

The Orange Waste Project

COUNCIL NAME

Orange City Council

WEB ADDRESS

orange.nsw.gov.au/ site/index.cfm?displ ay=267052

SIZE

285 square kilometres

POPULATION

40.869

Overview

The Orange Waste Project has been designed to provide the City of Orange with an efficient solution to management of its solid waste. Council has finished construction of key facilities and is now implementing an integrated approach to improved resource recovery and residual waste management for the Orange Local Government Area.

The Project will improve diversion from landfill from 18-20% to a level of 58%. In the first 12 months of operation (1 July 2013 to 30 June 2014) a 57% diversion rate from landfill has already been achieved, with a staggering 41% of this being organic material that traditionally would have been landfilled but is now being turned into compost.



Image: Food and garden waste being sorted and shredded at the Ophir Road Resource Recovery Centre (ORRRC), Orange.

Background

The Orange Waste Project was developed in 2013 and was designed to maximise resource recovery, introduce a food and garden waste collection service, develop a composting facility to manage the collected organic material and construct a new landfill facility.

The Orange processing and composting facility has sufficient capacity to receive waste and organic material from neighbouring Councils. Sending source-separated organic waste to the enclosed tunnel composting plant will allow all councils involved to reduce their greenhouse gas emissions and also extend the time before they run out of landfill space. The Project therefore has significant local, regional and national benefits in addition to quadruple bottom line measures.



The project objectives were:



- 1. Implement strategies to increase waste diversion from landfill from 18%-20% to a level of 58%;
- 2. Construct and operate a new landfill facility;
- 3. Introduce mechanisms to enable a source-separated organic waste stream to be diverted from landfill;
- 4. Implement a technology to produce compost that meets Australian Standard AS4454-2003; and
- 5. Implement strategies to increase waste management efficiencies, including transportation, handling, and control of litter and vermin.

Community engagement was identified as being critical to the success of the Project. An education plan focuses on the collection service as this provides a direct link to the community, and behaviour change is required for the service to be successful. The Plan's objective is to ensure all residents and visitors have a clear understanding of how to correctly use the service.

Implementation

Project planning had commenced in 2003 and in September 2009 Council lodged a Part 3A application to build the facilities. Project Approval was granted on 28 April 2010. The Project was delivered within its allocated budget of \$17.92 millon and within the tight timeframe of just under 13 months.

Many partnerships were strengthened over the course of the Project, including,

- JR Richards & Sons
- Wangarang Industries
- Community Groups
- Orange Community
- NetWaste and its members
- School groups
- Apiary Industry

Outcomes

Achievements include:

- · Construction of the new innovative facilities on time and within budget;
- Greater separation of waste streams that diverts more waste from landfill through pre-sorting to enhance recycling and reuse of diverted materials;
- Use of new technologies to enhance efficiencies;
- Orange City Council is the only Council in western NSW that is providing the three bin collection service i.e. garbage, recycling and organic;
- Approximately 15,300 food and garden waste bins have been rolled out to the Orange community;
- A 57% diversion rate from landfill with 41% of this being organic material that traditionally would have been landfilled:
- Adoption and acceptance of the new service by the Orange community, as demonstrated by the participation level of residents, low contamination rates and high presentation rates of bins;



The Project used several evaluation tools:

- Monthly contract meetings with JR Richards to track the success of the project via waste diversion figures;
- Annual bin audits to establish what proportion of waste in the general garbage is made up of organic material that could be diverted from landfill;
- Annual reporting and annual review to assess the Project's success in diverting waste from landfill;
- Independent project audits to assess the environmental impact;
- Customer feedback via activities such as surveys, tour days and public place displays.

Key Learnings

One of the greatest learnings that Council has gained from this project is the need to be flexible and adapt to changing conditions. As the Project planning, development and implementation extend some 17 years (1996 – 2013) until the Project became operational in August 2013, Council had to evolve with numerous changes to legislation, technology and community expectations to deliver the Project as it currently operates.

The Project also highlighted the importance of stakeholder engagement and the need to foster these relationships throughout the life of the Project. These major learnings are transferable across all of Council and have been adopted into Council workplace. To ensure that benefits of this Project are ongoing, Council will continue its project evaluation methodology to foster continuous improvement.

A greater focus in 2014/15 will be on education to increase participation in the food and garden collection service and increase the amount of waste diverted from landfill. There is significant potential to increase diversion from this sector and therefore to further increase Orange's overall diversion from landfill.

Contact

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This project was the 2014 winner of the Organics Recovery Award at the LGNSW Excellence in the Environment Awards.