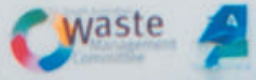


# CLEANER PRODUCTION

Be seen acting green > **CASE STUDY**  
at WOMADELAIDE



Put it in the right bin!

**WOMAD**

## SUMMARY

WOMAD is a three-day, fully-enclosed outdoor festival of music, arts and dance. In 2001, WOMAD introduced an on-site recycling system for use by patrons and caterers. The three-bin separation system resulted in a 79% diversion of material away from landfill.

### Business profile

## WOMAD

WOMAD is a biennial festival of music, arts and dance, presented by the Adelaide Festival Centre Trust and managed by independent arts and events producer Arts Projects Australia.

The inaugural festival was staged as part of the 1992 Adelaide Festival of Arts, and subsequent three-day festivals have been staged in every second year from 1993 to 2001.

The three-day WOMAD festival is a fully-contained outdoor event. Waste material—typically food and food/beverage packaging—is generated on site by caterers and brought into the venue by patrons.

### Financial assistance provided

The Environment Protection Authority provided \$20,000 for the implementation of a 'waste-free WOMAD'. The financial assistance supported the establishment of waste minimisation infrastructure, publicity, and an education program.

### Technology implemented

- Waste was separated by patrons into three streams, using clearly labelled 240-litre mobile garbage bins.
- The cleaning contractor aimed to reduce the waste disposed to landfill through greater control over the selection of materials used at the event. Caterers were required through contract specifications to use biodegradable cutlery, plates, bin liners and beer tumblers.
- An on-site composting facility (Peat's Biobin) received all compostable materials generated (food wastes and biodegradable containers and implements).
- Caterers separated cardboard from non-recyclable material on site, using a clearly labelled compactor for the cardboard.
- A waste-awareness campaign to reinforce the on-site recycling effort was delivered by KESAB and the EPA's Interim Waste Management Committee.
- Waste water from on-site catering facilities was collected in a re-engineered rainwater tank; the contaminated water was then collected daily by a liquid waste contractor.

### Cleaner production motivators

The incentive to separate materials into recyclable, compostable and waste materials resulted from:

- consumer demand for recycling at public events (particularly following the Sydney Olympics)
- the increasing cost of waste disposal to landfill
- the identification by the event cleaning contractor of ways to improve waste management at public events.

### TRADITIONAL APPROACH

Since WOMAD began, all waste materials generated by patrons and/or caterers had been collected in unsorted bins and consigned to landfill.

The quantity of material sent to landfill was not monitored in previous years; however, in 1999, the amount consigned to landfill by the waste transport contractor was estimated at approximately six tonnes.

CLEANER PRODUCTION INITIATIVES

Maximum diversion of waste materials from landfill was achieved by:

- the separation of waste by patrons and caterers into three streams at recycling stations. These stations consisted of three 240-litre mobile garbage bins, clearly labelled with cardboard overlays for:
  - > recyclable containers (PET bottles, cans, glass bottles) and other plastic
  - > food waste and paper associated with food (napkins, paper plates and wrapping)
  - > general waste—such as soiled nappies—destined for landfill.
- the contractual requirement for on-site caterers to use compostable utensils (cardboard plates, cardboard hot drink cups, cornstarch cutlery, clear cornstarch beer tumblers and biodegradable bin liners for food waste bins)
- the collection of food waste into on-site Biobins (9 m<sup>3</sup> aerated skips) for diversion to a compost manufacturer
- the collection of cardboard cartons from caterers for recycling.

The recycling message was communicated to the patrons by:

- signage near the main entrance and at locations inside the WOMAD area
- signage on bin lids and on backboards behind bin stations
- reminders to recycle made over the public address system
- 'ecovent' badges worn by WOMAD staff and by Venue Clean staff
- Messenger press articles and advertising
- provision of an on-site 'Waste Information' tent by KESAB, reinforcing the recycling promotional material and information and hosting recycling demonstrations.

Disposal of waste water was managed by caterers through on-site collection in a re-engineered rainwater tank. The contaminated water was collected daily by a liquid waste contractor.

**Benefits recommended and implemented**

Project effectiveness was measured by:

- on-site bin audits of beverage container and food waste bins to measure contamination
- food waste tonnage and quality reported by compost manufacturer
- bottle, can and cardboard tonnage reported by waste contractor.

MATERIAL

Quantity

• food waste, paper plates, cornstarch cups & cutlery	8,700 kg
• glass, PET bottles, aluminium cans	1,700 kg
• cardboard	3,000 kg
Total material recycled	13,400 kg
Total waste to landfill	3,500 kg

This equates to a 79% diversion rate.



## COST



Waste management is a very low-cost component for the WOMAD event. The increase in cost for the new waste management and recycling system, whilst significant, is still a very low percentage of the overall ticket price. The average ticket price in 1999 was \$68, compared with \$88 in 2001, and the waste management component of the ticket price increased from approximately 55c in 1999 to 94c in 2001. For a very small investment, a significant improvement in environmental outcomes has been achieved.

## BENEFITS



- ENVIRONMENTAL**
- Reduction of waste consigned to landfill
  - Conversion of food waste and compostable materials into compost, reducing the demand for virgin materials for soil ameliorants
  - Reduced demand for energy and raw materials (oil for plastic, bauxite for cans, sand for glass)
- ECONOMIC**
- There was no additional cost to the event managers for specifying use of compostable catering products. All additional costs for these were passed on from the event managers to the caterers to the consumer—adding approximately one cent per item to the product purchase price.
  - Specifying cornstarch and cardboard compostable products for use in catering provides certainty in the catering sector. Caterers expressed an increased willingness to bulk purchase compostable catering products, thereby reducing the unit cost.
  - Successful implementation of a 'waste-free WOMAD' has led to the establishment of 'waste-free event' cleaning companies to capture the niche market.
- SOCIAL**
- Introduction of sorted recycling at public events reinforces domestic kerbside practices due to the similarity of process.
  - Introduction of on-site recycling stations conformed with community expectations for recycling infrastructure at public events—thereby benefiting the WOMAD event through improved public image.

## WHERE TO FIND ADDITIONAL INFORMATION



Eco-efficiency Team  
Environment Protection Agency  
GPO Box 2607  
Adelaide SA 5001

[www.epa.sa.gov.au](http://www.epa.sa.gov.au)

Biocorp cornstarch product supplier:  
Venueclean (SA) Pty Ltd  
(Rob Horrocks)  
Yatala Vale Road  
Fairview Park SA 5126

E-mail: [venueclean@bigpond.com.au](mailto:venueclean@bigpond.com.au)

Biobin supplier:  
Peat Soil and Garden Supplies  
(Peter Wadewitz)  
Aldinga Road, Willunga  
(08) 8556 5295

WOMAD site and production managers  
Bluebottle

Totally Chlorine Free



Recycled



Content

