

Saskatoon's Composting Program

I was impressed with spring conference put on by SWANA Northern Lights and the Saskatchewan Waste Reduction Council (SWRC) that highlighted waste diversion in the province, other parts of the country and places abroad. (See my blog posts from the event at solidwastemag.com)

Saskatchewan has implemented some curbside recyclable collection programs and continues to grow a number of EPR programs.

I last wrote about composting in Saskatchewan in the February/March 2006 edition of this magazine and much has changed. According to the Saskatchewan Waste Reduction Council website, as of July 2013 there were about 130 locations in the province to drop off leaf-and-yard waste. These are mostly at small landfill locations and depots. The larger more urban centres have larger depots (in some cases dedicated solely to leaf-and-yard waste and in other cases accepting a range of materials).

Findacomposter.com reveals that there are about 10 composting facilities in Saskatchewan, primarily in larger urban centres. While a number of communities offer backyard composter programs, organic waste diversion is very much focused on composting leaf-and-yard waste.

The City of Saskatoon has composted leaf-and-yard wastes since 1999, starting with a small site at its landfill. In the early 2000s it worked with the SWRC, which provided technical assistance, to help it start a standalone depot system.

In 2006 Saskatoon set up its first standalone depot devoted specifically to receiving and composting leaf-and-yard waste. The McOrmand Road Compost Depot is a 10-acre tract on the east end of the city. The depot has a long-term lease from the city (which owns the land). In 2007 Saskatoon opened the 15-acre Highway 7 Compost Depot on the city's west side. Again, it has a long-term lease from the city.

by Paul van der Werf

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Both depots receive and process a wide range of leaf-and-yard wastes including grass, leaves, branches and logs. Due to Dutch Elm disease, elm is not allowed at the depots.

The city doesn't have scales at its depots and so has used a combination of volume and densities to estimate annual tonnages, which have been steadily increasing. In 2008 the city diverted an estimated 4,000 tonnes, which skyrocketed to an estimated 15,000 tonnes by 2009 (and for the last three years to an estimated 20,000 to 25,000 tonnes/year, although that has included materials from land clearing and grubbing).

Saskatoon accommodates between 45,000 and 50,000 vehicles per year at its depots. It collects license plate and customer type information (i.e., residential versus commercial) to help keep track of depot usage. Residents can drop leaf-and-yard wastes at no charge but commercial vehicles are charged an annual fee to use the depots. (\$200 for the first vehicle and \$50 per vehicle thereafter.)

The city contracts out all work and regularly put out tenders for gate attendants, loader operator, screening and wood grinding.

The gate attendants (three at each depot) manage traffic and leaf-and-yard waste drop off at each site; they also collect vehicle data and

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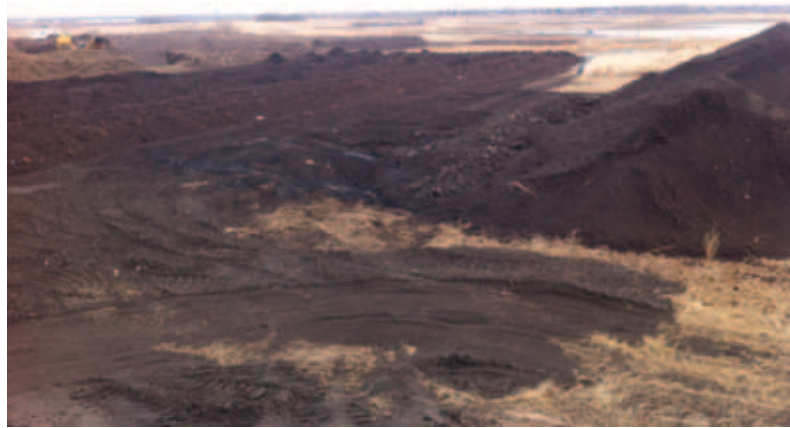
fees as well as keeping the sites clean. Customers are expected to empty their own bags.

The loader operator is responsible for helping to keep the depots clean and (importantly) transferring (on-site) the leaf-and-yard waste for composting. The composting pads at both sites are on the ground with drainage directed to on-site ponds. The wastes are composted using an open windrow system (150-200 feet). The ground brush (4-inch minus) from the previous season (i.e., ground in winter) is mixed with incoming leaf-and-yard waste. Then three buckets of ground brush is mixed to one bucket of leaves/grass to create “high porosity” windrows (to help make up for infrequent turning). Windrows are turned two to three times over the course of the season (basically moved to a new position and re-mixed).


Experiments have been conducted adding moisture to the windrows by conveying water from ponds using a “trash” pump, but to date operators have found that the high porosity of the windrows doesn’t absorb the leachate very well.

The city is investigating ways to improve the efficiency of its composting operations and is currently planning to tender for a compost turner (self propelled but pulled behind a loader or tractor).

Screening of product is undertaken in the summer (of material received the previous summer and fall) and fall (early summer material). Over the last year 7,500 m³ was screened.



The composting process takes about one year. The Parks Department historically takes most of the compost produced (2,000-4,000 m³). Since 2008 Saskatoon has provided compost free to community gardens (300-500 m³/year). It also markets compost back to residents through “Compost Sale Weekends” (\$5.00/20 litres compost; \$5.00/40 litres mulch). It’s investigating setting up bulk sales of this compost.

Composting of food waste in the province is very much focused on backyard composting at the moment. Saskatoon holds an annual Master Composter workshop, provides rebates for compost bins and (in conjunction with SWRC) offers Master Composter home visits. 

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