

# Managing food & garden organics at resource recovery centres

**Food organics and garden organics (FOGO) is classified as a combustible recyclable and waste material that could create a fire hazard if not stored correctly. Operators should comply with the Environment Protection Authority Victoria's (EPA's) *Waste Management Policy (Combustible Recyclable and Waste Materials)*.**

### Key points

- › FOGO is a valuable organic resource that can be processed into compost, soil conditioners and mulch products.
- › When organic materials end up in landfill, they undergo anaerobic decomposition and generate methane, a potent greenhouse gas.
- › Various acts, regulations, standards and guidelines apply to FOGO at resource recovery centres and transfer stations.

### What is FOGO?

FOGO comes from:

- › solid food scraps resulting from meal preparation and uneaten meals, mixed with regular garden waste
- › animal bones and leftover meat cuts
- › tarnished fruit and vegetables that do not meet quality specifications from householders or businesses.

FOGO is either delivered to a resource recovery centre or transfer station via the kerbside collection service, then promptly transported to an appropriately licensed composting facility, or it is delivered directly to a composting facility.

### Potential hazards

If not managed correctly, FOGO can pose hazards human health and the environment, such as:

- › odour that may affect amenity
- › sharp branches and thorns
- › concealed snakes, spiders and insects that may bite or sting
- › attracting wildlife (e.g. birds, rats and other pests) and spreading disease (e.g. fruit fly affected fruit)
- › heavy and awkward loads that may cause injury
- › contaminants that may enter waterways via leachate and other pollutants.

### Regulations

Some of the acts, regulations, standards and guidelines that apply to the safe handling, storing, transferring, transporting and recycling of FOGO are listed below.

#### Occupational health and safety (OHS)

- › Occupational Health and Safety Act 2004
- › Occupational Health and Safety Regulations 2007
- › Compliance code: Hazardous manual handling (WorkSafe Victoria, 2018)
- › Liquid storage and handling guidelines (EPA publication 1698)

#### Environmental

- › Environment Protection Act 1970
- › Environment Protection (Industrial Waste Resource) Regulations 2009
- › Environmental Guidelines for designing, constructing and operating composting facilities (EPA Victoria, June 2017)

#### EPA waste management policies

- › Waste Management Policy (Combustible Recyclable and Waste Materials)
- › Management and storage of combustible recyclable and waste materials – guideline (Publication 1667.2, October 2018)

#### Other

- › Commercial food waste (EPA position, publication 1606)

#### Australian standards

- › AS4454-2012: Composts, soil conditioners and mulches

## Accepting FOGO

In most cases, kerbside-collected FOGO should be transported directly to a suitable composting facility. FOGO is usually stored at resource recovery centres and transfer stations temporarily.

Criteria for accepting FOGO includes the following:

- › Separate FOGO from general waste and other contaminants (e.g. soil, plastics) within loads. Contamination can result in a whole load being downgraded or rejected by reprocessors. Such incidents should be investigated to prevent contamination occurring again.
- › Kerbside-collected FOGO and commercial collected FOGO should be managed differently. Commercial collected FOGO material should be transported directly to composting facilities and should not be received at resource recovery centres and transfer stations.

## Handling FOGO

When handling FOGO, you should:

- › minimise on-site storage time
- › follow the correct safe manual handling and management procedures (refer to WorkSafe Victoria's compliance code: Hazardous manual handling)
- › use equipment to aid handling (e.g. frontend loaders)
- › wear appropriate personal protective equipment
- › ensure staff are familiar with overall site emergency management procedures, including evacuation and alerting authorities.

## Storing FOGO

FOGO storage should meet the EPA's *Liquid storage and handling guidelines* (publication 1698), which replaces the *Bunding* guideline (publication 347). The guidelines help businesses with practical controls to ensure liquid substances are appropriately stored and handled to prevent spills.

For best practice, store FOGO in an undercover area and on a sealed surface and transport the full volume of FOGO to an appropriately EPA-licensed composting facility within 24 to 48 hours of being received.

If stored for longer, FOGO can generate odours, leachate and pollutant gases and bacteria and can attract vermin such as birds and rats.

The minimum storage requirements for FOGO are as follows:

- › store FOGO in an area marked with suitable signage, with enough space for incoming and outgoing stockpiles and located on level hardstand areas
- › store FOGO away from ignition sources, flammable materials or other potentially combustible vegetation and materials
- › store near water supply and with access to equipment for dust suppression and fire control measures
- › install protection such as barriers or appropriate fences to prevent windblown litter
- › manage stormwater run-off appropriately and divert to suitable leachate/stormwater management systems
- › store only manageable quantities of FOGO, consistent with the site's frequency of transport to a composting facility.

The EPA's *Designing, constructing and operating composting facilities* (publication 1588) explains composting operators' obligations under laws administered by the EPA. It applies to operators of thermophilic aerobic composting sites, where heat and oxygen are used.



Photo credit: Metropolitan Waste and Resource Recovery Group

## Transporting and recycling FOGO

FOGO should not be processed in the same way as garden organics (e.g. for mulching/chipping). Garden organics should only be processed when not mixed with FOGO. This is due to food materials within loads potentially breaking down and producing odour and leachate and attracting vermin.

Any FOGO received at resource recovery centres and transfer stations must be quickly transported to an EPA-licensed composting facility. FOGO should be compacted to increase the density of loads and minimise transport costs.

Minimum standards for transporting FOGO are to:

- › transport FOGO regularly on a first in–first out basis, to prevent stockpiles exceeding the site's storage limits and to minimise storage timeframes of each load received
- › transport FOGO using larger transfer trucks (25 to 40 tonnes) and/or trailers with waste licences
- › only send FOGO to processing sites licensed by EPA to receive, store and/or process FOGO
- › have appropriate controls in place (e.g. collection vehicle having appropriate covers) to minimise odour and scattering of materials during all stages of transport
- › remove contaminants prior to transporting FOGO off-site, where possible.

Sustainability Victoria produced a *Guide to Biological Recovery of Organics* (2018) to help stakeholders understand the regulations, requirements and best practice methods that apply to the recovery and biological processing of organics.

## Stakeholder engagement and FOGO

Operators should communicate and engage with other local municipalities to investigate consolidated collection or joint procurement activities, such as contracting a suitable facility for processing FOGO from multiple sites.

Operators should also seek out and build relationships with local collection and recycling contractors, who meet the relevant standards and regulations.

## Record keeping

Keep records of all FOGO received and sent for composting at resource recovery centres and transfer stations. This enables tracking of resource recovery from the site, as well as managing on-site storage quantities to ensure that material is not kept on-site for longer than 24 to 48 hours. Record keeping should include:

- › recording FOGO quantities received at the gatehouse
- › recording the weight or volume of FOGO collected from the site by the approved contractor
- › regularly inspecting FOGO storage areas to ensure the site only stockpiles the amount of material able to be stored based on the frequency of transportation to a composting site.

## FOGO and the circular economy

Sustainability Victoria is actively promoting a transition to a circular economy and reducing reliance on raw materials in production processes by continuously cycling materials of all types back through supply chains.

The priority for any decision around accepting and managing FOGO is to divert these materials from landfill by transporting material regularly to a suitable facility for processing into compost, soil conditioners and mulch products, while protecting the OHS of all stakeholders (namely operators and customers) and the environment.

Sustainability Victoria's *Victorian Organics Resource Recovery Strategy* will:

- › ensure that organic waste is managed appropriately, is used safely and contributes to positive environmental, public health and amenity outcomes in addition to supporting economic growth
- › transition the industry to new technologies and diversified products to ensure that the organics recovery system can handle the volumes and diversity of organic waste generated.

## For more information

### EPA Victoria

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### WorkSafe Victoria

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