

Certified compost



Gippsland
Regional
Organics

Owned by Gippsland Water, Gippsland Regional Organics (GRO) is one of Victoria's largest EPA-licensed organic waste treatment and composting facilities, located in Dutson Downs near Sale.

The Dutson Downs site spans about 8,500 ha and hosts a diverse and productive mix of waste management, agriculture and environmental assets. GRO is located on approximately 350 ha and uses multiple methods to turn waste into compost, reducing the amount of waste going to landfill.

Each year GRO accepts up to 250,000 tonnes of waste and manufactures approximately 70,000 tonnes of compost certified to Australian Standards AS4454 *Composts, soil conditioners and mulches*. Products are also independently tested by the National Association of Testing Authorities (NATA) accredited laboratories.

Besides GRO, Dutson is also home to Gippsland Regional Agribusiness (GRA), as well as significant native plants and animals including approximately 400 ha of protected native vegetation used for carbon offset.

Examples of organic wastes accepted at GRO

- Food processing waste.
- Food organics and garden organics (FOGO).
- Green waste.
- Grease trap and interceptor waste.
- Biosolids.
- Animal manure and agricultural residues.
- Dairy waste.

What are the benefits of using compost?

GRO compost is a mature, pasteurised organic soil amendment that contains stable organic matter, essential nutrients and beneficial microorganisms that support soil and plant health.

Compost improves soil structure and water holding capacity, enhancing plant performance, increasing irrigation efficiency and reducing erosion and surface run-off.

In addition, compost contributes to carbon sequestration in soils, helping to reduce the release of carbon dioxide emissions into the atmosphere.





Why should compost be stable and mature?

Stable compost is less resistant to further decomposition and can therefore act as a beneficial soil amendment.

Mature compost has fully completed the composting process.

How can compost be used?

Compost is used across a range of applications, including:

- Broadacre and mixed farming systems.
- Horticulture and market gardening.
- Landscaping and turf production.
- Soil blending and manufactured soils.
- Land rehabilitation and restoration projects.

How does compost support the circular economy?

Composting follows natural systems where organic materials decompose and cycle back into the soil. By managing and accelerating this process, composting converts organic waste into a continuous, valuable resource, reducing waste going to landfill and having a positive and sustainable impact on the environment.

How are contaminants managed?

It is possible for contaminants such as glass, plastic, metals and chemicals to be found in incoming organic waste. It is critical that minimal contamination enters the GRO site through these waste streams as removing them afterwards is labour intensive and expensive.

At the GRO site:

- Physical contaminants are removed via screening and the use of a wind sifter.
- Pathogens and biological contaminants are eliminated through pasteurisation. The high temperature over a series of days makes it too hot for harmful pathogens and plant seeds to survive.
- Chemical contaminants are almost impossible to remove once in the compost, so incoming wastes are tested for these contaminants. If chemicals are detected, the wastes are rejected.
- Extensive quality assurance and waste acceptance processes are followed to meet strict EPA licence requirements and compliance with Australian Standard AS4454.

Composting process at GRO

GRO has developed a rigorous process to transform organic waste into a safe and valuable soil amendment that can be used for many applications including agriculture, horticulture, gardens and landscaping.

1 Material arrival

Organic waste arrives at the GRO facility. This can include both solid and liquid wastes.

2 Assessment and sorting

Incoming materials are assessed and results recorded to provide evidence for compliance to AS4454. Most organic material is directed to open windrows, while more complex wastes are processed in in-vessel systems.

3 Feedstock blending

Approved organic wastes are blended with carbon-rich materials such as green waste to achieve suitable carbon-to-nitrogen (C:N) ratios, moisture content and structure for effective composting.

3a In-vessel composting

Complex waste materials such as oils and liquid wastes are treated in enclosed vessels that allow greater control of temperature, moisture and airflow, and protect the environment.

3b Open windrow composting

Dump trucks and wheel loaders arrange the material in windrows (long triangular piles). Microorganisms like bacteria and fungi naturally begin to break down the organic material.

Due to microbial activity, windrow temperature rises which is important to achieve pasteurisation and remove any remaining weeds or plant seeds. Windrows are turned five times and water is added using a windrow turner to maintain the right temperature, aeration and moisture conditions.

4 Curing and maturation

Following active composting, material is cured and matured in windrows to allow for microbial activity to slow down and the compost to be stable.

5 Testing

Compost is tested to make sure it meets AS4454 requirements and GRO safety standards.

6 Screening

A screen and magnets are used to remove physical contaminants such as metals (e.g. nails and wire) and a wind sifter is used to remove plastics and light litter.

7 Ready for use

The compost is ready to use in agriculture, horticulture, gardens and landscaping across Victoria and Australia.



- Reportable priority waste area / in vessels / tank farm
- Compost screening area
- Waste receivals area
- Compost production areas



What GRO compost products are available?

- 10 mm screened compost
- 10 mm screened mature compost
- 15 mm screened compost
- 15 mm screened mature compost

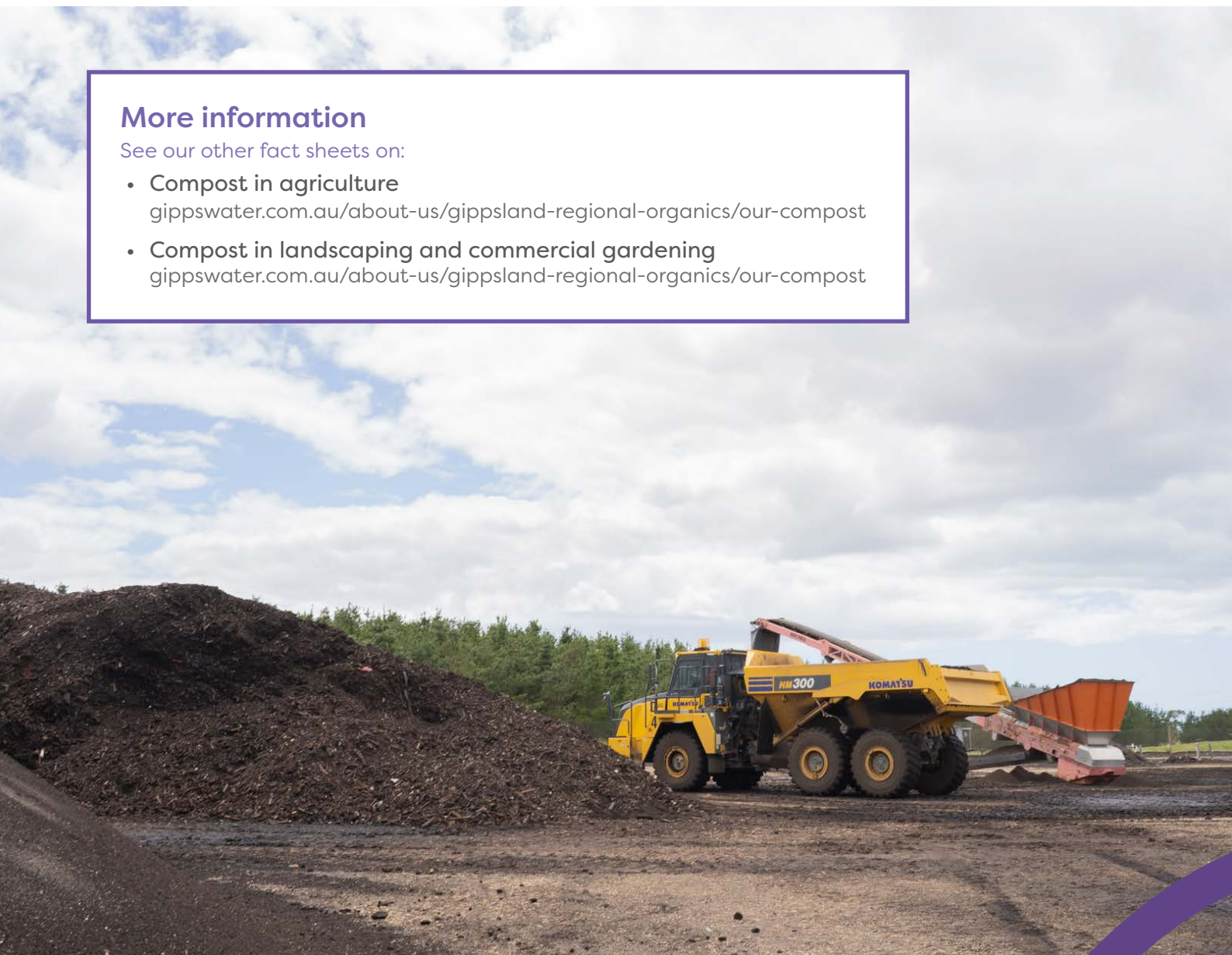
Typical nutrient content includes nitrogen, phosphorus, potassium, magnesium, carbon, phosphates, nitrates and trace elements.

See GRO's product specification sheets for more information.

More information

See our other fact sheets on:

- **Compost in agriculture**
gippswater.com.au/about-us/gippsland-regional-organics/our-compost
- **Compost in landscaping and commercial gardening**
gippswater.com.au/about-us/gippsland-regional-organics/our-compost



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We acknowledge the Traditional Owners of the Gippsland Water area, the Gunaikurnai people and the Bunurong people, and recognise their strong cultural connection to the land and waterways. We pay our respects to Elders, past and present.