Compost WA

Special Interest Group of the WA Branch of the Waste Management Association of Australia

A Position Statement on the Recycled Organics Sector in WA





TABLE OF CONTENTS

INTRODUCTION: ORGANIC WASTE MANAGEMENT IN WA	3
STRATEGIC CONSIDERATIONS AND POSITIONS	4
STRATEGIC CONSIDERATION 1: SUSTAINABILITY	5
Position 1: Integration	6
Position 2: Linkages with the land	6
Position 3: Land use planning	
STRATEGIC CONSIDERATION 2: POLICY FRAMEWORK	
Position 4: Soil health & performance	8
Position 5: Minimum standards	
Position 6: The waste hierarchy / highest and best use	8
Position 7: National cooperation	
Position 8: Environmental credits	
STRATEGIC CONSIDERATION 3: MARKET DEVELOPMENT	9
Position 9: Market incentives 1	0
Position 10: Product differentiation1	
Position 11: Education	
Position 12: Research and development1	0
Position 13: Feedstock – access and reliability 1	
SUPPLEMENTARY INFORMATION 1	.1

COMPOST WA is affiliated to Compost Australia and is a sub group of Waste Management Association of Australia (WMAA) WA Branch that represents, promotes and supports the (RO) sector of the Waste Management industry in WA.

The objective of Compost WA is the sustainable growth and development of the Recycled Organics (RO) sector in WA. Its action plan has four key strategies, to develop a strong organisation, to maximise market development; to develop clear quality standards and to support and promote appropriate policy.

Introduction: Organic waste management in WA

Organic wastes have the potential to both create and manage significant environmental concerns. Current disposal methods create problems related to their ability to pollute water and soil resources and transmit pests, diseases and weeds that contribute to agricultural, biosecurity and public health concerns.

Conversely, adequately processed organic matter, that is the result of well managed aerobic composting, can be an important component of soil quality and performance. In addition to providing a reservoir of plant nutrients, such organic matter makes significant contributions to soil moisture holding capacity (particularly in light soils); will buffer soil pH; improve soil aeration; potentially reduce the impacts of pests and diseases and has the potential to reduce many environmental problems associated with modern agricultural systems.

A focus on organic waste management commenced over 20 years ago when organic wastes' were recognised as the major component of the waste stream and the component that was creating major environmental issues associated with landfills.

Landfill diversion targets were initially set. However they proved to be unrealistic and, with respect to organics in particular, lacked constructive vision on how the diverted waste could be effectively reused.

This approach was followed by the concept of zero waste and the Waste 2020 policy was launched in 2003. This document based its support for 'Zero waste' around the Waste Management hierarchy that ranks the options for managing wastes, Figure 1.

At this time markets for recycled organics were largely urban home garden, Local Government and land rehabilitation uses. As with other states, there was growing recognition that these markets were approaching saturation and that agricultural markets represent an important option.





The recognition of the importance of continued growth in the 'Recycled Organics' market resulted in the National Compost Roadmap Project, a joint initiative of the Waste Management Association of Australia (WMAA), Federal Barton Group, State departments of environment and AusIndustry.

Strategic Considerations and Positions

The Compost WA 'Position Statements' are categorised into three broad strategic areas. These are:

- o Sustainability
- Policy Framework and
- Market Development

There are 13 Position Statements within these 3 broad categories.

Strategic Consideration 1: Sustainability

In the early 1990's the Australian government defined 'Ecologically Sustainable Development' (ESD) as 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased'

"Put more simply, ESD is development which aims to meet the needs of Australians today, while conserving our ecosystems for the benefit of future generations. To do this, we need to develop ways of using those environmental resources which form the basis of our economy in a way which maintains and, where possible, improves their range, variety and quality. At the same time we need to utilise those resources to develop industry and generate employment."

Sustainability remains a key driver of all government policy.

By returning organic wastes safely to the land, the Recycled Organics (RO) sector plays an important role in the development of a more sustainable society. Recycling organic wastes to productive land increases soil organic matter reserves, improves soil health and performance and also makes significant contributions to the conservation of water resources and management of water quality.

Combined with the environmental benefits associated with diverting organic wastes from landfill, the RO sector provides important 'environmental services' to society.

The WA State Government has an overarching State Sustainability Strategy which provides direction and guidance for policy. See "*Hope for the Future: The Western Australia State Sustainability Strategy*". For more details visit: http://www.sustainability.dpc.wa.gov.au/docs/Strategy.htm .

Cooperation between agencies and a holistic view of the relationships between different sectors (eg urban communities and the vital links to adjacent agricultural production) are important components of sustainability. This affects society in the areas of:

- Land use planning for both urban and rural land.
- Application of 'Zero Waste' principles.
- Agricultural market development for RO products.
- Management of wastes including recycled water.
- Production of fresh food and its related contribution to community health.
- Viable rural communities contributing to employment and other social values.
- Amenity values associated with rural landscapes in urban hinterlands.

Recognition of the strategic importance of agricultural land in the planning process resulted in the recent establishment of a Statement of Planning Policy for Productive Agricultural Land (SPP 2.5) in Western Australia.

Position 1: Integration

Promote wide recognition of the value and importance of the RO sector. Encourage and promote an integrated whole-of-government approach to policy development.

Target audience – State government, Community

Position 2: Linkages with the land

Promote the contribution that the use of RO products on productive land will make to improving soil quality, conserving water resources and minimising nutrient leaching

Target audience – Whole community and all levels of government

Position 3: Land use planning

Promote the strategic importance of land use planning that:

- Provides long term access to sites for the processing of organic wastes; and
- Strengthens the protection of productive rural land in close proximity to urban areas for recycling organic wastes

Target audience – State government, local government

Strategic Consideration 2: Policy Framework

The recent resolution by the Soil Science Society of America highlights growing international recognition for the value of soil organic matter and the benefits of reusing organic waste in agriculture. The resolution put up for international adoption, stated:

"We resolve that organic matter is a resource that must be restored and increased globally to reduce the net rate of increase in greenhouse gases, to increase plant productivity and improve environmental quality". Global climate change, food security and environmental quality are important interrelated issues that can be favourably and simultaneously addressed by global enhancement of soil organic matter.

The significance of managing soils, and particularly the potential to use composted organic waste, is also being addressed by the European Union through development of a comprehensive policy to protect soil. In summary, EU-25, the Thematic Soil Strategy for 'Organic matter and compost quality in the future', emphasises the inherent link between soil quality and the use of composted exogenous organic matter.

The application of minimum quality standards for the application of all organic materials to the land will protect soil and water resources, environmental and social values, and aid biosecurity. The application of regulations, that impose minimum standards, will contribute towards building market and community confidence in RO products.

Minimum standards need to ensure that RO products:

- Are pasteurised to manage pest, disease, weeds and other biosecurity concerns.
- Comply with standards for heavy metal and other contaminants based on risk.
- Comply with human health standards and other regulations such as fly breeding.
- Address concerns associated with physical contaminants such as glass and plastics.

Composting and related processes that facilitate the safe reuse of organic wastes are components of 'recycling' and are preferred to energy recovery in the 'Waste Hierarchy'. However as stated in the Code of Practice of the Energy from Waste Division of the Waste Management Association of Australia (WMAA), energy recovery may provide better outcomes when contamination makes processing by the RO sector difficult.

Reducing potential contaminants will maximise the organic recycling outcomes that result from increasing the collection of organic wastes. For example, National Pesticide Registration processes could test new chemicals for biodegradability and persistence in the environment to avoid the compost contamination that occurred with the herbicide clopyralid.

No single agency has the resources required to address all the needs of the RO sector. Effective national and inter-agency cooperation is an essential part of successful national and state strategies for recycling of organic wastes.

The use of RO products provides an environmental service to society. Support mechanisms such as 'Environmental credits' would assist the development of the sector.

Position 4: Soil health & performance

Promote the adoption of Soil Protection Policy and strategies for increasing the amount of organic matter in soils that are subjected to human activity.

Target audience – State and Federal government

Position 5: Minimum standards

Develop and promote the application of minimum standards for all organic materials applied to land that address potential environmental, human, soil and crop health risks.

Target audience – Federal and State government

Position 6: The waste hierarchy / highest and best use

Support and promote the recycling of organic wastes in preference to energy recovery from organic wastes

Target audience – Federal and State government, Local government

Position 7: National cooperation

Promote Government support for national collaboration in the development of uniform policy, guidelines, standards and regulation in the recycled organics sector.

This cooperation should extend to synergies related to research and development programmes and market development initiatives.

Target audience – Federal and State government

Position 8: Environmental credits

Promote the development of a system of 'Environmental Credits' for the environmental services provided by the appropriate recycling of organic wastes.

These considerations should include carbon and water use efficiency credits

Target audience – Federal and State government

Strategic Consideration 3: Market Development

The key constraints to market development for RO products are the lack of understanding of the value of RO products in developing sustainable farming systems and their cost relative to available low cost, unprocessed organic waste products. The benefits of using compost can be very large but are dependent on the user making changes to management practises.

RO product fitness for a specific purpose is not reflected in the current Australian Standard for Composts and Mulches, AS 4454. The current, and widely used, approach that compliance with AS 4454 implies suitability for all markets is incorrect. AS 4454 provides minimum standards only and these standards alone are not suitable for defining quality, fitness-for-purpose and therefore best use of RO products.

The management of RO product quality that relates to market development and fitness for purpose is a key responsibility of the RO sector. Projects arising from the 'Roadmap' process will address these and expand the agricultural market for RO products.

Government policy and action should support market development. Landfill levies should be used to fund a rebate scheme, paid to the end-user, for RO products. This would create the necessary market 'pull' described in the national compost 'Roadmap'.

Such market incentives could be tied to quality standards that simultaneously meet government policy needs and encourage market development.

These initiatives will also serve to educate the community about the value of RO products and the role they play in sustainable communities in the 21st century.

Other market development issues include defining and funding research and development programmes and the long-term access to feedstocks and the quality of those feedstocks.

Reliable access to consistent feedstock improves compost process efficiency, RO product quality and performance. This will facilitate product differentiation for specific applications and maximise market growth

Without support the development of the agricultural market for RO products will continue to be slow and is likely to favour alternatives such as energy recovery.

Position 9: Market incentives

Promote the use of RO products in selected markets by using the landfill levy to fund rebates to end users.

Qualifications for rebate should include products that:

- Conform to approved composting process; and
- Meet minimum standards for application of recycled organic products to land.

Target audience - State government

Position 10: Product differentiation

The RO industry should develop systems, including product quality disclosure, that will enable market development.

Target audience – Federal and State government, RO industry

Position 11: Education

The RO sector and Government should work cooperatively to develop a comprehensive communication package that highlights the benefits of recycling organic matter, whilst addressing community concerns.

Target audience – Federal and State government, the RO sector, industry

Position 12: Research and development

Promote and support local, national and international research and development to improve RO product quality and applications.

Encourage continuous improvement in the RO sector

Target audience – Industry, Federal and State government, research providers

Position 13: Feedstock – access and reliability

Ensure continued access to, and maximise the amount of, organic waste recycled for beneficial reuse.

Encourage collection systems that minimise contamination and maintain the separation of waste streams.

Target audience – Industry, Federal, State and Local government

References and supplementary Information

- 1. Department of Environment Working Group 2005. *Standards for application of organic materials including compost to land in WA*. Report presented to the Waste Management Board December 2005. Unpublished, http://www.zerowastewa.com/whoswho/committees/osg/
- 2. Government of Western Australia, 2002. *Focus on the future The Western Australian sustainability strategy, WA* Government, Perth, Western Australia.
- 3. Gulliver, A. 2005 *The Recycled Organics in WA a Report Back to Stakeholders*, WA Waste and Recycle Conference, September, 2005.
- 4. National Compost Industry Roadmap reports
- 5. Nolan-ITU 2004. National benefits of a UR-3R process[®] a triple bottom line assessment. Report for Global Renewables, July 2004
- Paulin, R. O'Malley, P., Wilkinson, K., Flavel, T. 2005. Identifying the benefits of composted soil amendments to vegetable production. Report VG990016 to Horticulture Australia Ltd, November 2005.
- Paulin, R. Discussion paper 'Compost production for agricultural use issues for the developing recycled organics industry', July 2005, attachment to Final Report on 'Identifying the benefits of composted soil amendments to vegetable production' by Horticulture Australia Ltd, November 2005.
- 8. Recycled Organics WA, 2005. *COMPOST WA Action Plan*, unpublished, Waste Management Association of Australia (WA Branch), August 2005.
- 9. Recycled Organics WA, 2006. *A Position Paper on the Recycled Organics Sector in WA,* Waste Management Association of Australia (WA Branch), September 2006.
- 10. RCS, 2005. *Compost Industry Supply Chain industry position paper.* Prepared for Waste Management Association of Australia, February 2005.