



# Composting in Alberta

The province is a leading jurisdiction for organics diversion

Composting is a going concern in the Province of Alberta. The province has an estimated 130 composting facilities of various shapes and sizes — everything from high tech to low tech — composting everything from manures to biosolids and municipal solid wastes.

### Regulations

Alberta has a Code of Practice that governs composting facilities; it specifies basic design and operating criteria. As well, the province has a certification program for compost facility operators who must prepare for and take an examination. The province is unique in Canada in this regard.

In terms of compost quality, Alberta uses the Canadian Council of Ministers of the

Environment (CCME) Guidelines for Compost Quality.

Alberta Environment will update its compost legislation by 2006. In January 2003 the ministry established the Compost Regulation Stakeholder Committee to assist it in putting together a new set of regulations governing the composting industry in the province. The committee membership includes various public and private interests.

To date the committee has been focused on reviewing legislation from all other provinces in Canada as well as European countries such as Germany. Information gathered will be summarized and presented at an upcoming meeting. In addition, each of the committee members has been asked to provide input from their various perspectives. An early issue upon

which the group was asked to comment was, "Who should regulate agricultural composting operations"? (Currently, two government bodies have jurisdiction over their operations.)

### Compost processing

The City of Edmonton has expanded its composting operation to include an outdoor facility utilizing the Gore™ Cover system to compost a portion of the sludge from its storage lagoons.

The Gore™ technology consists of a tarpaulin and a forced aeration system operating somewhere in between an aerated static pile and an in-vessel system. The tarpaulin consists of a Gore-Tex® membrane laminated between two polyester layers. The main advantage is that this allows gases such as

## COMPOSTING MATTERS

Windrows at the city of Edmonton's facility, below. The Cleanit Greenit composting facility, also in Edmonton (below at right).



CO<sub>2</sub> out yet also protects against precipitation. After constructing the pile and covering it with a tarpaulin, a water-filled fire hose is laid around the perimeter to seal it. (The cover is also purported to assist with moisture retention and odour control.)

This system was installed at the Edmonton facility to deal with a greater than anticipated volume of sludge and to develop a particular product stream. Sludge is mixed with wood chips and laid overtop of aeration channels on a concrete pad. Using an eight-week cycle, the operators can process 95,000 cubic metres annually of combined volume (i.e., sludge and wood chips). This equates to between 5,000 and 5,500 dry tonnes of sludge per year.

Capital costs for the facility were in the range of \$3 million. The site on which the facility was built is overtop an old swampy area. This resulted in high geotechnical and fill costs, which contributed to the capital costs. Operating costs are in the range of \$60 to \$70/dry tonne for the biosolids.

### Compost marketing

Another Edmonton compost facility operator is Cleanit Greenit Composting Systems Inc. It has made significant inroads into marketing its compost and blended-compost products by focusing on the development of premium soil products for major Alberta soil markets.

The company uses its CCME Category A and Ecologo-certified compost products, produced from a wide variety of organic wastes, as a base for its Organic Soil( products. These include a compost blend as well as a lawn mix and root-zone amendment.


Cleanit Greenit's key strategies focus on creating awareness of Organic Soil( products, arousing customers' needs and expectations to

the point of consumption and creating a loyal stream of satisfied customers.

Key marketing strategies include advertising in a variety of venues and direct marketing campaigns to large potential compost users, a door-to-door product sample campaign, booths at various trade shows, print media campaigns (e.g., in newspapers, phone books and specialty publications), articles in various related newsletters, newspapers and magazines, and product signage in strategic locations (e.g., all clients receive a sign).

A number of promotional strategies include fundraising sales (such as at schools, community groups), promotional product giveaways at a variety of high-visibility venues, and an incentive referral program for existing clients.

According to Kirstin Castro-Wunsch, a biological engineer and owner of Cleanit Greenit, "Consumers know that not all soil products and their quality are the same. We offer a local product that is nutrient rich, laboratory tested and that meets federal guidelines. We've applied science to ensure that organic wastes, which we divert from landfill, are manufactured into Grade A compost and soil products."

They've sold their products for five years and are currently experiencing annual sales increases of about 40 per cent. 

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