



WASTE MANAGEMENT ASSOCIATION OF AUSTRALIA

MAJOR PROJECTS 2006/2007

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Preamble:

In 2005 WMAA initiated a program whereby surplus funds generated by the Association during the course of its conferences and events would be given back to the industry through approved projects via the members. The funds allocated would either totally fund the project or be used as “seed funding” to attract grants or other industry or government funds. The total value of all the projects initiated by this process now totals approximately \$4.5 million.

Some of the major projects are listed below together with the individual project cost/value.

1. Organics from Mechanical-Biological Treatment (MBT) Facilities

Aim: This project will deliver recommendations on the environmentally appropriate land application of organic outputs derived from the mechanical and biological treatment of mixed municipal waste (MBT organics) in an Australian context.

Stage 1- Standards and Contaminants

The AWT DORF (AWT Derived Organic Rich Fraction) Working Group was established by Compost NSW and the NSW AWT Working Group as a consultation forum with the NSW DEC to review and make recommendations on specifications for utilising organic material derived from mechanical and biological treatment (MBT) of mixed municipal waste.

A first stage Study has been completed. The objectives of this stage were:

- (a) Provide an overview of where (and how) MBT organic outputs are being used in overseas jurisdictions (including an overview of what materials make up these streams);
- (b) Provide an overview of controls on MBT organic outputs (including restrictions on contaminants and controls over use);
- (c) Provide a critical review of relevant standards that are in place overseas;
- (d) Provide background and context on how and why local standards and guidelines were developed;
- (e) Based on evidence from the review and from information on Australian conditions, develop a list of the likely contaminants in MSW-derived organics produced in NSW/Australia (including discussion of a first set of indicator substances for analysing such mixed municipal waste derived organics); and

Stage 2

A list of compounds has been identified which may be present in mixed municipal waste in concentrations which will constrain the use of MBT organics produced from this material.

The stage two study will recommend:

- (a) appropriate sampling and analysis techniques for the detection of these compounds, including providing analysis of the risks associated with these test methods resulting in contaminants passing through an AWT process “undetected”;
- (b) threshold values and any associated application controls over the use of MBT organics as relevant to managing these contaminants in a land application context. These thresholds and controls will determine if, where and how this material can be land applied. Application alternatives would be consistent with the NSW Biosolids Guidelines.

Total project \$400,000 approx.

2. Australian Alternative Covers Assessment Program (A-ACAP)

This is a 5 year research project funded by an ARC Linkage grant and industry (represented by the WMAA). The research project (Australian Alternative Covers Assessment Program, A-ACAP) commenced in April 2006. It aims to investigate whether ‘phytocaps’ (planted soil covers) can meet performance criteria for landfill final covers more cost effectively and sustainably than conventional (low permeability) covers. This research will address two key issues:

- control of percolation of water into the waste zone through the use of a soil cover planted with species selected on eco-climatic criteria; and
- reduction of atmospheric emissions of methane and other greenhouse gases and of odorous and volatile trace landfill gases.

It is expected that the program will produce both innovative research and practical guidance for industrial and regulatory practices. The project includes full-scale test sites in five States and supports three PhD students

Total Project Value (combined cash and in-kind) \$3.574 million

3. National Landfill Survey

The WMAA National Landfill Survey conducted during 2006 extensively surveyed just under 400 Australian landfills which cover 95% of the Australian population and 19 million tonnes of waste.

This survey is the first of its kind in Australia and provides WMAA with information for each landfill site including such items as: liner/or no liner, type of liner, gas collection, leachate collection, environmental controls, recycling, equipment usage, rehabilitation, monitoring etc. This data will enable the industry to compare state by state and present a national picture of the landfill industry in Australia.

Project Cost. \$35,000.

4. Compost Roadmap Implementation

Compost Advocacy

Aim: An organics market study in NSW which will lead to a transitional plan for the New South Wales Recycled Organics industry quantifying differences between growth in organic material recovered and growth, or lack of growth, in the end market. A study with national implications when finalized.

Project Cost \$40k

Brand Development and Product Certification Scheme

The development of a brand and a product certification scheme for Application Specific Recycled Organic Products.

Project Cost \$40K

Recycled Organics Industry Communication Plan

To develop a communications plan for the Compost Industry to communicate across Australia.

Project Cost \$15K

Organics R & D Forum

This project has established a mechanism for the co-ordination of national research undertaken for the recycled organics industry in the form of an annual forum.

Project Cost \$35,000

Annual National Processors Survey

Aim: To quantify the Recycled Organics industry in Australia by accurately determining the amount of recycled organics produced state by state, costs involved and size of the industry and market. The information gathered will allow the industry to have influence in policy and to understand the major issues affecting the industry. The survey results are used by each state government for development of their strategies.

Project Cost \$30,000

Compost Week

A week of co-ordinated promotional activities, events and activities to increase community awareness of compost.

Project cost \$50K -\$100K

5. Review of Potential CO₂ Reduction of the Waste Industry

To investigate and report on the actual Green House Gas (GHG) impacts of the Waste Industry in Australia, including impacts from activities such as collection, recycling and landfilling activities.

\$10,000 stage one

6. Strategic Plan Development

This project is a joint initiative of the NSW Branch, the Boomerang Alliance, The Australian Council of Recyclers and the Local Government and Shires Association. Its aim is to develop and implement an “industry” sponsored Systems and Infrastructure Plan to manage waste as a resource in NSW and eventually to use the generic plan to facilitate the transition. To be utilized nationally where appropriate.

The plan will allow industry to recommend to government and the private sector the commercial, regulatory and legislative regime necessary to facilitate the generic systems and infrastructure implementation plan.

Project Cost \$5000

7. National Awards Program – Landfills & Transfer Stations

Development of a National Award for Landfills and Transfer Stations to be awarded every second year at the WMAA National Landfills and Transfer Stations Conference recognizing Best Practice across the country.

Project Value: \$20K

8. Preferred Practice Guidelines for Waste & Resource Recovery

The development of a pilot set of Preferred Practice Guidelines for sustainability educators, initially in Victoria, that could be rolled out to other states and territories.

This proposed project will promote the WMAA as a leader in sustainability education and professional development.

Project Cost. \$6000

9. EfW Infrastructure Plan

To produce a Generic Infrastructure Plan for the Energy from Waste

sector in Australia – for the benefit of WMAA members generally, and for inclusion into the NSW Branch S.P.I.G. working group process in particular.

\$7500

10. Young Professionals Development Program

To assist the Young Professional members of WMAA in career development focusing on one or more key areas of interest as identified in the survey, namely project management, marketing and networking, finance basics, or general career tips. Linking with real life examples and case studies of how professional skills can be applied to waste projects. . For example this may include:

- Financial analysis techniques and how these were applied to existing waste projects and capital ventures;
- Project management skills required for small and large scale waste projects; and
- Risk management processes and the importance to the waste industry.
- Site visits and presentations from guest speakers.

Project Cost \$3000

11. Various Industry Codes of Practice

Development of Clinical Waste Code of Practice, Construction and Demolition Waste Best Practice Guidelines, Metals Recycling Best Practice Guidelines, Resource Recovery Best Practice Guidelines (WA) Organics Recycling Best Practice Guidelines.

\$100K

12. Review of BioReactor Landfills

The National Landfill Division is conducting a project to review bioreacting landfill technology with the aim of resolving concerns within the regulatory community regarding the role of bioreacting landfills.

Project Cost \$100,000

13. Review of NSW Landfill Guidelines

To participate in the review process by the NSW Dept of Environment and Conservation of the NSW Landfill Guidelines. To develop a set of landfill guidelines which provide a risk based approach to the various landfill benchmark techniques for landfill construction and operation, which meet environmental and economic outcomes in an equitable and cost effective manner

Project Cost \$8000

Approximate Total Value of projects \$4,500,000