

Organics plant upgrade FAQs

In December 2020 the elected Christchurch City Council approved redevelopment of the organics plant in Bromley. This involves upgrading the technology and enclosing all processing of kerbside material, eliminating the potential for offensive and objectionable odour from the facility travelling beyond the boundary.

What is the Organics Processing Plant?

The Organics Processing Plant is a Council-owned composting facility in Bromley that is operated under contract by Living Earth. The facility receives all the food and green waste collected in the kerbside green bins.

The plant has been operating since 2009 and has helped divert over 400 thousand tonnes of organic material from landfill.

What upgrades to the facility were approved by the elected Council?

The Council approved funding to upgrade the composting tunnel technology to current industry leading standards and build an additional structure to enclose all other parts of the composting process. The additional enclosed area will be kept under negative pressure and all process air treated via a biofilter prior to release. This means all air generated through the process of composting kerbside material will be treated for odour and all processing will happen indoors.

Will these changes impact odour in Bromley?

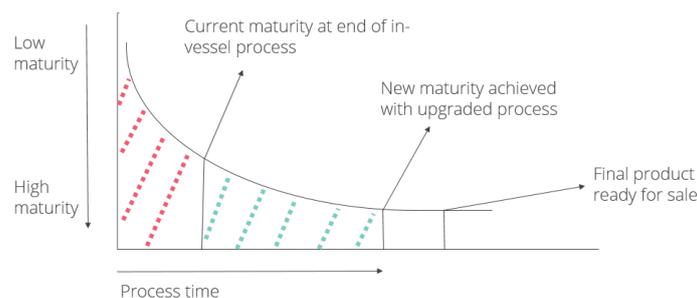
The upgrade being implemented will eliminate offensive and objectionable odour from the organics plant travelling beyond the boundary of the facility.

A number of other industries and activities in the area have been identified as contributing to odour in the Bromley-area. These changes will not impact those odours. Environment Canterbury continue to investigate and act on other producers in the area as part of their regulatory function.

How will these changes reduce odour from the composting process?

Under the approved option, all processing, maturation and curing of compost will occur indoors. In addition to the tunnel upgrades, Council also approved the construction of an additional processing building, this will house the final phase of maturing compost (known as curing).

Composting has three main phases; active composting, maturation and curing. The diagram below shows the biological process the organic material goes through as it composts.



The current system processes material for about 14 days in the composting vessels to the maturity noted on the graph, this is the active composting phase. The remainder of the composting process (maturing and curing) happens outside in windrows over about 12 weeks.

The upgrade to the tunnel technology will increase time in tunnel, to about 28 days, and improve the composting conditions (better control of temperature and moisture levels). These changes allow for most of the maturing of the compost, which currently happens outside, to take place in the tunnels (taking the compost to the second point on the graph).

The final stage (curing) will happen indoors in the additional processing building. By enclosing this final stage of the process all active stages in the process of making the compost occur indoors with all air treated via bio-filter.

Of note: The upgraded tunnels will be able to take more material (more finely shredded and loaded to a greater height) and process it more efficiently (better aeration and better irrigation). As the material coming out of the tunnels is more mature it will be of lower volume and requires much less time to cure before being packaged and sold. These two factors – the lower volume of material and the reduced time taken to cure – lead to the 90 per cent reduction in the area required to cure the compost material from the tunnels, allowing that area to be enclosed.

Will you be building new tunnels?

No additional tunnels are required under this proposal.

How much is this going to cost?

It is estimated the tunnel upgrades and the additional building will cost \$21.5 million.

How long will the changes take to make?

The elected Council have asked staff to implement the upgrades as quickly as possible whilst still meeting our legal requirements for procuring work of this value. A consultant was engaged before Christmas to assist drafting the detailed scope of works, user requirements and performance specifications for the project. These documents will form the basis of the tender documentation for the work.

On 27 January 2021 the Council approached the market with a Notice of Intent. This document advises prospective suppliers that a tender for this significant project is imminent and allows them time to prepare – speeding up the overall process.

We will be asking for Expressions of Interest in February 2021 and presenting our full procurement plan to the Finance and Performance Committee in March 2021 for approval by Elected Members.

We expect to award a contract for the works in June or July 2021. At this stage we will have a schedule of works from the successful contractor that will confirm exact timelines for construction. We expect work to begin by the end of this year.

How can I keep updated on progress?

We will continue to communicate through our webpage and newsletter, you can view all previous updates and sign up for our newsletter here – ccc.govt.nz/bromleyodour