
- 1.4 To investigate leading edge waste management practices

## FINANCIAL IMPLICATIONS

For the initial development, the budget is expected to be approximately \$2,500,000, of which \$388,000 (ex. GST) will be provided by the Waste Authority.

A budget amount of \$3,000,000 is provided in the Resource Recovery Budget over the 2014/2015 and 2015/2016 periods.

## SUSTAINABILITY IMPLICATIONS

The project will enable additional actions that improve the sustainability of waste operations to be implemented



*Item 11.2 continued*

## **MEMBER COUNCIL IMPLICATIONS**

<b>Member Council</b>	<b>Implication Details</b>
Town of Bassendean	} Nil
City of Bayswater	
City of Belmont	
Shire of Kalamunda	
Shire of Mundaring	
City of Swan	

## **ATTACHMENT(S)**

Nil

## **VOTING REQUIREMENT**

Special Majority

## **Discussion ensued**

The Manager Resource Recovery provided a brief overview of the report.

## **RECOMMENDATION(S)**

That the report be received

## **RRC RECOMMENDATION(S)**

MOVED CR POWELL

SECONDED CR ZANNINO

That the report be received.

**CARRIED UNANIMOUSLY**



### 11.3 IMPLEMENTATION OF RESOURCE RECOVERY PROJECT

**REFERENCE: D2014/13553**

#### PURPOSE OF REPORT

To advise Council of a possible implementation programme for the Resource Recovery Project at Red Hill Waste Management Facility.

#### KEY ISSUES AND RECOMMENDATION(S)

- The consultancy contract with Cardno is being assigned to Talis Consulting Pty Ltd.
- A programme of work has been proposed to get the project to the conclusion of the tender phase.

#### Recommendation(s)

That Council receives the report.

#### SOURCE OF REPORT

Director Waste Services

#### BACKGROUND

On 30 April 2009 (Ref: DMDOC/98318), Council resolved to proceed with the Expression of Interest process for the Resource Recovery Facility.

Since that time and as part of the project implementation, Council has also resolved that:

- Acceptable tenderers be listed;
- EMRC representatives visited nominated reference facilities of acceptable tenderers;
- Red Hill Waste Management Facility is the preferred site for the Resource Recovery Facility (RRF);
- The contract models of Design and Construct (D&C) and Design, Build, Operate and Maintain (DBOM) are preferred to the Build Own Operate (BOO) contract models at this stage of the project;
- Anaerobic digestion and gasification are the preferred technology options and a third bin for household organic waste collection will be considered in conjunction with anaerobic digestion technology;
- EMRC has proceeded with the environmental approval for the proposal and acceptable tenderers have provided information required for this process as required; and
- Prior to calling tenders, the Establishment Agreement will be amended to reflect the RRF as a "new project" and member Councils will be advised of the implications of this amendment.

On 19 September 2013, (Ref: DMDOC/185090) Council resolved:

*"THAT:*

1. *THE CURRENT EXPRESSION OF INTEREST/TENDER PROCESS FOR THE EMRC RESOURCE RECOVERY FACILITY (EOI 2009-10) BE CANCELLED AND ACCEPTABLE TENDERERS ADVISED ACCORDINGLY.*
2. *COUNCIL CONTINUE WITH THE RESOURCE RECOVERY PROJECT IMPLEMENTATION. THE REPORT REMAINS CONFIDENTIAL AND IS CERTIFIED BY THE CHAIRMAN AND CEO."*



*Item 11.3 continued*

## **REPORT**

### Assignment of consultancy report

Following a request from Cardno (WA) Pty Ltd, the consultancy contract with Cardno is in the process of being assigned to Talis Consulting Pty Ltd for the balance of the work remaining under the contract. The reason for this assignment is that key Cardno personnel including Mr John King now work for Talis Consulting.

The key personnel who now work for Talis Consultancy have been extensively involved with the EMRC on the Resource Recovery Project. Consequently, it is prudent that the EMRC continue its consultancy arrangement with Talis Consulting.

### Resource Recovery Project Implementation

The following steps are proposed to get the EMRC Resource Recovery Facility (RRF) project to the tender conclusion stage:

1. Determine the capacity and expandability of the RRF;
2. Determine the contract model (current preferences are D&C or DBOM);
3. Review and adjust as necessary the project financial model for use in the tender evaluation process, including incorporating the future landfill levy increases;
4. Revise the EMRC Establishment Agreement giving member Councils the choice of participating in the RRF project;
5. Develop a Participant's Agreement to address the rights and obligations of the participating member Councils and the EMRC relating to their involvement in the project, including but not limited to the provision of waste and of guarantees;
6. Prepare the tender specification covering the two technologies (anaerobic digestion and gasification) and incorporating the requirement of the environmental approval and the Community Partnership Agreement;
7. Prepare a tender evaluation plan including:
  - a. A tender process;
  - b. Tender evaluation process; and
  - c. Tender evaluation criteria.
8. Assist the EMRC to compile the tender pack of documents comprising conditions of tender, tender specification, tender evaluation plan, Draft Resource Recovery Agreement, probity process and facility inspections;
9. Assist the EMRC obtain agreement for the financing of the project from a suitable financing organisation, such as WA Treasury Corporation;
10. Present the financing agreement, participants agreement and the tender pack to the member Councils and seek their commitment to participate in the project;
11. EMRC Council decides whether to proceed with the call for tenders;
12. Assist the EMRC with responding to requests for clarifications from tenderers during the tender period;
13. Facilitate and participate in the evaluation of tenders received;
14. Participate in an inspection tour of facilities as part of the evaluation process;
15. Prepare and present the tender evaluation report to the Resource Recovery Committee, the Technical Advisory Committees and the Council of the EMRC; and
16. Assist the EMRC to finalise the Resource Recovery Agreement with the successful tenderer.

A project schedule is being developed for the above process and will be submitted to the Resource Recovery Committee at a future meeting.



*Item 11.3 continued*

Since the EMRC expression of interest process, there has been a change in the resource recovery market focussed around the development of privately developed resource recovery facilities with associated waste supply agreements from a number of waste generators. This option provides a shifting of risk to the facility operator and away from the waste generators, such as the EMRC (on behalf of its member Councils). The impacts on the member Councils are likely to be significantly less than would occur if the RRF were owned by the EMRC, as is currently proposed. It is proposed that this option and other changes in the resource recovery market will be assessed in Tasks 1 to 5 above.

**STRATEGIC/POLICY IMPLICATIONS**

Key Result Area 1 – Environmental Sustainability

- 1.3 To provide resource recovery and recycling solutions in partnership with member Councils

**FINANCIAL IMPLICATIONS**

Nil

**SUSTAINABILITY IMPLICATIONS**

The Resource Recovery Facility will contribute towards minimising the environmental impact of waste by facilitating the sustainable use and development of resources.

**MEMBER COUNCIL IMPLICATIONS**

<b>Member Council</b>	<b>Implication Details</b>
Town of Bassendean	} Nil
City of Bayswater	
City of Belmont	
Shire of Kalamunda	
Shire of Mundaring	
City of Swan	

ATTACHMENT(S)

Nil

VOTING REQUIREMENT

Simple Majority





*Item 11.3 continued*

Discussion ensued

The Director Waste Services provided a brief overview of the report and advised that a timeline will be developed for the Resource Recovery Project. The type of contract will need to be decided on before the tender process can commence.

Cr Anderton provided a Disclosure of Interest for Item 11.3 Financial and Proximity Interests Local Government Act 1995 Sections 5.60B, 5.65, 5.70 and 5.71 due to his working relationship with New Energy Corporation.

**RECOMMENDATION(S)**

That Council receives the report.

**RRC RECOMMENDATION(S)**

MOVED CR ZANNINO

SECONDED CR LINDSEY

That Council receives the report.

**CARRIED UNANIMOUSLY**



## **11.4 FEASIBILITY STUDY MATERIALS RECOVERY FACILITY – HAZELMERE RESOURCE RECOVERY PARK**

**REFERENCE: D2014/13549**

### **PURPOSE OF REPORT**

To advise Council on the outcomes of a preliminary feasibility study into the establishment of a Materials Recovery Facility (MRF) at the Hazelmere Resource Recovery Park.

### **KEY ISSUES AND RECOMMENDATION(S)**

- The establishment of a MRF at the Hazelmere Resource Recovery Park is part of the five year development plan for the site.
- The City of Swan requested that the feasibility study into the project be undertaken in 2014/2015.
- The preliminary results of the feasibility study are presented for further discussion.

#### **Recommendation(s)**

That:

1. The report be received.
2. Further evaluation be undertaken incorporating likely member Council recyclable volumes allowing for current contracts.

### **SOURCE OF REPORT**

Director Waste Services

### **BACKGROUND**

The concept plan for the Hazelmere Resource Recovery Park includes a possible MRF to process member Council household recyclable collections.

A presentation on the preliminary findings of the MRF feasibility study was made to a Council Strategy/Briefing session on 27 March 2014. At that briefing, the City of Swan requested that the EMRC further examine the feasibility into the establishment of a Materials Recovery Facility (MRF) at the Hazelmere Resource Recovery Park as a priority. A budget provision was made in the 2014/2015 annual budget for consultancy costs required for this work.

### **REPORT**

A financial model has been prepared for a proposed MRF at the Hazelmere Resource Recovery Park based on previous work undertaken by the EMRC in conjunction with the Southern Metropolitan Regional Council. EMRC officers have liaised with the City of Swan's Manager Fleet and Waste Services to establish current MRF operating data, including operating costs and commodity prices, which has been very useful in refining the financial model.



*Item 11.4 continued*

Assumptions made in the financial model include:

<b>Item</b>	<b>Assumption</b>
Capital cost for a MRF	\$17m (incl GST) or \$15.5m (excl GST)
Cost of Capital	8.5%
Refurbishment Interval	5 years
Project Life	20 years
No of Operating Weeks	49
Throughput (per shift)	150 tonnes
Throughput (tonnes per hour)	20 tonnes
Operating days per week	5
% direct to waste	25%
Recovery efficiency	90%
Overall recovery	67.5%

The tonnage of recyclables processed by the MRF is assumed from year 1 (2017/2018) of the financial model to be equivalent to the current member council tonnages, as shown below, with growth at 3% per year to reach 60,000 tonnes in year 5. This would need to be aligned with existing collection contracts.

<b>Member Council</b>	<b>Tonnage of Recyclables</b>
Bassendean	1,632
Bayswater	6,158
Belmont	3,677
Kalamunda	5,716
Mundaring	4,026
Swan	10,000
<b>Total</b>	<b>31,209</b>

Note there is no allowance in the modelling results for other Council waste or commercial waste being processed. This needs to be explored further as there is potential to access northern suburbs and commercial waste.

Current data has been used for the revenue for recyclables which include:

- Old news print – loose unbaled paper (ONP #6);
- Corrugated containers, grade 10 (OCC #10);
- Glass;
- HDPE clear;
- Mixed Paper;
- Steel;
- PET clear;
- Aluminium;
- PET coloured; and
- Other recoverables.



*Item 11.4 continued*

The financial results are as follows:

<b>Parameter</b>	<b>Result</b>
NPV	\$6.7 million
Payback	9 years
IRR	12.6%
No. of years of negative cashflow	0

Conclusion

The feasibility study shows that the financial return is promising using the assumptions made. The financial return is sensitive to capital cost, recycling tonnages, the cost of operation and commodity prices.

More work is needed to determine the timing and availability of member Council tonnages which will depend on current contracts. Also more research is required to determine the potential for other customers, potential contract models (Design and Construct, Design Build Operate and Maintain, Build Own Operate or fee for service). This will enable more rigorous analysis of the business case and a future report to Council.

An informal group comprising the EMRC's Director Waste Services and Manager Resource Recovery and the City of Swan's Manager Fleet and Waste Services has been collaborating over the financial analysis in conjunction with the EMRC's financial modelling consultant. This will continue on a more regular basis over the next several months to bring the feasibility to a conclusion and recommendations on implementing the project.

**STRATEGIC/POLICY IMPLICATIONS**

Key Result Area 1 – Environmental Sustainability

- 1.1 To provide sustainable waste disposal operations
- 1.2 To improve regional waste management
- 1.3 To provide resource recovery and recycling solutions in partnership with member Councils
- 1.4 To investigate leading edge waste management practices

**FINANCIAL IMPLICATIONS**

Provisions have been made in the ten year budget projection for feasibility and design studies of a MRF in 2014/2015 and 2015/2016 with construction of a MRF in 2016/2017, contingent on the outcome of the feasibility study.

**SUSTAINABILITY IMPLICATIONS**

The recovery of recyclable materials from the waste stream is consistent with the State Waste Strategy of reducing waste to landfill.



*Item 11.4 continued*

## **MEMBER COUNCIL IMPLICATIONS**

<b>Member Council</b>	<b>Implication Details</b>
Town of Bassendean	} Will assist with planning of future contracts for household recycling bin collections and processing.
City of Bayswater	
City of Belmont	
Shire of Kalamunda	
Shire of Mundaring	
City of Swan	

## **ATTACHMENT(S)**

Nil

## **VOTING REQUIREMENT**

Simple Majority

## **Discussion ensued**

The Director Waste Services provided a brief overview of the report.

## **RECOMMENDATION(S)**

That:

1. The report be received.
2. Further evaluation be undertaken incorporating likely member Council recyclable volumes allowing for current contracts.

## **RRC RECOMMENDATION(S)**

MOVED CR POWELL

SECONDED CR ZANNINO

That:

1. The report be received.
2. Further evaluation be undertaken incorporating likely member Council recyclable volumes allowing for current contracts.

**CARRIED UNANIMOUSLY**



**12 REPORTS OF DELEGATES**

Nil

**13 NEW BUSINESS OF AN URGENT NATURE APPROVED BY THE CHAIRMAN OR PRESIDING MEMBER OR BY DECISION OF MEETING**

Nil

**14 CONFIDENTIAL MATTERS FOR WHICH THE MEETING MAY BE CLOSED TO THE PUBLIC**

Nil

**15 FUTURE MEETINGS OF THE RESOURCE RECOVERY COMMITTEE**

The next meeting of the Resource Recovery Committee will be held on **Thursday, 5 February 2015** at the EMRC Administration Office, 1<sup>st</sup> Floor, Ascot Place, 226 Great Eastern Highway, Belmont WA 6104 commencing at 5:00pm.

**Future Meetings 2015**

Thursday	5	February	at	EMRC Administration Office
Thursday	5	March (if required)	at	EMRC Administration Office
Thursday	9	April (if required)	at	EMRC Administration Office
Thursday	7	May (if required)	at	EMRC Administration Office
Thursday	4	June (if required)	at	EMRC Administration Office
Thursday	9	July (if required)	at	EMRC Administration Office
Thursday	6	August (if required)	at	EMRC Administration Office
Thursday	3	September (if required)	at	EMRC Administration Office
Thursday	8	October (if required)	at	EMRC Administration Office
Thursday	19	November (if required)	at	EMRC Administration Office

**16 DECLARATION OF CLOSURE OF MEETING**

There being no further business, the Chairman declared the meeting closed at 5:40pm.