



*Woodlawn Eco-Precinct*

# ***FAQs for Councils***

*May 2017*



# *Introduction*

Instead of sending waste straight to landfill, a number of councils from Sydney's southern region now send their household residual waste to Veolia's Mechanical and Biological Treatment (MBT) facility for additional processing. This facility is located within Veolia's Woodlawn Eco-Precinct near Goulburn in southern NSW.

The multimillion-dollar facility utilises resource recovery technologies from around the world to extract organic content from mixed waste streams. From this organic material, a high quality compost is produced which is then used to rehabilitate the Woodlawn site, which was previously used for mining.

This document has been designed to provide general information for SSROC councils and their residents about the MBT facility and to answer commonly asked questions relating to this alternative waste treatment solution, its processing technologies, and its benefits to the environment and local communities.



*Now up to  
60% of your  
waste is being  
diverted from  
landfill*

## **Frequently asked questions**

1. *Who is Veolia?*
2. *What is the relationship between Veolia and the Southern Sydney Region of Councils (SSROC)?*
3. *Which councils are involved, and what are the associated benefits?*
4. *General facts about waste-to-energy technology*
5. *What is the Woodlawn Eco-Precinct?*
6. *How does the MBT work?*
7. *What are the sorting rules for participating councils?*
8. *What is the overall impact of this project?*
9. *Where can I get more information?*
10. *Key contacts*

## 1. Who is Veolia?

Veolia is one of Australia's most experienced and longest serving providers in municipal waste management and resource recovery solutions, with over 40 years of operations across Australia and New Zealand (ANZ).

Veolia ANZ has over 4,000 skilled employees in its three divisions of energy, water and waste management services, operating across more than 120 locations within the region.

## 2. What is the relationship between Veolia and the Southern Sydney Region of Councils?

In September 2011, Veolia responded to Southern Sydney Councils' Request for Tender in the provision of AWT (Advanced Waste Treatment) services, including receipt, resource recovery, treatment and disposal services of municipal solid waste for a possible 15 year contract term.



In October 2013, Veolia and SSROC agreed to partner, affecting over 1.4 million residents. At 110,000 tonnes of material per annum, the 10-year contract will see Veolia and SSROC work together to process more than 1.2 million tonnes of waste.

To achieve the targets, Veolia built a waste transfer station at Banksmeadow, which receives household waste from four of the participating councils: Bayside (former Botany and Rockdale LGA) Georges River (former Kogarah LGA), Waverley and Woollahra. The other two participating councils, Burwood and Inner West (former Ashfield and Leichhardt LGA) utilise the existing Clyde Transfer Terminal.

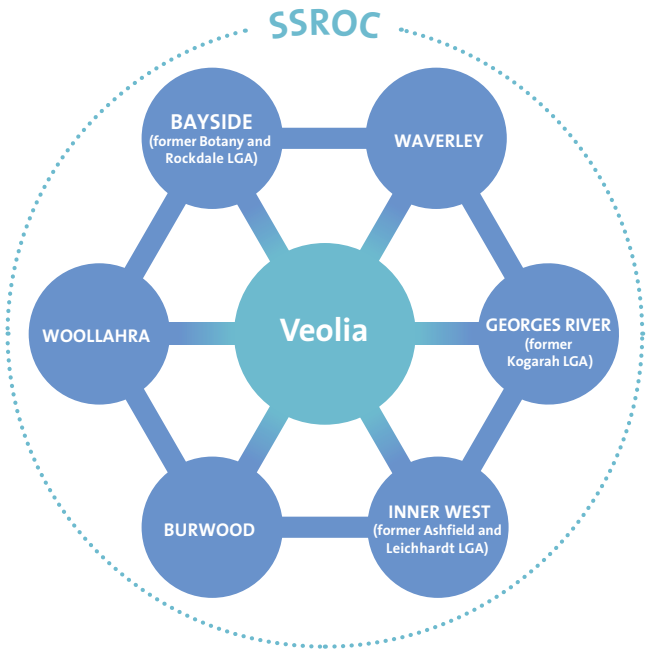
Waste received at these two transfer stations is moved by rail to Veolia's Woodlawn Eco-Precinct, at Tarago.



Through further advancements of technology, the MBT provides all SSROC stakeholders – including the general public – with a long-term sustainable solution to manage their general waste. The project is highly unique, with SSROC being the first area to reap the benefits of this ‘first of this scale’ MBT technology.

### 3. Which councils are involved, and what are its associated benefits?

The project’s approach means councils can reduce the amount of waste they had previously been sending to traditional landfill and the community can be assured that their waste is being collected and managed in the most advanced, environmentally-friendly way possible. The councils involved include:



## 4. General facts about waste-to-energy technology

1. The Woodlawn MBT design incorporates knowledge Veolia has gained in operating this type of facility for over 30 years.
2. The process is designed to maximise the recovery of the organic content of municipal waste, to produce a compost for soil remediation.



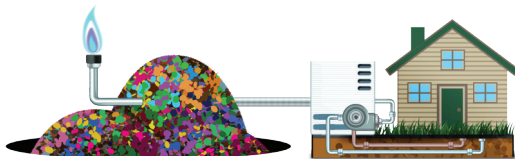
3. Veolia ensures all of the landfill sites, including the MBT, operate to best practice principles, including the management and capture of landfill gas which is used to generate electricity.
4. Decomposition of organic material within landfills produce a gas composed of approximately 50 per cent methane.
5. The gas is recovered and used to generate electricity or to produce an alternative fuel. This process is currently used at most medium and large landfills in Australia, and the electricity that is generated is generally supplied to the grid.

## 5. What is the Woodlawn Eco-Precinct?

The Woodlawn Eco-Precinct is located approximately 250km southwest of Sydney in Tarago, south of Goulburn. Veolia is committed to rehabilitating the Woodlawn site to rectify the environmental disturbance caused by over 20 years of mining activities. This includes the reclamation of the mine void with stabilised waste. Veolia established the Woodlawn Bioreactor in 2004, as the initial component and technical foundation for the Woodlawn Eco-Precinct.



The Bioreactor enables Veolia to rapidly stabilise residual waste by accelerating the decomposition process and maximising the recovery of landfill gas to produce green energy through the onsite BioEnergy Facility. Veolia has also developed the Eco-Precinct with other sustainable and innovative elements, such as the development of the Woodlawn aquaculture, horticulture and wind farm projects.



Additionally, the new MBT facility is designed to separate organics from mixed household waste to create a compost product that meets EPA standards for application to land, which is used for the progressive remediation of the contaminated mine site.

The MBT facility is capable of processing up to 144,000 tonnes of putrescible waste per annum, sourced primarily from residual household waste streams. Waste is transported by rail from Sydney to the Crisps Creek Intermodal facility and transferred by road to the Woodlawn MBT facility.

## 6. How does the MBT work?



### *Waste collection process*

- Following the collection of waste from households, it is transferred to either Clyde or Banksmeadow Transfer Terminal by a waste collection vehicle.
- A transfer station is where data about the waste, customer information, vehicle weight and billing information is recorded.

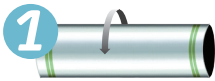


## Transfer process

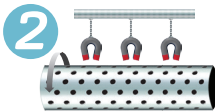
- The waste is compacted into purpose built sealed containers, identified for processing at the MBT, and loaded onto a train for rail transportation to Woodlawn.

## Treatment process

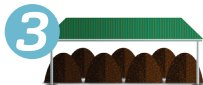
### **The facility comprises of three main processing areas:**



**Drums** – Slow rotating drums pre-treat the organic waste to assist in the separation of organic material from inert material to maximise the diversion of organic material from the mixed waste stream.



**Pre-treatment** – Mechanical separation equipment removes non-organic and oversized materials.



**Aerated Composting Hall** – Controlled production and maturation of compost product.

### **Veolia has incorporated advanced environmental control systems into the MBT design to ensure the facility meets strict environmental standards, including:**

- **Biofilters** – To treat air in the waste receipt, refining and initial composting areas
- **BioKap** – A biofilter cover designed to reduce potential odours during composting
- **Aerocontrol system** – Automated aeration to control oxygen and moisture levels during composting to optimise the process and minimise generation of odours

### **Resulting products/effect**

- **Recyclables:** The “mechanical” element is an automated sorting stage that removes recyclable metals from the mixed waste stream.  
**Compost:** Meets the NSW EPA standards and is used for former mine site rehabilitation.



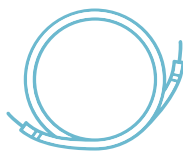
- **Residual waste:** The Bioreactor enables Veolia to rapidly stabilise residual waste by accelerating the decomposition and maximising the recovery of landfill gas to produce green energy through the onsite BioEnergy Facility.

## 7. What are the sorting rules for participating councils?

Collaborative effort is key in creating environmental, financial and social change. We would like to encourage all residents to consider their waste habits at home by following the source segregation rules:



No hazardous materials  
for example gas cylinders,  
batteries, chemicals, paint



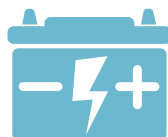
No rope, cable,  
string or hose longer  
than 1 metre



Pizza boxes aka contaminated  
(non-recyclable) cardboard  
should go in the red bin



No hot ashes



No car parts or car batteries

## 8. What is our overall impact with this project?



### *Environmental*

#### ***Diversion***

The Woodlawn MBT facility is specifically designed to separate organics from mixed household waste. Based on waste audit data, it is expected that approximately 60% of the waste received will be diverted from landfill. The organic waste is then used to create a compost to help rehabilitate the contaminated mine site.

#### ***Waste management/environmental leadership in AU***

Veolia is a leader in environmental innovation. Veolia's achievements across sustainability, innovation and community have been formally recognised by bodies such as the Australian Business Awards, Environment and Department of Public Works Sustainability Awards, Engineers Australia Awards, and the WMAA National Landfill Excellence Awards.

#### ***Better reporting/contract management structure to relay waste management results back to the residents***

The MBT project is compliant with government legislation at a Federal and State level. Following the collection of waste from households, the waste tipped at the transfer terminal is recorded in alignment with customer information, vehicle weight and billing information. The MBT project is a sustainable solution for residents that is committing to:

- 51-57% diversion rate
- Progressive remediation of the contaminated mine site



## ***Strong contribution towards meeting both local and federal environmental objectives***

With an objective of improving environmental outcomes across the member councils, SSROC required a solution provider that could reduce the amount of waste going to landfill. SSROC signed an agreement with Veolia for a long-term contract for the treatment of household waste across their local government areas, one that will keep tens of thousands of tonnes of waste away from landfill each year. Combined with their other recycling collection programs, the councils will meet the State Government target of 70% reduction in waste diversion from landfill by 2021-22.



### ***Operational***

#### **Fewer trucks on the roads:**

The waste is transported by rail from Sydney to the Crisps Creek Intermodal facility and then transferred by road to the Woodlawn MBT facility.

#### **Helping Veolia restore the mine damage:**

The organic output enhances soil properties such as water retention, porosity, nutrient supply and organic matter supply.

#### **Helping the council:**

Helping the council adopt a long-term, cost-effective waste management solution that is not a simple collection contract.



### ***Social***

**Local community support:** The project delivers local environmental, social and economic benefits such as increased renewable energy production, further rehabilitation of the former mine site, support for local community groups through the voluntarily Veolia Mulwaree Trust and an increase in local job opportunities.

## 9. Where can I get more information?



**Website:** [veolia.com/anz/woodlawn](https://veolia.com/anz/woodlawn)

A connection and information source for SSROC residents and member councils to learn more about the project.



**Email alerts:** Through email alerts, SSROC member councils and their communities can sign-up to email-alerts about the project and also submit any questions on the MBT process.



**Social media:** Through Facebook, Linkedin, Instagram and eDM content, SSROC residents have access to a range of information and education touchpoints.



**SMS alerts:** Veolia will send relevant updates to SSROC member councils about the project and how it's impacting their communities. Residents can opt-in to receive these updates via SMS alerts.

## 10. Key contacts

### SSROC:

**Bayside Council**, Joe Logiacco, Manager Waste & Cleansing Services

**Burwood Council**, Harry Gavrillis, Manager Environment and Health

**Georges River Council**, Fiona Stock, Manager Environmental Services

**Inner West Council**, Allan Wildiing, Manager Waste and Resource Recovery

**Waverley Council**, Margaret Diebert, Manager Cemeteries, Resource Recovery and PPC

### Veolia:

**Ben Sullivan**, NSW Group General Manager

**Mark Taylor**, General Manager – NSW Resource Recovery

**Vanessa Seaton**, Contracts Manager – Municipal Treatment & Collection

**Christine Hodgkiss**, General Manager – Growth and Development

**Shaun Rainford**, Technical Manager – Australia and NZ

**Vanessa Toparis**, Community Engagement Officer

**Sarah Yun**, Senior Marketing & Communications Manager