



Waste Management Community  
Reference Group

**MINUTES**

**26 October 2009**

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# WASTE MANAGEMENT COMMUNITY REFERENCE GROUP

## MINUTES

26 October 2009

(REF: COMMITTEES - 10191)

A meeting of the Waste Management Community Reference Group was held at the EMRC Administration Office, 1<sup>st</sup> Floor, 226 Great Eastern Highway, BELMONT WA 6104 on **Monday, 26 October 2009**. The meeting commenced at **6.04pm**.

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## 1 DECLARATION OF OPENING AND ANNOUNCEMENT OF VISITORS

The Acting Chairman opened the meeting at 6.04pm and welcomed Ms Delia Richardson; EMRC's new Community Engagement Officer and congratulated Ms Janet Gee on being elected as a Councillor for the City of Belmont.

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

### WMCRG Members

Mrs Sally Paulin (Acting Chairman)	Deputy Chairman
Mr Peter Pearson	Chairman
Mr Berry Ambrose	Member
Mr Malcolm Barker	Member
Ms Janet Gee	Member
Mr David Strain	Member
Mr Ray Lewis	Member
Mr Edwin Dell	Member
Ms Dianne Katscherian	Member
Ms Dot Kingston	Member
Mr Anthony Fowler	Member

### WMCRG Apologies

Ms Ruth Balding	Member
Mr Mark Simpson	Member

### EMRC Officers

Mr Peter Schneider	Chief Executive Officer
Mr Stephen Fitzpatrick	Manager, Project Development
Ms Gabrielle Grime	Waste Education Coordinator
Ms Delia Richardson	Community Engagement Officer
Ms Pina Martino	Administration Support Officer

### Consultant(s)

Ms Gae Synnott	Consultant, Synnott Mulholland
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## 3 DISCLOSURE OF INTERESTS

Nil

## 4 ANNOUNCEMENT BY THE CHAIRMAN OR PERSON PRESIDING WITHOUT DISCUSSION

In accordance with section 3.3 of the EMRC Standing Orders the Acting Chairman announced a proposed change in Order of Business to deal with **Item 11.2 Future Involvement of Red Hill Community Liaison Group with WMCRG** and **Item 11.6 Discussion on WMCRG Terms of Reference** as the next item of business following **Item 11.5. Waste Education Update**.

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## **9 REPORTS OF RELEVANT RESOURCE RECOVERY COMMITTEE RESOLUTIONS**

### **9.1 PREFERRED RESOURCE RECOVERY FACILITY OPTIONS**

Council has resolved to recommend a preliminary set of preferred RRF options as a basis for discussion between the EMRC and the member Councils and the community. The unconfirmed minutes of the Ordinary Meeting of Council 24 September 2009 relating to this report item (Report item 9.1 Resource Recovery Committee, 17 September 2009) are attached.

#### **RECOMMENDATION(S)**

That report item 9.1 of the Resource Recovery Committee minutes of 17 September 2009 be noted.

#### **WMCRG RECOMMENDATION**

MOVED MR STRAIN

SECONDED MS KATSCHERIAN

That report item 9.1 of the Resource Recovery Committee minutes of 17 September 2009 be noted.

**CARRIED UNANIMOUSLY**

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## 9 REPORT OF OFFICERS

### 9.1 PREFERRED RESOURCE RECOVERY FACILITY OPTIONS REPORT

**REFERENCE: COMMITTEES-9922**

#### PURPOSE OF REPORT

To advise Council of the progress of the assessment of the various options for the Resource Recovery Facility, including the technologies, sites, ownership models and bin collection systems.

#### KEY ISSUES AND RECOMMENDATION(S)

- The Tender Evaluation Committee (TEC) in conjunction with consultants Cardno have completed an evaluation of the options for the Resource Recovery Facility (RRF) – namely the technology options, site options, ownership model options and bin collection system options.
- The Western Australian Treasury Corporation (WATC) have reviewed the financial modelling of the various options and made suggestions for improvement.
- Information used in the preferred options analysis included data gained from the Expression of Interest (EOI) process, the request for information report from October 2008, information obtained from the international conference on energy from biomass and waste (2008) and the associated site visits, input from representatives of consultants Fichtner GmbH & Co and Juniper Consultancy Services and other research.

#### Recommendation(s)

1. That the following preliminary recommendations of the Resource Recovery Committee form the basis of consultation between the EMRC and the member Councils and the community with the intention of reporting back to Council in approximately March 2010 with a final recommendation:
  - a) Red Hill Waste Management Facility is the preferred site for the RRF.
  - b) The Design & Construct contract ownership model is preferred to a Build Own Operate contract model.
  - c) The RRF technology options including anaerobic digestion, gasification and pyrolysis are ranked higher than combustion and plasma at this stage but more information is required before a final preference can be determined.
  - d) A third bin for household organic waste collection be considered in conjunction with anaerobic digestion technology.

#### SOURCE OF REPORT

Manager Project Development

#### BACKGROUND

On 30 April 2009, Council resolved to proceed with the Expression of Interest process.

At the 27 August 2009 meeting of Council it was resolved:

1. THE FOLLOWING RESPONDENTS TO THE EXPRESSION OF INTEREST ARE LISTED AS ACCEPTABLE TENDERERS:
  - A. ENERGOS AS;
  - B. EVERGREEN ENERGY CORPORATION PTY LTD;
  - C. GRD MINPROC LIMITED;



*Item 9.1 continued*

- D. MOLTONI ENERGY PTY LTD;
  - E. SITA ENVIRONMENTAL SOLUTIONS;
  - F. TRANSPACIFIC CLEANAWAY LIMITED; AND
  - G. WSN ENVIRONMENTAL SOLUTIONS.
2. THE FOLLOWING RESPONDENTS TO THE EXPRESSION OF INTEREST ARE NOT LISTED AS ACCEPTABLE TENDERERS:
    - A. ANAECO LIMITED; AND
    - B. THIESS SERVICES PTY LTD.
  3. THE RESPONDENTS TO EXPRESSION OF INTEREST 2009-10 BE ADVISED OF THE OUTCOME OF THE ASSESSMENT.
  4. THE ATTACHMENT REMAINS CONFIDENTIAL AND BE CERTIFIED BY THE ACTING CHIEF EXECUTIVE OFFICER AND THE EMRC CHAIRMAN.
  5. THE TENDER EVALUATION COMMITTEE BE ACKNOWLEDGED FOR THE SIGNIFICANT EFFORT PUT INTO EVALUATING THE EOI SUBMISSIONS.

## **REPORT**

The Tender Evaluation Committee (TEC) has reviewed the Cardno project team's progressive assessment of the technology, site, ownership model and bin collection system options at its meetings of 21 August and 3 September 2009. Information used in the financial modelling of the various options included:

1. Information gained from the respondents to the EOI – Establishment of a Resource Recovery Facility for the Eastern Metropolitan Regional Council, May 2009;
2. Information gained for the EMRC Request for Information, October 2008;
3. Information obtained by the EMRC delegation that attended the Second International Symposium on Energy from Biomass and Waste and the associated visits to facilities in October-November 2008;
4. Feedback from the Western Australian Treasury Corporation (WATC) on the financial modelling and financing costs;
5. Research reports prepared for the Los Angeles County Department of Public Works including a report prepared by URS entitled "Conversion Technology Evaluation Report, August 2005";
6. A research report prepared by Advanced Energy Strategies for the Alameda Public Utilities Board in the US entitled "Investigation into Municipal Solid Waste Gasification for Power Generation, May 2004"; and
7. Discussions with consultants Fichtner GmbH & Co in Germany and Juniper Consultancy Services in the UK on their experience with the commercialisation of gasification, pyrolysis and plasma facilities, the operational complexity of these technology options compared compared to anaerobic digestion technology, major operational risk issues and mitigation, the competitiveness of gasification, pyrolysis, combustion and plasma compared to anaerobic digestion and feedback on the assessment methodology used in the EMRC project.

The Executive Summary of the draft Cardno report on the RRF Preferred Options is attached (Attachment 1).

Within the decision model for the acceptable technologies, a multi-criteria assessment model is used as was used in the Task 5 report "Assessment of Sites and Technologies, February 2006". The criteria have been amended to include carbon implications under the environmental criteria and public perception under the social criteria. The carbon implications criterion was assessed against EOI responses to net greenhouse

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gas emissions, whereas the public perception criterion used the results from the recent Patterson Market Research study on community attitudes towards Resource recovery Technologies.

### **Contract Model and Facility Ownership**

A value for money assessment has been undertaken to assess if the benefits to the EMRC of transferring risks to a contractor under a Build Own Operate contract would offset the increased costs charged by the contractor due to private financing and for assuming the project risks.

In analysing the risk aspects of the contract ownership models, the Manager Project Development and Cardno's Project Director have met with the CEO of the SMRC to discuss the lessons learned from their experience with a Design & Construct model. Use has also been made of the Federal Government's Infrastructure Australia methodology for assessing the suitability of Public Private Partnerships for undertaking social infrastructure projects such as waste treatment facilities.

Changes in the international financial markets since the Global Financial Crisis have had a material effect on the financing costs of Public Private Projects. While some of these costs may be temporary, it is anticipated that a more conservative approach to private financing of major infrastructure projects will be taken for the foreseeable future.

The assessment has found that, providing a comprehensive, but achievable, risk mitigation strategy is adopted by the EMRC, a Design and Construct contract, with the EMRC retaining ownership of the RRF, would provide best value to the EMRC and the member Councils.

WATC have provided valuable feedback on the financial model, financing costs for a WATC loan and the implications on the Member Councils. This information has been used to adjust some of the assumptions in the Financial Model used for the assessment process. WATC is of the view that guarantees from Member Councils would be required for either an EMRC loan (under a D&C contract) or of the EMRC's financial obligations under a BOO contract. Also, such guarantees would have similar effects on borrowing capacities of the Member Councils, as they would be seen by lenders in the current market as liabilities of the Member Councils.

### **Preferred Site for the RRF**

Consideration has been given to locating the RRF at either of the EMRC facilities at Red Hill and Lakes Road, Hazelmere. Particular attention has been given to the possibility of being able to sell the surplus heat from the RRF (in addition to electricity that may be produced), as well as the views of the public obtained from the recent Patterson Market Research study. It has been concluded that the opportunities for selling heat from the RRF may be limited and so should not be a determining factor in deciding on the preferred site. There is a strong community preference for siting the RRF at Red Hill. From a technical perspective, both sites are suitable, however, Hazelmere, being located closer to the population centre, offers better opportunities to be used for a Resource Recovery Park.

The TEC has recommended, on balance, that the RRF should be located at Red Hill. Detailed consultation should be undertaken with the local communities to obtain their input to the development through a Community Partnership Agreement.

### **Technologies**

The TEC has found that there is limited publicly available information about some of the technologies, particularly relating to costs and due to the limited use of some of the technologies. On the basis of the available information a Multi Criteria Analysis has been used to assess the technologies and a provisional ranking has been established. However, the TEC is of the view that further research is required on the costs and the operational risks of the technologies before a final decision is made. These matters are particularly important if a D&C model is adopted, as recommended.

This research will be conducted over the next few months using expert advices from waste consultants Juniper Consultancy Services and Fichtner GmbH & Co and then the Multi Criteria analysis will be updated which may result in a change to the ranking of the technology options.

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Consideration also needs to be given to the capacity of the RRF for particular technologies, and the potential need for additional future stages, given the differences in the type of waste processed by the differences technologies.

### Bin Collection System

The results of the recent three bin collection trial have been reviewed and found to be encouraging. The quality of products, particularly the compost from the anaerobic digestion process, will benefit from the improved quality of feedstock from a source separated collection system. The additional costs of collection have been found to be offset by the reduced cost of processing. If a two bin collection system is used, then considerable effort and cost is expended in removing the inorganic waste from the waste stream – a task that is largely undertaken by householders with a three bin collection system.

It is therefore recommended that consideration be given to implementing a three bin collection system if anaerobic digestion technology is used for the RRF.

In summary, the analysis by Cardno has provided the following preliminary recommendations on the site, technologies, contract ownership model and bin collection systems.

Options	Preferred Option
RRF Site	Red Hill Waste Management Facility
RRF Technology	Ranking of technology options: 1. Anaerobic Digestion 2. Gasification 3. Pyrolysis 4. Combustion 5. Plasma
RRF Contract Ownership Model	Design & Construct
Bin Collection System	Three bin system for Anaerobic Digestion, otherwise a two bin system.

Following the meeting of the TEC on 3 September, the project team has spoken with a representative of waste consultants Fichtner GmbH regarding their experience with the various technology options. They advised as follows:

- There is not a lot of difference between gasification and pyrolysis;
- Pyrolysis is technology applied in Germany but is not successfully implemented (based on economic comparison with other alternatives) over a long period for MSW. Pyrolysis is in successful operation for special waste types like cables and tyres;
- None of the gasification/pyrolysis technologies for MSW has been in operation for a long period;
- The Thermoselect plant at Karlsruhe in Germany stopped operation 2 to 3 years ago because it could not reach its throughput capacity;
- There is a lot of investment in incinerator technology in Germany all with highly sophisticated flue gas treatment;
- Plasma technology is not competitive for MSW although it has been used for small quantities of MSW;
- The thermal technologies usually need 3 - 6 weeks per year for regular maintenance per line so this means spare capacity is needed or alternative disposal means;
- Thermal technologies are complex but not such that the EMRC could not operate such a facility with appropriate training and management systems;



- With anaerobic digestion facilities, difficulties include the time to start the process, usually 2 weeks; problems with substances in the waste which are not suitable and separate organic collections work better;
- With the incineration facilities, there can be corrosion issues with boilers due to chlorides in the flue gas;
- 80,000 – 100,000 tonnes per annum per line is common for incineration facilities;
- Optimising the energy output from incineration facilities has to be balanced with maintenance requirements;
- Where pyrolysis was in competition with incineration in Germany in recent samples of projects, pyrolysis, was not competitive with incineration, as it was unable to meet design throughputs and incineration facilities have become cheaper;
- Anaerobic digestion is competitive with incineration, it's then a question of what to do with the residual compost and liquid from an anaerobic digestion plant;
- The ratio of flue gas residuals to bottom ash residuals is usually 1:3 to 1:4 (for grate incineration); and
- The EMRC selection criteria used in the multi criteria model appear to be appropriate.

The project team also spoke with Juniper Consultants in the UK, who advised as follows:

- All of the reliable technologies need careful management and operation to comply with appropriate standards;
  - Using reliable and proven technology is critical as there are a number of emerging, but unproven technologies trying to enter the market;
  - Operational challenges are often underestimated by promoters of new technologies. A good indication of the maturity of a technology is the quality of the protocols and systems that have been developed for managing and operating the facility;
  - Pre-processing of waste for most of the technologies is critical, and a major potential risk area if the pre-processing is not undertaken properly;
  - Attention needs to be given to the quality and maintenance costs of the refractory lining of the combustion chamber and of the boilers in waste to energy facilities;
  - Proven gasification technologies (particularly from Japan) are most costly, while simple anaerobic digestion technologies and unproven gasification technologies are the least costly;
  - There are many new technologies that are seeking to establish reference sites and are pricing their bid accordingly; and
  - Generally conversion technologies (gasification, pyrolysis and plasma) and anaerobic digestion technologies are more competitive with capacities less than 150,000 tonnes per annum, while combustion technologies are generally more economic treating more than 150,000 tonnes per annum.
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### Member Council and Community Engagement

The project timeline for the completion of the preferred RRF options analysis was amended at the RRC meeting of 25 June 2009, taking into account feedback from the Chief Executive Officer Advisory Committee (CEOAC). The revised timeline provides for extended consultation with the member Councils between November 2009 and February 2010 (refer Attachment 2). It also provides for community engagement according to the programme identified in report item 9.4 of the 13 August 2009 RRC agenda.

Because of local government elections and councillor inductions, the next round of member Council consultation on the project is likely to occur in early December 2009 through to February 2010.

### **STRATEGIC/POLICY IMPLICATIONS**

The Resource Recovery Project contributes to Key Result Area 1 - Environmental Sustainability of EMRC's Strategic Plan for the Future, specifically Objective 1.3:

To provide resource recovery and recycling solutions in partnership with member Councils  
Key Result Area 1 – Environmental Sustainability

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

### **FINANCIAL IMPLICATIONS**

The cost of using consultants Cardno BSD/Meinhardt JV arising from the Request for Tender 2004/1 is budgeted at approximately \$491,150 in the 2009/2010 Budget under – Resource Recovery – Implement Resource Recovery Project Plan. This includes budget provisions for the tasks related to the Expressions of Interest process and Tender. Provision is likely to be needed to fund additional technical advice to assist in the assessment of technologies and the establishment of the technical requirements of the RRF under a D&C model.

### **SUSTAINABILITY IMPLICATIONS**

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

<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)

1. Executive Summary of the Report – Cardno, Preferred RRF Options (Ref: Committees-9997)
2. Project Timeline ([Ref: Committees-9996](#))

### VOTING REQUIREMENT

Simple Majority



## **RECOMMENDATION(S)**

1. That the following preliminary recommendations of the Resource Recovery Committee form the basis of consultation between the EMRC and the member Councils and the community with the intention of reporting back to Council in approximately March 2010 with a final recommendation:
  - a) Red Hill Waste Management Facility is the preferred site for the RRF.
  - b) The Design & Construct contract ownership model is preferred to a Build Own Operate contract model.
  - c) The RRF technology options including anaerobic digestion, gasification and pyrolysis are ranked higher than combustion and plasma at this stage but more information is required before a final preference can be determined.
  - d) A third bin for household organic waste collection be considered in conjunction with anaerobic digestion technology.

### Discussion ensued

Cr Klein expressed concerns about introducing the third bin system and the cost implications on member Councils. She also stated that the current Councillors on the Committee may not be re-elected and therefore incoming Councillors would be unaware of the technologies and processes to date.

Manager Project Development stated the review of a three bin system had been carried out previously in the Cardno BSD Meinhardt Task 10 report on Waste Collection Systems. The Cardno analysis showed that the overall cost per annum to households for a three bin system was comparable to a two bin system. The separation of the organic waste by householders reduced capital costs for an anaerobic digestion facility because less pre-treatment of the waste would be required. The Manager Project Development also stated that the preferred options recommended here were not final and more information would be required on the technologies as a basis for discussion with member Councils and the community in the coming months.

## **AMENDMENT**

Moved Cr Godfrey seconded Cr Klein that recommendation 1 be amended and to include an explanation of why Red Hill Waste Management Facility is the preferred site for the RRF.

The substantive motion included the amended recommendation 1.

**CARRIED**

## **RRC RECOMMENDATION(S)**

MOVED CR GODFREY                      SECONDED CR KLEIN

1. That the following preliminary recommendations of the Resource Recovery Committee form the basis of consultation between the EMRC and the member Councils and the community with the intention of reporting back to Council in approximately March 2010 with a final recommendation.
  - a) Red Hill Waste Management Facility is the preferred site for the RRF based on environmental, economic and planning considerations, community research and the potential value of the EMRC Hazelmere site as a Resource Recovery Park.
  - b) The Design & Construct contract ownership model is preferred to a Build Own Operate contract model.
  - c) The RRF technology options including anaerobic digestion, gasification and pyrolysis are ranked higher than combustion and plasma at this stage but more information is required before a final preference can be determined.
  - d) A third bin for household organic waste collection is considered in conjunction with anaerobic digestion technology.

**CARRIED UNANIMOUSLY**

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*Item 9.1 continued*

Cr McKenna asked if the EMRC could commence the environmental approval process. The Manager Project Development advised that the intended process was that by around March 2010, after the EMRC had completed consultation with the member Councils, the EMRC would report back to Council on the recommended technologies, ownership model and bin collection system. The EMRC, would after this, commence the environmental approval process which needs to be site and technology(s) specific.

**COUNCIL RESOLUTION(S)**

MOVED CR GODFREY

SECONDED CR PULE

1. THAT THE FOLLOWING PRELIMINARY RECOMMENDATIONS OF THE RESOURCE RECOVERY COMMITTEE FORM THE BASIS OF CONSULTATION BETWEEN THE EMRC AND THE MEMBER COUNCILS AND THE COMMUNITY WITH THE INTENTION OF REPORTING BACK TO COUNCIL IN APPROXIMATELY MARCH 2010 WITH A FINAL RECOMMENDATION.
  - A) RED HILL WASTE MANAGEMENT FACILITY IS THE PREFERRED SITE FOR THE RRF BASED ON ENVIRONMENTAL, ECONOMIC AND PLANNING CONSIDERATIONS, COMMUNITY RESEARCH AND THE POTENTIAL VALUE OF THE EMRC HAZELMERE SITE AS A RESOURCE RECOVERY PARK.
  - B) THE DESIGN & CONSTRUCT CONTRACT OWNERSHIP MODEL IS PREFERRED TO A BUILD OWN OPERATE CONTRACT MODEL.
  - C) THE RRF TECHNOLOGY OPTIONS INCLUDING ANAEROBIC DIGESTION, GASIFICATION AND PYROLYSIS ARE RANKED HIGHER THAN COMBUSTION AND PLASMA AT THIS STAGE BUT MORE INFORMATION IS REQUIRED BEFORE A FINAL PREFERENCE CAN BE DETERMINED.
  - D) A THIRD BIN FOR HOUSEHOLD ORGANIC WASTE COLLECTION IS CONSIDERED IN CONJUNCTION WITH ANAEROBIC DIGESTION TECHNOLOGY.

**CARRIED UNANIMOUSLY**

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## **9.2 RESULTS OF ORGANIC BIN TRIAL**

Council has resolved to use the results of the organic bin trial in the preferred Resource Recovery Facility options analysis. The Manager Project Development gave an overview on the attachment to (Report item 9.2 Resource Recovery Committee, 17 September 2009) and read out the outcomes of the trial and the key issues and recommendations (are attached).

### **RECOMMENDATION(S)**

That report item 9.2 of the Resource Recovery Committee minutes of 17 September 2009 be noted.

### **WMCRG RECOMMENDATION**

MOVED MR STRAIN

SECONDED MS KATSCHERIAN

That report item 9.2 of the Resource Recovery Committee minutes of 17 September 2009 be noted.

**CARRIED UNANIMOUSLY**

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## 9.2 ORGANICS BIN TRIAL REPORT

**REFERENCE: COMMITTEES-9682**

### PURPOSE OF REPORT

To advise Council on the outcomes of a trial involving the use of a household organics bin by member Council residents.

### KEY ISSUES AND RECOMMENDATION(S)

- A household organics bin was trialled in approximately 300 homes across the region (50 per member Council) between 21 April and 23 June 2009.
- Prior to the roll out of the organics bin, residents in the streets selected by the consultants were advised of the trial and given the opportunity not to participate.
- Consultants APC Environmental conducted a pre-trial audit of rubbish bins for the selected households and in the case of Bayswater residents, an audit of the rubbish and green waste bins.
- The 300 households were provided with a 240 litre organics bin, a 6.6 litre bio-basket and supply of compostable liner bags, an information pack and other information via the R-Gang website.
- The 240 litre organics bin was collected weekly and the organics have been composted at Red Hill.
- The organics bins were audited at the end of the 8 week trial, together with the contents of the rubbish bin.
- Results showed a significant diversion of organics from the rubbish bin and low contamination of the collected organics, however there was still an average of 32% organics in the rubbish bin at the end of the trial.

#### Recommendation(s)

That:

1. Results from the trial be used in the preferred Resource Recovery Facility options analysis and made available to the community via the R-Gang website.
2. Further research be conducted into the use of source separated organics bins around Australia to compare with the EMRC trial and identify critical success factors.

### SOURCE OF REPORT

Manager Project Development

### BACKGROUND

In April 2008, the EMRC applied for and was successful in receiving \$95,000 (plus GST) grant funding from the Strategic Waste Initiative Scheme to trial a household organic waste collection in the eastern region. The purpose of the trial was to assess the potential for an organics bin in the region in conjunction with anaerobic digestion Resource Recovery Facility.

The trial design was developed by APC Environmental and they recommended a selection of streets in each member Council based on similar socio-economic data. From this selection and after some input from member Council officers, the final streets and houses were nominated.



*Item 9.2 continued*

Quotations were received from two consultancies able to conduct the audits of the waste streams before and after the issue of the organics bins. Due to the availability of EMRC personnel and the preferred consultant, the trial was not commenced until after Easter 2009. Care was taken to avoid school holiday periods which could distort the waste stream and affect the ability of households to participate.

APC Environmental recommended a minimum of six weeks for the trial if weekly collections were undertaken as behaviour tends to modify over time. It was decided to conduct the trial for 8 weeks and this was done between 21 April and 23 June 2009. Audits of the rubbish bins, greenwaste bins and the organics bins were completed by APC Environmental at the EMRC's Hazelmere site. EMRC staff developed the information packs, advertising and website information to support the trial, much of which was drawn from the experience of the City of Burnside in Adelaide. Gidge Waste and the City of Swan assisted with the collection of the waste, distribution of the organics bins

## REPORT

The participating streets for the trial were as follows:

<b>Council</b>	<b>Street (s)</b>	<b>Suburb</b>
Bassendean	Margaret Street	Ashfield
Bayswater	Rosebery Street	Bayswater
Belmont	Armadale Road (between Wright St & Oates St)	Kewdale
Kalamunda	David St, Emerald Court, Opal Court, Gem Court	Maida Vale
Mundaring	Laslett Circle, Luhrs Court	Mundaring
Swan	Albatross Loop, Shelduck Crescent	Beechboro

Approximately 50 households were selected in each member Council street(s), a total of approximately 300 households. For the pre-trial audit, APC staff visited 323 addresses to collect 287 samples, which represents a presentation rate of 89%. The pre trial audit was conducted from 21 – 28 April 2009. In total, 4,714kgs of general waste from the rubbish stream and a further 340kgs of garden waste from Bayswater Council were sorted into 16 agreed categories. There was a diverse range of bin weights, composition and fullness between the samples within each of the six member councils.

The audit report of consultants APC Environmental is attached for information (Attachment 1).

For the post-trial audit, conducted from 16 – 23 June 2009, APC staff collected samples from 171 households' rubbish bins and 198 organics bins, which comprised the regional sample. A number of operational issues occurred during the week of the post audit collection and, in some cases, corresponding rubbish bins were collected up to two hours earlier than we were advised would be the normal collection time. This unfortunately happened on more than one occasion due to poor communication between Cleanaway operational staff and collection drivers. In total, 2,093kgs of waste from the rubbish stream was sorted and a further 2,145kg of garden waste was audited from the trial organic bins. In total, 4,238kgs of household waste and organics was sorted into the agreed categories. As with the pre trial, there was a diverse range of bin weights, composition and fullness between the samples within each of the six member and participating councils.

Overall yields per household by the participating streets referred to above are summarised in the following table:



Item 9.2 continued

Council	Pre Trial		Post Trial		Total Waste Stream
	Rubbish	Greenwaste	Rubbish	Organics bin	
	Weight Kgs Per Household Per Week				
Bassendean	15.8	N/A	11.4	6.6	18
Bayswater	11.6	5.9	15.3	11.2	26.5
Belmont	20.2	N/A	16.5	13.0	29.5
Kalamunda	18.6	N/A	13.0	11.6	24.6
Mundaring	11.4	N/A	9.2	14.2	23.4
Swan	20.1	N/A	12.1	7.3	19.4
<b>Average Household</b>	<b>16.3</b>	<b>5.9</b>	<b>12.9</b>	<b>10.65</b>	<b>23.55</b>

The results showed that at the end of the 8 week organics bin trial:

- Average rubbish/household/week = 12.9 kg;
- Average organics/household/week = 10.65 kg;
- Total waste/household/week = 23.55 kg, an increase in total waste of 7.25 kg/week; and
- Rubbish bin contents reduced by 4.4 kg/week.

The aggregated composition of the rubbish bin, pre-trial was as follows:

Rubbish Bin Material	Weight (kg)	Per cent
Recyclable material (1)	1366.4	29.0%
Textiles – natural and synthetic	99.7	2.1%
Organic material (2)	2614.7	55.5%
Hazardous/medical	7.7	0.2%
Other/miscellaneous	625.8	13.3%
<b>Total</b>	<b>4,714.3</b>	<b>100.0%</b>

- 1: Paper, cardboard, plastics, glass, ferrous and non-ferrous metal.  
 2: Wood and straw, green waste, food waste.

The post trial compositions of the rubbish bin and the organics bin were as follows:

Rubbish Bin Material	Weight (kg)	Per cent
Recyclable material (1)	740.6	35.4%
Textiles – natural and synthetic	73.4	3.5%
Organic material (2)	789.6	37.7%
Hazardous/medical	11.3	0.5%
Other/miscellaneous	478.1	22.8%
<b>Total</b>	<b>2,093.0</b>	<b>100.0%</b>

- 1: Paper, cardboard, plastics, glass, ferrous and non-ferrous metal.  
 2: Wood and straw, green waste, food waste.



*Item 9.2 continued*

<b>Organics Bin Material</b>	<b>Weight (kg)</b>	<b>Per cent</b>
Recyclable material (1)	43.6	2.0%
Textiles – natural and synthetic	1.4	0.1%
Organic material (2)	2,091.4	97.5%
Hazardous/medical	0.0	0.0%
Other/miscellaneous	9.1	0.4%
<b>Total</b>	<b>2,145.5</b>	<b>100.0%</b>

- 1: Paper, cardboard, plastics, glass, ferrous and non-ferrous metal.  
 2: Wood and straw, green waste, food waste.

Pre-trial organics in rubbish bin = 55.5% (wood and straw, food waste and green waste) or 54% (food and green waste only).

Post trial organics in rubbish bin = 37.7% (wood and straw, food waste and green waste) or 32% (food waste and green waste only).

Therefore residents diverted 22% of organic waste from the rubbish bin to the organics bin.

The organics bin analysis was 97.5% (wood and straw, food waste and green waste) or 94.8% food waste and green waste. Contamination in the organics was low at 2.5% comprising plastics, metal, glass and nappies of which 1.6% is recyclable, so true contamination was 0.9%

The proportion of green and food waste in the organics bin varied between the Council areas as shown in the following table.

<b>Council</b>	<b>Green waste</b>	<b>Food waste</b>	<b>Other material</b>
<b>Bassendean</b>	<b>58.6%</b>	<b>30.1%</b>	<b>11.4%</b>
<b>Bayswater</b>	<b>70.9%</b>	<b>28.1%</b>	<b>1.0%</b>
<b>Belmont</b>	<b>61.0%</b>	<b>35.3%</b>	<b>3.7%</b>
<b>Kalamunda</b>	<b>58.5%</b>	<b>28.3%</b>	<b>13.2%</b>
<b>Mundaring</b>	<b>68.6%</b>	<b>30.1%</b>	<b>1.3%</b>
<b>Swan</b>	<b>79.4%</b>	<b>20.5%</b>	<b>0.1%</b>
<b>All councils</b>	<b>65.4%</b>	<b>29.4%</b>	<b>5.3%</b>

Moisture analysis was completed on the pre and post trial rubbish and organics bins to provide data for the Resource Recovery Facility.

All collected organics were windrow composted at Red Hill.

Implications for Resource Recovery Facility

The organics trial has shown that the introduction of a dedicated bin for the collection of food and garden waste has the capacity to divert significant proportions of these streams from the rubbish bin and hence to a future Resource Recovery Facility.

An average yield of 10.65 kg/household /week would provide 66,000 tonnes per annum of household organic waste across the region, assuming 120,000 households and 100% participation rate.



With ongoing education and awareness campaigns, the use of a contrasting bin lid colour for the organics bin rather than the nature green lid used in the trial to avoid possible confusion, greater diversion of organic waste especially food waste could be achieved.

The trial showed very low levels of contamination in the organics bin at less than 1%, suggesting a good understanding by participating householders of the materials that were accepted in the organics stream.

Further research into the use of household organic bins should be conducted around Australia to assess the performance and success factors in their deployment and to compare the results to the EMRC trial.

#### Acknowledgements

The EMRC acknowledge the services supplied by the City of Swan in assisting with the organics bin trial including the sourcing and distribution of the new organics bins, the daily collection of the organic waste and transport of audited waste to Red Hill and the final collection of the organics bins. The support from City of Swan staff Colin Pumphrey and Lance Clerke is especially acknowledged.

### **STRATEGIC/POLICY IMPLICATIONS**

The Resource Recovery Project contributes to Key Result Area 1 - Environmental Sustainability of EMRC's Strategic Plan for the Future, specifically Objective 1.3:

To provide resource recovery and recycling solutions in partnership with member Councils  
Key Result Area 1 – Environmental Sustainability

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

### **FINANCIAL IMPLICATIONS**

The project was partly funded by a \$95,000 (plus GST) grant from the Waste Authority. Funding was also budgeted for under Undertake Waste Stream Audits (72884/01 - \$92,000).

### **SUSTAINABILITY IMPLICATIONS**

The Resource Recovery Facility and/or Resource Recovery Park will contribute toward 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)

Report by APC Environmental, "Organic Bin Trial Waste Audit", August 2009 (Ref: Committees-9970)



### VOTING REQUIREMENT

Simple Majority.

### **RECOMMENDATION(S)**

That:

1. Results from the trial be used in the preferred Resource Recovery Facility options analysis and made available to the community via the R-Gang website.
2. Further research be conducted into the use of source separated organics bins around Australia to compare with the EMRC trial and identify critical success factors.

### Discussion ensued

Manager Project Development stated the results of the trial showed that participating householders had a good understanding of materials that were accepted in the organics stream. Furthermore research by Cardno shows that the three bin system rated highly, and householders were separating green waste organic waste and putrescible waste.

Cr Albert stated that with a comprehensive community education program, the acceptance of the three-bin system would increase, as had been evident from the trials already introduced.

### **RRC RECOMMENDATION(S)**

MOVED CR ZANNINO

SECONDED CR ALBERT

That:

1. Results from the trial be used in the preferred Resource Recovery Facility options analysis and made available to the community via the R-Gang website.
2. Further research be conducted into the use of source separated organics bins around Australia to compare with the EMRC trial and identify critical success factors.

**CARRIED UNANIMOUSLY**

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*Item 9.2 continued*

**COUNCIL RESOLUTION(S)**

MOVED CR ZANNINO

SECONDED CR PULE

THAT:

1. RESULTS FROM THE TRIAL BE USED IN THE PREFERRED RESOURCE RECOVERY FACILITY OPTIONS ANALYSIS AND MADE AVAILABLE TO THE COMMUNITY VIA THE R-GANG WEBSITE.
2. FURTHER RESEARCH BE CONDUCTED INTO THE USE OF SOURCE SEPARATED ORGANICS BINS AROUND AUSTRALIA TO COMPARE WITH THE EMRC TRIAL AND IDENTIFY CRITICAL SUCCESS FACTORS.

**CARRIED UNANIMOUSLY**

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## **10 REPORTS OF MEMBERS**

### **10.1 REPORT FROM MEMBERS ON THE 2009 WASTE AND RECYCLE CONFERENCE**

Reports from Mr Dell and Mr Lewis on the Waste and Recycle Conference 2009 (are attached).

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## **WASTE & RECYCLE 2009 CONFERENCE**

I thank the Eastern Metropolitan Regional Council for affording me the opportunity, as a member of the Waste Management Community Reference Group, to attend the Waste and Recycle 2009 Conference over the four days of September 15 to 18, inclusive of the Pre-Conference Tours and Workshops. I found the full day Waste Experience Tour very useful and informative that encompassed visits to:

- Brockway DiCom AWT Facility;
- Tamala Park landfill site;
- MRC/Biovision's newly commissioned Resource Recovery Facility in Neerabup; and
- The recently expanded Wangara MRF.

### **ANAEROBIC DIGESTION**

Seeing the first train of the Brockway DiCom AWT Facility in operation was most informative. Although it was not possible to see any of the resulting product, it was edifying to hear that the compost was of sufficiently high quality for a major garden products company to contemplate entering into a commercial contract to use the material in a range of garden soil conditioners, including potting mixes. Perhaps, when the second train is operational and the plant fully commercial, a follow-up visit could be made. At such visit, product should be available for examination plus data on residues going to landfill and the composition of those residues. Such data would be of interest to the EMRC should the residues continue to be disposed of in the Red Hill facility.

### **NB**

It is evident that in order to produce high quality compost that is acceptable for commercial garden product manufacture it is critical that there be no contamination of the feedstock. Therefore it would be most desirable that source separation of MSW occurs.

### **INCINERATION**

A highlight of the Waste to Energy Workshop was hearing about thermal treatment of waste, especially its wide acceptance globally. It was good to learn that, although incineration has been environmentally polluting, modern technology had generally overcome earlier problems. However, emissions into the atmosphere had been reduced but not entirely eliminated. Therefore in contemplating disposal technologies all options should detail the pluses and negatives of each technology before any final decision is reached.

Advantages of incineration include:

1. Safe and effective disposal of MSW;
2. Reduction of dependence on fossil fuel where the process includes electricity generation; and
3. Disadvantage is that it undermines recycling, recovery and reuse.

## WASTE & RECYCLE 2009 CONFERENCE

### GLASS RECYCLING

I was impressed by the initiative of the Alice Springs local government in implementing a recovery scheme for cans and bottles as a means to improve the environment by providing a financial incentive for the community to become active in gathering bottles and cans from public places including parks, gardens and road verges. Unlike the container deposit system that exists in South Australia; payment, for bottles and cans delivered to the recovery depot, comes from the landfill levy.

At present the Alice Springs Town Council is stockpiling glass with a view to future crushing. The product will be used as a partial material substitute in non-structural concrete such as footpaths and street kerbing. The Alice Springs Council is contemplating using glass fines in road marking paint. Such usage of crushed glass has the flexibility to include sheet glass in the process. It was also good to hear that the Augusta Margaret River Shire Council has diverted glass bottles from landfill to a stockpile for future crushing once the necessary crushing equipment has been procured. Glass bottles had been going to landfill, as it was not economic to ship to the bottle reprocessing plant in South Australia. Being a wine producing region and tourist destination Margaret River has a very large volume of wine bottles for disposal compared with other local government areas. Brendan Mohr of the Mindarie Regional Council advised that glass recycling transport costs to South Australia were in the order of \$115 to \$130 per tonne.

#### **Points of Interest from Keynote Address by Professor Dexter Dunphy:**

- Products need to be designed to facilitate reuse and recycling;
- See all waste as poor management;
- Danish Government has a plan to eventually be free from fossil fuel dependence for its energy needs;
- Think systemically; use biological not mechanical models; and
- Reduce consumption as we are living beyond replacement levels.

I liked the pertinent comment: "survival is not compulsory".

#### **Use of Recycled Materials in Road Construction and Maintenance by Local Governments:**

Case studies presented by Erin Fuery of WALGA revealed that although there had been some limited usage of recycled materials such as C and D, waste including glass, plus reclaimed asphalt and crushed brick some research had found that there was a reluctance to use such materials due to:

- Lack of confidence in the product;
- Unprofitable in use due to cheapness of raw material;
- Tender documentation does not include requirements; and
- MRD does not use.

However, some limited usage has proved positive. For example, a co-mingled recycled concrete trial on Welshpool Road gave cost savings and stood up better than quarried material alone. Canning, Gosnells and Augusta Margaret River councils have recently updated tender documents to include recycled materials. MRD has trialed recycled materials on a small section of the new Perth Bunbury Highway.

## WASTE & RECYCLE 2009 CONFERENCE

### The Social Cost of Landfill:

Particularly pertinent to the EMRC position was the address by Professor Paul Hardisty of Worley Parsons especially:

- Social cost e.g. environmental damage that is not factored into the cost of making product; and
- A London survey found that living within 500 metres of a landfill site, whether active or closed, gives 10% devaluation in property values.

### E-Waste:

The Greensense presentation on e-waste gave some interesting data:

- Economic gold recovery is one gram of gold per tonne of ore;
- One tonne of recycled mobile phones yields 3 grams of gold; and
- Currently there are >3,000 tonne of obsolete mobile phones unaccounted for. These are either in homes or have been disposed of inappropriately. This equates to 9,000 grams of gold.

### Risk Assessment:

Concluding comments by some of the presenters are of relevance to our situation, particularly:

1. **Bruce Bowman:** Focus on opportunities and turn every event into one.
2. **Kevin Poynton:** Community is our customer and should be treated as such in any risk assessment plan. Recognise waste as an essential service just as we regard water, electricity et al.
3. **Sandra Cointreau:** To minimize risk we have to work across boundaries.
4. **Professor Dunphy:** Over next few years we must redesign our industrial system. For example the Fuji Xerox system of leasing equipment so it can readily take back and make improvement modifications. We need to ensure that lobby groups are not successful in obstruction of good projects.
5. **Peter Leahy:** The public needs to be fully informed what is going on. So get the message out.
6. **David Färdig:** Need partnerships. Classify waste as an essential service. Support research into options including combustion.

I trust that the above comments on the Conference are useful.

Edwin Dell  
Member  
Waste Management Community Reference Group  
16 October 2009

## WASTE & RECYCLE 2009 CONFERENCE

Once again let me thank the EMRC for giving me the opportunity to attend the Waste and Recycle Conference at the Esplanade Hotel, Fremantle.

On the Wednesday I attended the two workshops. The first which examined the Draft Waste Strategy for Western Australia was interesting in that it gave those present a chance to examine the draft document. My opinion, and that of others who sat around me, was that the document has been a long time coming and like many things that take a long time the end result was a little disappointing.

My major concern was that for a document that is a **"STRATEGY"** there were no outcomes; for example, the Waste Authority will issue standards (similar to those in other States, Territories see <http://www.ene.gov.on.ca/programs/3653e.pdf> ) to ensure that landfill operations throughout the state are properly controlled. Similarly, I would have hoped that it would introduce model legislation for product stewardship such as container deposit, packaging, for promulgation in State Parliament, that is, provide leadership to local government and private industry.

I had always thought that strategies should tell what is intended (outcomes), describe possible ways of achieving those outcomes, indicate how those outcomes would be measured (performance indicators), and then evaluate the process to see how it could be improved. Only the Resource Recovery Targets seemed to have any indication of what was intended but again no means by which these would be achieved. What was done was to provide a series of 'motherhood statements' for the Product Stewardship, Disposal, and Data headings when what is wanted is a leadership strategy which states what it is intended to achieve, how that achievement will be implemented and how it will be monitored and evaluated. A copy of the Waste Authority's Waste Strategy for Western Australia [DRAFT] (with my scribbling) is included with this report.

It seems that the Waste Authority wants feedback from the public and from those who attended the workshop. Perhaps the WMCRG should provide feedback, either as a group or under our members' individual names.

The Waste to Energy workshop in the afternoon outlined the various options available in producing energy from waste. However, I am concerned that those outlining the options seem to think that waste is, and will continue to be, an inexhaustible resource. I have always considered that the major objective of any waste management system is to reduce the amount of waste at source, that is, make it diminish to what might be considered a vanishing point. The presenters, well versed in their various options, seemed to miss this point. I had to leave before the feedback session at the end of the workshop so I was not able to put this point. I would have liked to hear the responses.

The keynote speakers preceding Thursday's sessions were thought provoking with Professor Dunphy's address having some echoes of my belief that we should eliminate waste in manufacturing by 'thinking outside the square'. His example of Fuji Xerox epitomised the ideal for which all manufacturers should strive. Accept responsibility for what you produce and when it has reached the end of its useful life, take it back and re-use it to make more products, if not the company's own, then some other company with the same outlook as Fuji Xerox.

Dr Lisa Skumatz emphasised the idea of thinking "outside the box" and asked some relevant questions. She pointed out the strengths of the various programs such as "Pay as you throw" and "Garbage by the pound" with which she had been involved. Her economics background was very evident from her speech and her ideas were based on, what seemed to me, valid research. She didn't impress me as much as Professor Dunphy, but the points that she made in her address were thought-provoking.

I attended the following presentation by Peg Davies, having some idea of what she was about to say. Her presentation confirmed my belief that Earth Carers is a worthwhile contribution to waste management but that it is a path for the committed to follow. My opinion is that what she describes is extremely worthwhile. For me the major stumbling block is that it is a program for the enthusiast and that most of the populace may see it as a good idea but 'not for them'.

## WASTE & RECYCLE 2009 CONFERENCE

Unfortunately for the conference participants, the next two sessions which were intended to be addressed by Professor Richard Weller were cancelled because the professor did not attend. For me, he was the one person whose presentation I was most interested in. Subsequent to the conference, I searched the proceedings for Prof. Weller's paper only to find that it was not available. Later, after asking him about the possibility of obtaining a copy of Prof. Weller's paper, Steve Fitzpatrick sent me the response that he had received. Effectively, it stated that if I wanted to find out what Professor Weller was going to say, it would cost me \$99.00 for a copy of his new book Boomtown 2050. Will the book be perused by the members of our various legislatures in the hope that they will take note of the shortcomings of current planning legislation?

A stand-in presenter for the second session that Prof. Weller was to undertake gave me pause for thought subsequent to the session which I did not attend. Living as I do in Hazelmere, I was astonished to find out that it was hoped that it would become the home of a Resource Recovery Facility and incinerator which would provide feedstock to a brick making plant. The facility would handle up to, I believe, 140,000 tonnes of MSW. It also seems that the City of Swan and the EMRC were unaware of the development. The site would be that of a previous operation on land which abuts the airport and which had been abandoned. Further enquiries revealed that the company, SITA, was reasonably confident of obtaining permission to operate. I am still appalled that this could be envisaged. Will the State Government require an Environmental Impact Statement? Will the State Government have any power as I believe the property is owned by the Federal Government having been excised from the original airport reserve? As a Hazelmere resident I wait developments with interest.

The afternoon sessions involved Dr Skumatz again who expanded on her keynote address that she had given earlier. The following three sessions were all involved with risk and risk assessment. The three were enlightening and allowed the participants to understand that no matter how you handle risk that no organisation or individual can wholly divest itself of the responsibility for actions undertaken even if carried out in good faith and best practice. Isn't there a message here for all of us about waste management?

The conference, while enlightening in some ways, filled me with a sense of foreboding. There seemed to be little evidence of "thinking outside the box". Perhaps it is my innate cynicism but to me the exhibitors all seem to have a vested interest in ensuring that the waste stream does not dry up.

Let me thank the EMRC once more for giving me the opportunity to attend two days of the conference. It was, as always, sometimes illuminating, sometimes dispiriting. In short, like the curate's egg, good in parts.

Ray Lewis  
Hazelmere  
WMCRG Member

23 October 2009



## **11 GENERAL BUSINESS**

Nil

### **11.1 2009 WASTE & RECYCLE CONFERENCE**

The Manager Project Development along with the Acting Chairman invited discussion on issues raised at the 2009 Waste & Recycle Conference.

#### Discussion ensued

WMCRG members voiced their concerns on the workshop on the draft State Waste Strategy and non attendance of some of the keynote speakers. The Manager Project Development advised the Waste Management Association will develop a submission based on feed back at the workshop. A public workshop is being held on the draft Waste Strategy for WA at the EMRC on the 6 November 2009 and registrations could be completed on line.

### **11.2 FUTURE INVOLVEMENT OF RED HILL COMMUNITY LIAISON GROUP WITH WMCRG**

**Item 11.2 Future Involvement of Red Hill Community Liaison Group with WMCRG was considered by the Committee earlier in the meeting following item 4 Announcement by the Chairman or Person Presiding Without Discussion.**

The Manager Project Development invited discussion in relation to future involvement of the Red Hill Community Liaison Group representatives at WMCRG meetings.

Ms Synnott facilitated the discussion session with the WMCRG members. Comments provided by WMCRG members are outlined in the attachment for this item.

Ms Synnott thanked the WMCRG members for their input and advised that there would be further discussion at the next WMCRG meeting to be held on 24 November 2009 at EMRC.

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## WMCRG DISCUSSION ABOUT ITS ROLE INTO THE FUTURE

Aim of the discussion:

- To hear what group members think about their role and how they want to be involved in the project as it progresses.
- To hear what group members think about the potential involvement of a Red Hill site-specific group and how that would or should work.
- To understand what group members believe it is important to maintain.
- To understand their views about what is open for change.

Broad conclusions from the discussion:

- Group members envisage two separate groups into the future – the existing WMCRG and a formalised Red Hill site-specific group.
- The role of the WMCRG is to provide broad input to the EMRC on waste management issues across the board and to support the waste education program.
- The role of the Red Hill group is to work with the EMRC during development of the RRF, with a specific role to help develop the CPA.
- Each group would operate independently, and would report directly to the EMRC on matters appropriate to its terms of reference. There would be an informal link between the two groups for the purpose of communication.

Matters to be resolved include:

- The mechanism for contact between the WMCRG and the Red Hill group.
- Process for selection of members, possibly using a similar EOI process to the original process used to select WMCRG members; and involvement of local councilors to prod nominations. Important to make the process of selection fair and accessible.
- If the new Red Hill group aims for a balance between local and regional members, what is local? Where to define the boundary?
- Size of group – possibly 12.
- Terms of reference to be developed for the Red Hill group.
- Duration of appointment – perhaps a maximum of 2 years to ensure regular input of new ideas.

Discussion points about the Red Hill Group:

- The current Red Hill Community Liaison Group (RHCLG) is unstructured.
- The group acknowledged Adam Johnson's wish for an informal forum to continue to exist but felt that a formalised and representative group needed to be established.
- Important to check the DEC/EPA requirements for a site-based community advisory group as part of the site's EMS.

Both groups (the formal and the informal) could operate side by side. The current RHCLG should be consulted in the formulation of the proposed new group to determine:

- What do they want in terms of input?
- Do they want to operate as a separate group or interact?

It should be made clear to the existing group that the opportunity to have significant input requires them to be formalised.

## WMCRG DISCUSSION ABOUT ITS ROLE INTO THE FUTURE

The formal group's role would be:

- Hands-on with the RRF project.
- Involvement in development of the CPA.
- Advisory group which can make recommendations to the EMRC about community issues relevant to the project.

Discussion points about the WMCRG:

The group sees its role as follows:

- To provide broad input on waste management issues.
- To provide input into the CPA as advisers on RRF issues.
- To support the waste education program.
- To provide strong educational support across all areas of waste management not just the RRF.

It was agreed that the following description from the Potential Models discussion paper (Option 2) was a reasonable summary of the group's views:

	Model	Advantages	Disadvantages	Other comments
2.	<p>WMCRG continues as main group:</p> <ul style="list-style-type: none"> <li>• Terms of reference are reviewed.</li> <li>• Membership structure remains the same.</li> </ul> <p>Separate site-specific groups are established to deal with the RRF and RR Park:</p> <ul style="list-style-type: none"> <li>• Membership determined through transparent and rigorous process.</li> <li>• RR Park group would be created when needed.</li> </ul> <p>Mechanism created to share members to ensure alignment between groups.</p>	<ul style="list-style-type: none"> <li>• Project &amp; organisational knowledge retained.</li> <li>• Broad perspective taken by WMCRG.</li> <li>• Very localised focus possible through the site-specific groups.</li> </ul>	<ul style="list-style-type: none"> <li>• As the RRF group would be in addition to the existing RHCLG, significant resources required to run 3 or 4 separate groups.</li> <li>• Time commitment of community members who are part of RRF group &amp; also regularly attend WMCRG meetings.</li> <li>• Some duplication in the topics covered by each.</li> <li>• Reduced business to be dealt with in WMCRG meetings.</li> </ul>	<ul style="list-style-type: none"> <li>• RHCLG continues to meet informally.</li> <li>• Member sharing between groups could be done by two co-opted members from each group attending the other group to report on activities.</li> </ul>



### **11.3 RESOURCE RECOVERY PROJECT UPDATE**

The Manager Project Development provided a brief update on the Resource Recovery Project.

### **11.4 COMMUNITY ENGAGEMENT UPDATE**

The Manager Project Development advised that the EMRC had given a briefing on the Resource Recovery Project to Stoneville residents on 30 September 2009. The EMRC will also brief Hazelmere residents at a meeting being held on 3 November 2009 and would also be attending a meeting convened by the Hills Climate Change Action Group on the 26 November 2009. The Community Engagement Officer suggested that the EMRC hold displays at shopping centres to encourage further interaction with the community. A Community Forum proposed for December 2009 will not be undertaken this year but may be rescheduled to February 2010. The Community Engagement Officer also suggested holding static displays in public libraries as another form of raising awareness of the Resource Recovery Project.

### **11.5 WASTE EDUCATION UPDATE**

The Waste Education Coordinator provided an update on waste education initiatives, including the Earth Carers training programme Wednesday 21 October 2009.

### **11.6 DISCUSSION ON WMCRG TERMS OF REFERENCE**

**Item 11.6 Discussion on WMCRG Terms of Reference was considered by the Committee earlier in the meeting following item 4 Announcement by the Chairman or Person Presiding Without Discussion.**

The Acting Chairman advised that due to time constraints the Terms of Reference would be discussed at the next WMCRG meeting.

At the Chairman's invitation Ms Gee addressed the Committee advising that this was her last meeting as she had been elected as a councillor at the City of Belmont.

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## 12 FUTURE MEETINGS OF THE WMCRG

The next meeting of the Waste Management Community Reference Group will be held on **Tuesday 24 November 2009** at the EMRC Administration Office, 1<sup>st</sup> Floor, Ascot Place, 226 Great Eastern Highway, Belmont WA 6104 commencing at 6.00pm.

### Future Meetings 2009/2010

<b>Tuesday</b>	<b>24 November 2009</b>	<b>at</b>	<b>EMRC Administration Office</b>
Monday	08 February	at	TBA
Monday	08 March (if required)	at	TBA
Monday	12 April	at	EMRC Administration Office
Monday	10 May (if required)	at	EMRC Administration Office
<b>Tuesday</b>	<b>08 June</b>	<b>at</b>	<b>EMRC Administration Office</b>
Monday	12 July (if required)	at	EMRC Administration Office
Monday	09 August	at	EMRC Administration Office
Monday	13 September (if required)	at	EMRC Administration Office
Monday	11 October	at	EMRC Administration Office
Monday	08 November (if required)	at	EMRC Administration Office

## 13 DECLARATION OF CLOSURE OF MEETING

There being no further business, the Acting Chairman declared the meeting closed at 8.19pm.

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