Claystone's Composting Facility Background and Frequently Asked Questions

Claystone's brand new aerated composting facility planned for Ryley, Alberta, will use leading-edge technology to transform up to 20,000 tonnes of source-separated organic waste into usable compost every year.

Organic waste holds a lot of untapped potential. If we process it properly into compost, we gain a fantastic, eco-friendly resource that can be used to grow food while also reducing landfill usage and greenhouse gas emissions.

Compost may look like dirt – but it's actually the key to a cleaner future.

Organics From Start to Finish

Claystone can provide municipalities or large-scale commercial enterprise with full-service organic waste processing. Our collection teams can pick up their organic waste, transport it to our advanced facility for treatment with the latest techniques, and then deliver it to where it will be the most beneficial.

Going green has never been so easy.

Certificate of Authenticity

When customers choose to dispose of their organic waste with Claystone, they know it won't just be tossed in a landfill. If their organic waste is acceptable, Claystone will process it into rich, usable compost – and issue a certificate of authenticity to prove it. That's Claystone's guarantee that their waste isn't being wasted.

Your Compost Questions Answered

Why is Claystone building a compost facility?

Claystone is constructing the facility to help Alberta municipalities and large-scale commercial enterprises meet their waste diversion targets. Once operational, Claystone will become a leading organics provider in the Edmonton metropolitan region as communities and businesses look for more full-service organic waste processing opportunities. A compost facility has been a component of Claystone's and previously Beaver Municipal Solutions' development plans. The current landfill operating permit allows for a compost facility for up to 20,000 tonnes annually.

How will Claystone manage odours from the incoming organic material?

Odour is perhaps the most common problem associated with composting, and the failure to adequately address it can lead to complaints and the closure of facilities. Fortunately, odours can be controlled through facility design, proper management, and operational controls.

Claystone is constructing an advanced compost facility with leading-edge technology that will exceed the standards of Alberta's Composting Code of Practice to control and manage odours.

Preventing excessive odours requires consistent management of the composting process, starting with prompt attention to incoming ingredients. Materials will be mixed with a bulking agent which allows oxygen to travel through the material being composted.

Making sure that there is enough oxygen in the compost pile is the most important component to minimizing the risk of microbes producing odours. In addition to providing enough oxygen, Claystone will aerate compost piles with 15 cm of biocover layer. This material is either coarse wood chips or finished compost. The microbes in this layer absorb and decompose the odour compounds that may come up from the composting material underneath.

These design considerations and techniques have proven successful in mitigating odour issues before they occur.

What will Claystone do if any neighbours have any concerns?

Claystone is committed to being a responsive partner and good neighbour and we take our responsibility to reduce negative impacts on neighbouring residents seriously. Below are answers detailing how Claystone mitigates nuisance issues common to landfills and compost operations.

Odour control: Claystone employs various tactics to deal with odours depending on the type of organics. Active municipal solid waste is covered in the summer months, while odorous waste is covered immediately. Claystone's best practices ensure that they can mitigate odours and respect their neighbors. Through careful design and diligence in operation, odours from compost can be controlled and not be disruptive to the neighboring airshed.

Birds: Claystone Waste already has experience managing birds at their current site. They work with a falconry contractor permitted by the Canadian Wildlife Service to control migratory birds like seagulls to reduce populations.

Litter control: Litter management is carried out in the following ways on Claystone's landfill site.

- There are several layers of litter control fencing. The perimeter fence is a permanent fence. Semi-permanent fences are located at strategic points on closed portions of the landfill where high winds often blow litter. Moveable wind fences are available for placement as wind blockers.
- The collection of litter is done by landfill staff to ensure the site is litter-free.
- When waste moves outside the landfill boundaries onto adjacent properties, Claystone makes all attempts to collect the waste with the authorization of property owners or tenants.
- Off-site litter blown onto neighbouring, adjacent public roads and drainage ditches from a wind event is removed by Claystone following a wind event.
- Off-site litter blown onto neighbouring adjacent properties from a wind event is removed by property owner-authorized contractors at Claystone's cost, or by Claystone as soon as practicable after the wind event. Claystone will not and does not enter private property unless authorized by the property owner.

Dust control: Dust management is a key operational function on the Claystone site. In dry weather conditions, internal landfill access roads are watered to suppress dust as needed. During construction projects, contractors are responsible for dust control in their working areas of the site, with compliance monitoring done by Claystone.

Will local contractors be prioritized for construction procurement?

Claystone is committed to providing local employment and being an economic driver within the Beaver County region. Local contractors will be prioritized to the greatest extent possible when awarding contracts for the construction of the compost facility.

How will Claystone receive the organic material?

Once the facility is up and running, four to six trucks per day with walking floor trailers will transport the material from the customer to the landfill. Material will be accepted Monday to Friday. Claystone may also be contracted to collect and deliver the source separated organics from the customer and transport to the landfill.

Who owns the end product and what is the plan for it?

The finished compost will be Category Grade A (CCME Guidelines) which can be used in gardens. Claystone will own the product; likely 3000 to 4000 tonnes would be marketed to an end user annually. The intent is to make the finished compost available to anyone. Local residents could pick up the compost and load it as it won't be bagged.

How will Claystone deal with contaminants in the source separated organic material brought to the site (i.e. plastic bags)?

A dual-deck screen will be used to remove contaminants throughout the process. Some biodegradable materials, such as compostable cutlery, won't break down in 45 days, so they will also be screened out.

How will the community benefit from the compost project?

As a municipally-owned company, Claystone is inextricably linked with the communities that surround them. Claystone is committed to improving the quality of life of these communities through various community benefit programs that are unmatched in the waste management industry.

Over the past year Claystone Waste has provided direct and indirect financial benefits to the Beaver region community totalling over $4.9 million. This figure includes:

- $3 million in dividend payments to Claystone's municipal shareholders. This dividend represents an approximately $300 per person benefit to every resident of the Beaver region to help keep property taxes low and fund local priorities.
- $1 million in subsidized waste collection services for residents in the Beaver region to keep utility bills low.
- $500,000 in community grants support including a Good Neighbour Grant to the Village of Ryley and Beaver County. The Claystone Community Grant program provides welcome financial support to local community groups including Family and Community Support Services, the Royal Canadian Legion, the Holden Seniors Club, Viking Agriculture Society, Tofield and Area Health Service Foundation among many others each year.
- $400,000 in annual property taxes to support municipal operations and public services.

With the new compost facility, the local community can expect to benefit from increased employment and economic activity. Construction of the facility will create up to 40 jobs and contribute to ongoing employment growth in the region through permanent positions required for operations.

More questions? Reach out to Anne Ruzicka, Communication Manager at anne.ruzicka@claystonewaste.com.