

Walker Environmental Group

Compost Facility

About the Compost Facility

The Thorold facility is a 90,000 tonne per year organic waste composting facility that has been providing organic waste diversion solutions to Ontario municipalities and businesses since 2002. The compost operation facilitates the natural decomposition process to create high quality compost and mulches for landscaping and agricultural uses.

What is Composting?

Composting is about giving back to the earth. It is a way of facilitating Nature's process.

It is about taking the scraps from our tables and the clippings from our gardens and transforming this into nutrient rich earth, which can be used by plants to grow.

Composting is the breakdown of complex sugars, proteins, carbohydrates and fatty acids from our food using bugs and micro-organisms.

Walker compost facts

- Walker's Thorold facility has been awarded a 20-year contract to process organics from the Region of Niagara.
- Walker sells compost to nurseries, vineyards, greenhouses, and soil manufacturers in Ontario and upstate New York.
- Since 2002, Walker has composted 150,000 tonnes of organic material using a windrow process.
- The new Gore™ Cover System has been operating since April, 2009.
- Walker's compost product has sold out every year since 2004.



Walker compost supports community garden projects.

Oxygen
+
Moisture
+
Kitchen Scraps
+
Yard Clippings
+
Bugs & Microorganisms

= Finished Compost



The
Gore™ Cover
System is sized to
compost 40,000 tonnes
of organic material in a year.
That's 40,000 tonnes of waste
diverted from landfill.



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Advanced composting technology: The Gore™ Cover System

A 97% reduction in odour can be achieved by composting through the Gore™ Cover System.

The combination of positive aeration, the Gore™ Cover and physically moving the organic material through the three-phase Gore™ process creates a mature compost product in just eight weeks.



1 Receiving and Mixing

The organic food waste is delivered to the receiving building and put through the mixer with ground leaf and yard waste to produce an optimum blend. It is then transferred to the trenches on the Gore™ pad to be formed into windrows.



2 Phase 1: four weeks under Gore™ cover

Once in the trenches the blended material is covered with the Gore™ fabric using a mobile unwinding machine. The temperature and oxygen sensors are inserted through the fabric, the aeration fans are turned on and the material remains covered for four weeks.



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3 Phase 2: two weeks under Gore™ cover

After four weeks, due to volume reduction the material from two trenches can be transferred to one trench as part of a two week second phase. The temperature and oxygen sensors are again inserted in the fabric. The aeration fans are turned on and the Gore™ fabric is pulled over the newly formed windrow.

Aeration fans



Gore™ cover



Aeration trench

4 Curing

After two weeks, the material is moved to another trench for the final phase of the Gore™ process. This time it is not covered as there is very little odour. Once again the sensors are inserted and the fans are turned on.

5 Screening

After this final two week period the windrow is removed to the screening building where it is screened and ready to finish curing and be loaded onto trucks for customers.

Screening



The Gore™ pad began operations in April, 2009.



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