Submission to the Productivity Commission
INQUIRY INTO WASTE GENERATION AND RESOURCE EFFICIENCY

Prepared by Compost Queensland,
A Division of the Waste Management Association of Australia

Waste Type: Organic Recyclables

In Summary

In the main, Compost Queensland endorses the majority of the comments and views expressed by Compost Australia in their 7-page submission to the Commission. The additional concerns our Queensland Division has are based on local conditions within Queensland.

The following dot points provide a summary of the areas Compost Queensland would like to see addressed and reported to the Commission. In some cases the views do overlap the Compost Australia submission, but nonetheless they are of sufficient importance to warrant further elaboration.

- The plethora of rules and regulations imposed by Government bodies are stifling productivity. The costs of compliance are making the end products unaffordable in the marketplace. These include Local Government and State Government instrumentalities.
- Unlike their counterparts in the Southern States, Local Government bodies in Queensland do not have disposal levies in place for organic materials. There is no disincentive for these materials to go to landfill.
- These levies should then be directed to market development work with farmers. The attachment titled; **'Returning the Favour',** 'Lockyer Valley Recycled Organics Project' is one such set of in-field trials, funded privately in conjunction with the Brisbane City Council.
- Additional funds need to be made available for R&D projects to;
  (1) Verify the correct use of mulches and composts under varied climatic conditions e.g. sub-tropical and tropical conditions, and
  (2) As disease suppression in both horticultural and agricultural crops through the creation of healthier soils.
- All levels of Government, ie Federal, State and Local Governments, should adopt a zero waste policy to ensure that organic materials can be effectively recovered for beneficial reuse. Generators of any recyclable organic materials that end up in landfill should be penalized by way of a levy or tax (these are trackable through EPA Waste Transport Certificates).

- There is currently no State Government funding provided to departments such as the EPA Sustainable Industries Division for redistribution to either compost manufacturers or primary producers in order to adopt more sustainable practices.
- The pressure to divert organic waste from landfill has been brought to bear largely by public policy and awareness of Green issues.
- There has to be education directed to the source of waste generation to prevent contamination, in order to maximize the reuse of organic materials, together with education at the consumer level, that the resultant products are safe, sustainable and beneficial.
- The social benefits associated with the use of recycled organic products, which will lead to more sustainable agricultural practices should be encouraged through subsidies to farmers. Other tangible incentives make take the form of lower water charges, reduced council rates and fees, and tax offsets.
- As a standard practice, the generator, recycler, and end user should be rewarded for implementing government sustainable environmental practices.

Background to the Australian Compost Industry

Organic wastes can be converted into useful resources through processes such as composting and anaerobic digestion. Industrial scale organics processing businesses exist throughout Australia.

Compost Queensland is affiliated with Compost Australia, the latter being the peak national body for the organics processing and recycling industry. It is linked to working groups in five Australian states who deal with state specific issues. The goal of Compost Australia is to support a professional and sustainable industry by establishing and implementing an industry development plan. The Industry has just completed a major project, in conjunction with The Barton Group and AusIndustry, to prepare a Compost Supply Chain Roadmap.

The aim of the Roadmap project was to develop a viable and sustainable organics recycling industry across Australia. Ongoing industry development will involve new product and market identification and development of strategic plans that target both niche and wide-ranging markets for recycled organics. The Roadmap was Launched at the Australian Parliament House on February 13, 2006. More information can be found at www.compostroadmap.com.au.

In addition Compost Australia conducts an annual industry survey that provides processing quantity and product market data and informs current priorities for the sector in each state.

Recovery and Beneficial Reuse Strategies

The optimal outcome for diversion of organic materials from landfill has to become a 100% resource recovery target, i.e. no organic material should reach landfill. For this ideal to become a reality, a lot more work will need to be carried out to disband the barriers. These are can be categorized as follows;

1. Regulatory constraints need to be removed to make the resultant products more affordable to the end users – these include the amenity horticulture market (home gardeners, landscapers, and civil landscape projects), as well as the agricultural market (farmers of crops as diverse as fruit and vegetables to viticulturalists). One glaring example is the cost of compliance to EPA composting facility standards, which has become crippling, and to many manufacturers, led to unsustainable operating costs, hence eroding the viability of many businesses.

2. The majority of Local Government bodies in Queensland do not place environmental levies upon organic materials at the disposal point i.e. landfills. Whilst council transfer stations do contribute markedly to the diversion of a large percentage of 'Green Waste', and some councils do engage in kerbside collection of this material, still a huge percentage of household green waste finds its way into landfills by way of domestic wheelie bin collections and other means. This is the fraction that needs to be diverted to organic material recyclers.

3. For the remaining percentage that will inevitably still find its way to landfill, due to contamination (through such items as uncompostable, non-biodegradable plastics, metals etc.) and other factors, levies need to be applied on a user-pays basis. These levies should then become the nucleus of funding for market development projects to identify and promote the use of recycled organics to the farming community.

4. The two critical factors facing Australia's farms today are lack of water and land degradation due to generations of the over-application of chemical fertilizers. Good quality compost and mulches help in; (a) the retention of moisture, and (b) reduction of the application rates required for chemical fertilizers i.e. as an adjunct to current farming practices, not total replacement of chemical fertilizers.

5. Additional funding is urgently required for essential R&D projects to verify the advantages of using compost under a variety of climatic conditions and in various soil types. It is widely recognized, but needs to be demonstrated through growing trials that the addition of compost aids plants to resist disease through the restoration of soil health. To date, much of this funding has been provided by private companies, in the main, without Government assistance.

6. A zero waste target has to become a serious priority for all levels of Government (Federal, State and Local Government) for all waste categories, especially organic materials which already have identifiable homes if the dollars can be made to stack up to the farming community. Quite apart from the recycling aspect, extending the life of very finite landfills, (the siting of which is a national problem), is a social and environmental responsibility for both generators and end users.

7. The Queensland Government Department that already has a mechanism in place for distribution of funding is the EPA Sustainable Industries Division. This agency is not being utilized effectively as a vehicle to reach either the compost manufacturers or primary producers, in order to adopt more sustainable practices.

8. The major breakthroughs in organic material diversion have been brought about to date by greater public awareness of 'Green' and 'Save the Planet' type campaigns. The next generation of change has to be driven by education, directed at the source of waste generation, mainly to 'do the right thing', to prevent contamination.

Contaminants such as plastics, glass and metals often prevent effective reuse of organics by composters, due to fear of consumer rejection through;

(a) Unsightly plastics in mulches and composts,

(b) The potential threat of litigation from consumers caused by injuries through undetected glass and metal, or

(c) Farmer's produce (particularly root crops such as potatoes) contaminated by small particles of glass or metal.

The end user, whether they are domestic consumers or agricultural consumers, must feel comfortable that the composts and mulches are safe, sustainable and provide beneficial results.

9. The main barrier to entry for recycled organic products into the mainstream farming community is price.

By way of example: Brisbane City's salad and vegetable bowl is the Lockyer Valley which is over 100 kilometres from major composting facilities. The freight component far exceeds the value of the compost or mulch products from this process. So, quite apart from the unknown benefits available to the farmers from compost and mulch application, (yet to be proven to the farmer), there is a dollar barrier to market entry.

Freight subsidies to farmers would be an incentive to encourage more sustainable agricultural practices long term. Other incentives could take the form of lower water charges, reduced Council rates and fees, and tax offsets.

Breaking down the aforementioned barriers is a pivotal role where the whole of Government can become involved, through both legislation and financial assistance.

Conclusion

As a fundamental starting point, the organic waste generator, the recycler, and end user need to be rewarded for implementing sustainable environmental practices. Likewise, as with waterways, air etc polluters/contaminators need to be penalized financially.

Society and Government know that the landfilling of waste generated by manufacturers and end users is not sustainable long-term.

Green organics do not need to take up valuable space in landfills.

The Compost Industry has the processes available to convert what is currently still referred to as a waste, into a valuable resource i.e. a growing medium and soil enhancer to supplement chemical fertilizers, whilst improving moisture retention. The Compost Industry has identified potential customers but is restrained by costs – through regulatory and transport pressures.

What the Compost Industry is looking for is:

1. Whole of Government assistance to divert green organic materials from landfill to compost manufacturers.

2. Assistance through levies and funding to conduct further market research and R&D to demonstrate the value to farmers.

3. Some form of freight subsidy scheme to get the final product to market.

Thank you for the opportunity to present our views to your Commission.

Bob Ferguson
Chair
Compost Queensland

"Returning the Favour"

The Lockyer Valley Recycled Organics Project

"Returning the Favour" is about working together to create a sustainable region where we utilise our wastes as resources and protect our region's natural assets, such as fertile soils and water quality. It is about developing scientific evidence to support the value of recycled organic products in agricultural markets and the benefits for soil health, crop yield and water catchment quality.

OBJECTIVE

The goal is to increase the use of compost and recycled organic products in broad acre agriculture in the Lockyer and Bremer regions by communicating the beneficial effects of compost use **by** growers **to** growers.

To increase the use of recycled organic products in agricultural applications this project intends to demonstrate the on-farm potential for crop yields and soil health and external benefits of reduced sediment and nutrient run-off into waterways. This growth in demand will expand the available markets for products manufactured from garden organics collected within Brisbane City Council (BCC) and other regional Councils, effectively utilising previously unwanted materials to produce valuable resources.

HOW?

Thirteen growers from within the Lockyer Valley, Bremer region and Fassifern are participating in the trial. Council purchased compost products generated from recycled garden organics collected in Brisbane City from three large composting operations on the fringe of Brisbane.

Through on-farm demonstrations, replicated tests and rainfall simulation experiments we hope to identify the on-farm benefits of compost use in terms of soil health, crop yield and water retention research and the off-farm value for the health of the Brisbane River catchment. Commencing in 2005, the proposed trial is to continue over the next two years, combining the cumulative results to model the effect of widespread compost use in the region on the total catchment.

COMPOST: QUALITY, TRANSPORT & SPREADING

Each compost product supplied has been tested to ensure compliance with Australian Standards. It is critical that the compost delivered met strict specifications nominated by the participating farmers.

Prior to application, soil tests were conducted on-site at participating farms to measure the baseline quality of the soil health and structure.

The time and effort to provide feedback directly to the growers on the outcome of these tests is greatly appreciated.

Paddy Gill spreading the compost at his farm in Laidley.

All growers have taken delivery of their first year of compost (50m^3) and have spread in the recommended application rates (40m^3, 10m^3 and 0m^3) and have crops in the ground.

Some growers have experienced "tough times" with the dry spell and extreme weather, which is expected to affect crop performance to some degree. We are grateful for the patience and commitment demonstrated by participating growers.

DEMONSTRATIONS

On-site demonstrations will allow growers to monitor physical soil properties and crop performance on their own farm. It is expected that compost will be supplied annually on the same plot to gauge cumulative advantages.

Some crop benefits are visible after one year.

As the project continues, field days at farms involved in the project to provide a forum for discussion on the topic of compost use and will demonstrate the success that growers have had in using the products supplied.

SCIENTIFIC TRIALS

The Department of Primary Industry and Fisheries (DPI&F) are conducting a two-year scientific trial at the Gatton Research Station. Mr Steve Harper, Senior Research Scientist, from the DPI&F will be coordinating the research. This research uses replicated experimentation to quantify impacts on soil characteristics such as water infiltration rates, water holding capacity, plant available water and soil and nutrient loss.

RAINFALL SIMULATIONS

The potential water quality outcomes of the widespread use of compost are another important focus of the scientific trial. Rainfall simulation should produce region-specific data on sediment transport and nutrient run-off, which can be applied to modelling scenarios based on widespread compost use.

A rainfall simulation trial

COMMUNICATIONS

Communication will be vital to the success of the project. Surveys will be used to evaluate the needs of growers in the region.

Information sessions, field days, demonstrations and a handbook for compost users are intended to provide valuable tools to support the needs of compost users. Ongoing engagement will be conducted via one to one communication, local focus groups and growers associations. Positive media interest has also increased curiosity in the regional outcomes of this project.

WHY DOES BCC WANT TO RETURN THE FAVOUR?

As the "Returning the Favour" project enters into its second year, the participants, interest and results are positive. Continued funding over the next two years is essential for the project's future. The success of this project has the potential to expand sustainable and viable markets for recycled organic products generated from effective resource recovery.
Strategic regional alliances formed through this research will contribute to the development of a recycled organics management strategy. This strategy will define how organic materials are specified, sourced and recycled to bring about effective management of our organic resources.

It is expected that this trial will also identify the benefits of compost use in suppressing soil loss and water pollution. This will help the region to identify strategies to reduce soil and nutrient loss and sediment loading in the waterways and bay protecting the quality of our freshwater catchments.

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