

COMPOSTING MATTERS

by Paul van der Werf

"About 60 per cent of these centralized facilities use a mulching pile to compost their wastes."



Composting in Manitoba

In 1996 an estimated 950,000 tonnes of waste (840 kg/person/year) was disposed in Manitoba. This represents a decrease of 16 per cent in the amount of waste disposed per capita between 1989 and 1996. Manitoba had set a waste reduction goal of 50 per cent by the year 2000 and had planned to achieve this by reducing waste going to landfill to 500 kg/person/year. The goal was not achieved; the current 786 kg/capita is a 21 per cent reduction, marginally lower than the national average but considerably higher than Nova Scotia's generation rate of just 417 kg/capita.

Current composting in Manitoba

The composting industry is evolving in a steady fashion in Manitoba. The most recent survey (2002) noted that eighteen municipalities have promoted backyard composting. There are approximately 39 municipal composting systems. Ninety per-cent of these accepted leaf and yard waste; 25 per cent accepted food waste and other wastes including woodchips, straw and manure.

About 60 per cent of these centralized facilities use a mulching pile to compost their wastes. These feature large piles that are infrequently turned. Finished compost from these programs is typically given away. A

number of municipalities used compost in municipal projects. There has also been some limited commercial composting of commercial wastes.

Stimulating reduction and composting

To stimulate waste reduction and pollution prevention the Waste Reduction and Pollution Prevention (WRAPP) Fund was established in 2000. The province allocated \$2.2 million to this fund — with annual commitments in the range of \$550,000.

The purpose of this fund is (among other things) to showcase local ideas and successes, support sustainable waste reduction activities with measurable results, and to demonstrate innovative approaches to integrated waste management using proven technologies. The management of organic waste has been a focus, with approximately \$470,000 allocated to various projects thus far.

Some project highlights include a backyard composter project in the City of Winnipeg (20,000 units), compost facility funding in Beausejour, East St. Paul, as well as backyard composting and promotion in Brandon. Research into various aspects of composting has been provided to the University of Manitoba. Funding has also been supplied to provide composting seminars and training in the province.

COMPOSTING MATTERS

A number of composting programs contribute to growth in Manitoba's composting industry.

Compost Action Centre: Resource Conservation Manitoba (RCM) is a non-profit, non-governmental organization directed by an elected community board. RCM's mission is to promote ecological sustainability through environmental education and to develop alternatives to current practices. The Compost Action Project is part of RCM and supported by Manitoba Conservation, the Manitoba Product Stewardship Corporation, and the City of Winnipeg. It is a project that seeks to enlighten Manitobans about composting from the grassroots on upward.

Brandon Composting Facility: The City of Brandon has been composting in one form another for 17 years and is considered a forerunner of composting in Manitoba. Presently there are three open windrow composting pads with an overall area of about 1.5 ha (3.8 acres). The three pads are made out of different materials: asphalt excavations and grindings, woodchips and clay. These all drain to a retention pond.

In 2004 the city composted approximately

3,300 tonnes of manure and straw and about 3,000 tonnes of leaf and yard waste. Incoming wastes are all piled with a loader. Some are preprocessed with an Allu bucket. All windrows are turned with a Wildcat Compost turner and watered as required. The city has specific temperature based turning regimens for manure and leaf and yard wastes. Windrows are watered as required.

The raw materials delivered in 2004 will be completed in 2005. Most of the finished composts are used internally. Users include the parks department and the reclamation of a landfill when the present cell is complete.

The City of Selkirk: Faced with a landfill that was set to (and did) close in 2002 the City of Selkirk initiated a Solid Waste Management Plan that included bag limits and increased recycling and composting. This has increased its waste diversion by 44 per cent.

One initiative that has contributed to this waste diversion is a three-phase centralized composting program, beginning with a subsidized residential backyard composting program and a composting area for leaf and yard waste. Its goal is to divert 50 per cent of waste by 2006 and 85 per cent by 2011.

The City of Selkirk received \$20,000 funding from the Waste Reduction and Pollution Prevention (WRAPP) fund to implement a centralized composting program. This included the purchase of a tree branch chipper.

As a reward for its efforts The City of Selkirk was awarded the 2004 FCM-CH2M Sustainable Community award in the solid waste category.

The future

Areas that still require development include Compost Facility Operating Guidelines, Operator Training and Quality Controls, the development of an Organics Management Strategy and additional incentives to encourage growth in the industry.

Opportunities for growth include an elevated interest in managing municipal organic wastes, mortalities composting and manure management. 

Paul van der Werf is president of composting and waste management consultancy 2cg based in London, Ontario. To contact Paul, visit www.2cg.ca

www.2cg.ca