

3. UPDATE ON THE COMPOST PROGRAMME AND COMPOST STANDARD

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PURPOSE OF REPORT

1. The purpose of this report is to provide results to the Committee of a Crop and Food Research market appraisal for municipal compost in Canterbury and to provide an update on other compost related matters.

COMPOST MARKET APPRAISAL IN CANTERBURY

2. In the 2004/05 financial year the Committee allocated funds to identify and quantify target markets for the use of municipal compost in primary production in Canterbury. Accordingly, Crop and Food Research Limited were commissioned to:

Review Information

- (a) Review relevant published national and international research about the application of municipal compost to a range of crops and soils typical of the Canterbury Region. This included identifying the benefits of the compost to the productive system, identifying the barriers to the use of municipal compost and identifying any significant gaps that a research programme could address at a later stage.

Identify Target Markets

- (b) Use the information collected in (a) to, where possible, identify the major soil/crop combinations in Canterbury that would benefit the most from the application of municipal compost.

Quantify target Markets

- (c) Use the information in (b) to quantify the area of soil/crop combinations in Canterbury that would benefit from the application of municipal compost.

Assess the Viability of Target Markets

- (d) Assess the viability of the target compost markets identified in (b) and (c) using the following variables:
 - (i) **Compost price.** Calculate the viability of compost applications using three compost values: 1. zero value for the compost where the Council pays for the delivery and spreading of the compost; 2. zero value for the compost where the farmer pays for the delivery and spreading of the compost; and 3. \$20 per tonne for compost product with farmer paying for the delivery and spreading.
 - (ii) **Distance to market.** Combined with standard transport costs calculate the economic outcome of applying municipal compost to major soil/crop combinations within two transport zones (10 - 50 km, 60 -100 km) from compost production centres; and
 - (iii) **Application rates.** Using three rates of compost application (15 tonnes per hectare, 50 tonnes per hectare and 100 tonnes per hectare).
3. This research (full report attached) identified potatoes as a target market for Canterbury and based on this information the recommendations below are recommended to the Joint Standing Committee.
 4. The Committee has already authorised the required expenditure for this programme up to June 2007, and the Action Plan for the following three years (July 2007 onwards) has provisional allocation of funds to continue with it. Note that the current funding and research could possibly be complemented by other organisations eg Envirowaste Services Ltd, Horticulture New Zealand and Compost New Zealand etc.

NEW ZEALAND COMPOST STANDARD

5. In December 2005, Standards New Zealand finalised the New Zealand Standard 4454, Compost Soil Conditioners and Mulches. The standard is voluntary and was developed by a technical working group of stakeholders for composts, soil conditioners and mulches. It is based upon the equivalent Australian Standard, which was modified to suit New Zealand.
6. The Standard is aligned with the New Zealand Waste Strategy 2002 and related guidelines issued by the Ministry for the Environment. With a large percentage of organic waste still being landfilled throughout the country, there is the potential to divert this material for composting and beneficial use.
7. It is important that as more organic is diverted and turned into compost and other products, that these products do not present a hazard to potential markets, the environment or to public health. The Standard prescribes compositional requirements, compliance requirements, sampling and testing methods for composts, soil conditioners and mulches. Health warning labels have been adopted from current labelling for the potting mix industry. The Standard does not have limits on acceptable levels of amine herbicides as this matter was still to be finalised at the time of printing the Standard. It was envisaged that future testing be undertaken to determine this.

COMPOST NEW ZEALAND

8. Compost NZ is an industry sector group that was established in December 2005 to promote organic resource recycling in New Zealand. It is a voluntary group established by representatives from organisations in the waste and composting industries.
9. The Goals of Compost NZ are to:
 - Establish a credible group to represent the compost industry.
 - Establish and support programmes for the development of the compost industry.
 - Identify common industry priorities and advocate for their implementation.
 - Encourage training and increased professionalism.
 - Actively support the development of new markets for compost products.
 - Establish and maintain relationships with key stakeholders including similar international organisations.
 - Support the development of relevant product standards and encourage their adoption by both producers and end users.
 - Establish effective communication channels.
 - Provide formal response and comment on issues and policies affecting the industry.
10. A Steering Committee has been formed and a Strategic Plan has been developed. Funding from the Ministry for Environment Sustainable Management Fund has been granted to:
 - Help finalise the Strategic Plan, develop the industry group, create a website, gather industry data.
 - Conduct a Research and Development Forum.
 - Facilitate progress on certification of the compost Standard NZS4454 for the compost industry.
 - Develop a series of “tool kit” workshops on the compost standard with the intent to inform and equip the compost industry to adopt and use the standard.
 - Develop a series of workshops to inform potential end users about the new standard.
 - Conduct a Regional Council Forum to assist Regional Council staff with information about compost operations and site conditions.

11. Achievements to date include:

- Development of:
 - a website link under the Waste Management Institute web site.
 - Industry contacts and survey to collect data on the industry.
- A research forum was held in Wellington. Processors agree that market development of potential rural markets needs developing.
- Compost Industry training standards have been drafted and are soon to be finalised with the New Zealand Qualifications Authority.
- Planning is underway for the NZS4454 and end user workshops. Liaison with Compost Australia is being carried out to avoid duplication of work and to pool resources to achieve similar outcomes.
- The Regional Council Forum is planned for next year.

12. Identified Issues:

- Most work is being undertaken by the steering committee on a voluntary basis. Experience from Australia has shown that greater progress can be achieved with a dedicated staff person to coordinate National projects.
- Funding for market development and trials for national benefit was not approved.
- There is a willingness of compost NZ members to work together for the national good. As an organisation a joint approach with others will help progress future market developments.

STAFF RECOMMENDATIONS

It is recommended that:

- (a) Staff proceed with arrangements for stakeholder meetings with representatives of the potato growing industry (eg McCains, Horticulture New Zealand, key Canterbury potato growers, farm advisers etc) to determine their interest and need for research and to determine how best to influence the use municipal compost in this sector.
- (b) Based on a positive response from this sector, staff proceed with arrangements for the trials necessary to verify and demonstrate the costs and benefits of the application of municipal compost to potato production in Canterbury.