Council of Mayors South East Queensland

Regional Waste Management Taskforce

Organics and Aggregates Workshop

Issue | 6 August 2015

Job number 244664-00

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ARUP

Job title	Regional Waste Management Taskforce			Job number 244664-00
Document title	Organics and Aggregates Workshop			**File reference**
Document ref				
Revision	**Date**	**Filename**	Workshop Report Draft 1.docx		

Revision	Date				
Draft 1	4 Aug 2015	**Description**	First draft		
			Prepared by	Checked by	Approved by
		Name	Joyanne Manning	Joyanne Manning	Joyanne Manning
		Signature			
Issue	6 Aug 2015	**Filename**	244644 CoMSEQ Workshop Report Issue.docx		
		Description			
			Prepared by	Checked by	Approved by
		Name	Joyanne Manning	Joyanne Manning	Joyanne Manning
		Signature			
		Filename			
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		Name			
		Signature			

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Contents

1 Introduction

Arup was commissioned by Council of Mayors (SEQ), to facilitate a workshop on behalf of the Regional Waste Management Taskforce to discuss the region's approach to organics and aggregates recycling.

The purpose of the workshop was to develop a recommended approach to regional collaboration on key waste issues for consideration by the Council of Mayors (SEQ). Once the direction is agreed, it is anticipated that a High Level Agreement may be developed between collaborating parties.

Joyanne Manning provided the workshop facilitation which took place on Friday 24th July in Brisbane City Councils Brisbane Square offices.

2 Workshop Attendees

The workshop was attended by a cross section of industry and Council representatives. Attendees were:

Cr Matthew Bourke	Brisbane City Council (Chair)
Martin Tower	Australian Organics Recycling Association (AORA)
Mark Dekker	BMI / Waste Recycling Industry Association Queensland
Cr Paul Taylor	City of Gold Coast
Matt Fraser	City of Gold Coast
Diana Dawson	Council of Mayors (SEQ)
Cr Jim McDonald	Lockyer Valley Regional Council
Peter Driemel	Lockyer Valley Regional Council
Richard Oakley	Logan City Council
Peter Thompson	Nugrow
Nev Brownlow	Phoenix Power
Arron Lee	SEQ Councils Waste Managers Forum
Cr Jenny McKay	Sunshine Coast Council
Cr Nancy Sommerfield	Toowoomba Regional Council
Troy Uren	Toowoomba Regional Council
Jon White	TransPacific Industries
Colin Thun	WMI
Mark Webster	Alex Fraser Group
Neil Perry	Transpacific Industries

3 Workshop Format

The workshop was devised to discuss with the attendees their current understanding of the organics/aggregates sectors in SEQ, and what they believe the future state needs to be in order to identify initiatives and actions that could be adopted in the region to support these sectors.

Whilst the organics industry includes food organics (FO), green organics (GO) such as garden waste, agricultural and biosolids it was agreed that the main focus of the workshop would be on green organics while acknowledging that these other waste streams are present and are being recovered in SEQ.

A copy of the Workshop Agenda is provided in Appendix A.

4 Organics

4.1 Current Understanding

The organics waste stream is considered to be growing. GO is generally being mulched or composted with other organic wastes (waste oils, fats and greases). Most Councils have an 'opt in' bin collection which is separately priced with the exception of Moreton Bay, Logan and Lockyer Valley Councils. The average participation is 10% except for Toowoomba Regional Council which has had a GO collection since 2005 and have c50% participation.

The market is currently a supply push market. There is a complex supply chain associated with it from the producer (householder), collector, processor and end user and researchers, the media and regulators. The quality of the output is directly proportional to the quality of the input and contamination of the input feedstock is an ongoing problem and challenge.

The market is limited by financial constraints and both the willingness of householder to pay for the service and the willingness of the end user to buy the product. An affordable solution is required as the price of freight and product to the agricultural market is too expensive and cannot compete with the unregulated local market.

The market is under threat from the unregulated market. The unregulated market can offer unprocessed product cheaper than the regulated market. However this product comes with a lack of traceability and thus could be a potential biosecurity risk. Also unprocessed product is being illegally stockpiled due to seasonal constraints.

Threats to the market:

- Unregulated market
- Considered odour issues
- Fire ants – treatment requirements are extending time for green waste.

- Increasing contamination levels with increased participation
- Transport costs
- Education – uncoordinated and non existent in some areas

4.2 Future State

4.2.1 Participation Rates

There is a need to realise the full potential of the GO and increase participation rates and thus diversion rates. However, increased participation cannot result in increased contamination so therefore increased participation needs to be coupled with increased education and awareness.

There is a need to identify and secure markets for the end product, otherwise whilst there will be increased participation and processing, there will be no increase in the available market which could result in a wasted product going to landfill.

4.2.2 Cost

There is a need for an examination of the rate payers threshold of willingness to pay. Is it $50 or can it be increased?

Are there any opportunities to access grant capital?

What would the impact of the reintroduction of the carbon tax be on the market?

The cost of freight is a very significant component of the overall cost of the end product. Consider opportunities to minimise transportation movements by either identifying local markets to the generators, or product bulking prior to transport.

4.2.3 Zoning

Urban encroachment is continuing in SEQ. Need to consider zoning and providing adequate availability of zoned land to accommodate future waste infrastructure. Need to provide buffering around existing and proposed waste infrastructure to minimise urban encroachment and conflicts with neighbours. Need to consider the costs associated with indoor composting to minimise odours.

4.2.4 Markets

Sustainable, cost effective markets are key. Revenue is derived from both the gate fee and the sale of end products and often there is more opportunity to increase revenue through value-adding end products.

There needs to be local processing for local markets to reduce on transportation costs.

There is a need for a whole of Government approach with regard to the support of the industry. Landfill bans of certain materials would have a significant impact on the market and availability of feedstock.

Need to generate a quality product for the end user and thus proper regulation of the whole industry is required to promote the regulated industry and de-incentivise the unregulated industry.

4.2.5 Education

Education is required of both the rate payer to ensure that uncontaminated material is being presented and of the agricultural sector to educate them of the benefits of using regulated processed organic product. Farmers are traditionally conservative and need evidence before adopting new practices.

Consider the opportunities for more trials such as the current trial that Sunshine Coast Council is undertaking with the strawberry industry.

The assimilation of information and knowledge sharing of results is key to raising the profile of the industry and understanding of potential customers. AORA is working with other states to build a knowledge base.

Options for education and knowledge transfer:

- AORA
- Universities, especially Gatton UQ and Sunshine Coast University
- Resilient Rivers Program – piggy back on landholder engagement
- More Council trials including consideration of a demonstration Council.

4.3 Actions

1. Investigate how organics industry can get involved with landholder engagement opportunities occurring in the region through the Rivers Resilient Initiative eg. increase the number and frequency of shed talks to farmers/growers via farming industry associations such as Growcom and Agforce.
2. Investigate grant opportunities to promote FO/GO compost on land.
3. Transport and Main Roads Specification MRTS 16 Landscape and Revegetation requirements. Consideration of the true cost of applying this standard. Seek planners support to promote the use of organic compost and mulch in applying MRTS16..
4. Urban Development Institute of Australia (UDIA) Policy/Program. Consider opportunities to promote the use of for recycled organics.
5. Consider opportunities to change Council waste contracts to promote industry development and participation. Consider changes to:

   a. Termination clauses
   b. Contract durations
   c. Introduce % diversion rates to specific waste streams.

6. Lobby State Government to carry out a legislation review of organics waste types (it is an identified priority waste in the 2014 State Waste Strategy).

5 Aggregates

5.1 Current Understanding

There are currently four licenced facilities operating in SEQ and there is a big demand for product. There are mobile licences available, which are site specific and for a maximum of 28 days.

Clean concrete is accepted at no charge in Brisbane. However 50% of all concrete is ending up in landfill. This equates to approximately 1m tonnes per annum in Brisbane alone.

Brisbane City Council owns and operates its quarries and does its own recycling.

Toowoomba have experienced the positive impact of site recycling and reuse. A recent development in Toowoomba CBD (QIC) resulted in both economic and environmental positive outcomes (c8000 trucks off the road network, and reuse of aggregate saved on use of virgin resources).

There are economic benefits of using recycled aggregate as it is typically 20% lighter but it does need more water when re-used.

There are very good case studies from around Australia with regard to the successful use of recycled aggregate. Crushed tyres can be used in asphalt and glass in road base and as base material for utility services.

The availability of feedstock is being undermined by unlicensed facilities and operators. This material is not being recovered to reach its full reuse potential.

With respect to asbestos, licenced facilities are required to have an asbestos management plan but unlicensed facilities are taking all demolition waste and are likely to be receiving asbestos. This is a Workplace Health and Safety issue.

Freight costs are also an issue for the aggregates industry. 15-30km is optimum for aggregate transportation. Ideally the recycling site needs to be near the end market.

5.2 Future State

5.2.1 Planning/Approvals

Councils need to consider mandating construction and demolition waste management plans for proposals above specific agreed thresholds. These plans could then be used for auditing and tracking demolition waste.

Demolition permits/approvals need to be on the basis that construction and demolition waste is going to licenced processing facilities.

The waste environmentally relevant activity (ERA) was removed by the last Government from Councils toolkit. Councils now only have jurisdiction to act on certain waste issues such as littering, illegal dumping and condition of a waste container or storage areas occurring on Council land, residential land and some commercial land. Therefore, a new legislative tool for enforcement relating to construction and demolition waste management is required, otherwise there is no accountability.

There is a new asbestos auditing process in force from the 1st July 2015. This is a complaints based process. Consider opportunities to change this audit process from a complaints based process to a proactive audit process. This will require funding and staffing as current funding based on providing a reactive rather than proactive service.

5.2.2 Bans

In order to make more material available for recovery and meet demand, need to consider the introduction of a landfill ban for concrete.

Also need to consider the reclassification of material less than 100mm diameter as this size is no longer termed as waste. This is prohibiting material entering the market.

5.2.3 Specifications

There are opportunities to adopt practices from other States and jurisdictions and include additional recycled materials in construction specifications. Crushed glass can be used as a substitute for glass and additive to bitumen and crushed tyres can be used in bitumen.

5.2.4 Small Construction Businesses

Larger construction companies are more aware of costs associated with waste management and are more proactive with regard to minimising construction and demolition waste and recycling demolition waste (refer QIC Toowoomba example). Given the cost of waste management will rise into the future, and the majority of construction activity in SEQ relates to small construction projects, an education and awareness program for improved site management practises would be beneficial.

5.3 Actions

1. Consider the requirement of mandatory construction and demolition plans as part of the DA application process.
2. Consider opportunities to change new asbestos auditing process from a complaints basis process to a proactive based process.
3. Seek opportunities to raise the profile of the aggregates industry through Universities/Conferences/TMR/Others.
4. Seek approval to get crushed glass and tyres into relevant TMR and Council specifications.
5. Investigate the opportunities to lobby the BSA re site management practices.
6. Foster training days with respect to aggregate use for Council Engineers via an Aggregate Sponsor Group.

6 Conclusion

The workshop provided a very good opportunity for the Regional Waste Management Taskforce members and industry participants to share views on the organics and aggregate recycling business in SEQ and identify potential initiatives and actions that can be investigated by Council of Mayors (SEQ) to promote and support these sectors into the future.

The actions from the workshop provide an excellent platform for Council of Mayors (SEQ) to develop a High Level Agreement between collaborating parties that could result in some real positive outcomes for the rateable population of SEQ.

Appendix A

CoMSEQ Organics and Aggregates Workshop - Agenda

Council of Mayors
South East Queensland

REGIONAL WASTE MANAGEMENT TASKFORCE

Organics and Aggregates Workshop

Friday, 24 June 2015
10am – 1pm
Brisbane City Council Rooms 1A and 1B
Level 13, Brisbane Square (266 George Street)
(Light lunch available from 1pm)

AGENDA

Chair:	Cr Matthew Bourke
Facilitator:	Joyannne Manning, Arup
Secretariat:	Council of Mayors (SEQ)
Attendees:	As per circulation list

Purpose of Workshop: The Regional Waste Management Taskforce is developing a recommended approach to regional collaboration on key waste issues for consideration by Council of Mayors (SEQ). Once the direction is agreed, it is anticipated that a High Level Agreement may be developed between collaborating parties. This workshop is a step in the process towards this agreement.

1. Welcome and Introductions		
1.1	**Introductions of workshop attendees (all)** Who you represent Current understanding of organics/aggregates sectors in SEQ Desired outcome of today's workshop	15 mins
1.2	**Purpose and outcomes of today workshop (Joyanne Manning)**	5 mins
2.	**Organics**	
2.1	**Current state of organics waste in SEQ (all)** Collection Treatment	20mins

	Markets	
2.2	**Current challenges facing the organics sector (Martin Tower)**	15 mins
2.3	**Future state (all)**	45 mins
	Collection	
	Infrastructure	
	Education	
	Land security	
	Markets	
	Funding	
2.4	**Identification of**	15 mins
	Goals	
	Initiatives	
	Actions	
3.	**Aggregates**	
3.1	**Current state of recycled aggregates in SEQ (all)**	10mins
	Collection	
	Treatment	
	Markets	
3.2	**Current challenges facing the aggregates sector (all)**	10 mins
3.3	**Future state (all)**	30 mins
	Approvals – Mobile vs static plant	
	Infrastructure	
	Education	
	Land security	
	Markets	
	Funding	
3.4	**Identification of:**	15 mins
	Goals	
	Initiatives	
	Actions	