# Woodlawn Eco-Precinct Update - September 2023

## A message from Justin Houghton

We recently reviewed our staffing and recruitment for the past 12 months. It was pleasing to see that we continue to increase our number of local employees. In the past 12 months, we employed 14 new staff, including nine permanent staff and five labour hire — all from the local area. Seven of these new employees are from the Tarago area, one from Windellama, two from Currawang and four from Goulburn. In line with our diversity and gender equality policies, we are proud to say that three of these employees are women. In an industry such as ours, which is traditionally male dominated, this is a real achievement and a step in the right direction as we continue to promote inclusion, diversity and gender equality at the Woodlawn site.


***Veolia Woodlawn Mechanical Biological Treatment Facility (MBT) team.***

## Woodlawn Liquid management

We all suffered during the three years of extremely high rainfall from early 2020 to late 2022. As a result, all of our dams on site filled to their freeboard. Freeboard is airspace below the overflow level of a dam and is managed as the maximum operating level of the dam. This leaves us enough capacity to safely manage any emergency volumes to prevent an off site discharge. Freeboard volumes or levels are worked out by an independent third party based on water

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balance calculations. Woodlawn's water balance is submitted and approved by regulators. We were, and continue to be, working under an approved water balance.

Freeboard volumes were breached during those three years of almost double our annual average rainfall. These breaches were all reported to the relevant authorities and as such became formal non-compliances. Even though it is registered as a non-compliance, there was no off site discharge during this period. This showed that in this emergency situation, while we moved liquid around site between different dams the volume above freeboard was sufficient to prevent offsite discharges. The good news today is that due to the significant increase in our mechanical evaporation capacity and better weather conditions we have been able to reduce the water in four of our six dams to below the freeboard level (including our largest dam ED1). The remaining two are today within centimetres of freeboard.

We will now update the water balance with third party experts approved by the EPA to account for these extreme weather conditions. The water balance will also assess and recommend other ways of treating, storing and using excess liquid on site. We will then need to submit this new water balance for approval and update our management plans to reflect the new liquid management requirements.

The initial water balance update identified the potential additional treatment of water onsite with a new Reverse Osmosis plant. This would bring it to a quality consistent with Australian Drinking Water Guidelines - we use the drinking water guidelines as a target not because we want to use the water for drinking. This drinking quality water could then be used in a range of processes at the eco-precinct, including in water carts on our roads, irrigating small plots for fodder, and supplying water for operational processes. We are assessing the feasibility of building this Reverse Osmosis plant at the existing water treatment plant on-site.

As with any change to a State Significant Development, a great deal of testing by third parties and supportive analysis would be required to do this. We have lodged a scoping letter with the Department of Planning and Environment to progress through the early stages of getting those requirements before putting together a modification proposal. This measure is extremely expensive and rarely undertaken in the waste industry, but we are pursuing it because it is consistent with the objectives of further water resilience, security and compliance onsite and the circular economy principles.

**Woodlawn Bioreactor**

Woodlawn's 12 month licence reporting period started on 6 September 2023. The table below is a record of the volumes received at site during the current licence reporting period.

| **Source** | **Licence limit**<br>**6 Sep 2023 to 5 Sep 2024** | **Actual tonnage received**<br>**From 6th September 2023** |
|---|---|---|
| **Waste to Bioreactor via Rail** | 900,000 | 72,112t |
| **Local waste via road** | 125,000 | 17,443t |

| | | |
|---|---|---|
| **Waste to MBT by Rail** | 280,000 | 19,530t |

**Woodlawn ARC Update**

How Woodlawn's ARC is vital for a circular economy.

Two key questions appear to have been playing on the minds of some residents recently. The first is why is the proposed Woodlawn Advanced Energy Recovery Centre (ARC) proposed to be sited at Woodlawn and not in Sydney? The second is how does it fit into the circular economy? Let's get to those answers.

***Why locate the ARC here?***

The NSW Government and NSW Environment Protection Authority, identified four locations across NSW suitable for energy from waste facilities. The four locations are West Lithgow Precinct, Parkes Special Activation Precinct, the Richmond Valley Regional Jobs Precinct, and the Southern Goulburn Mulwaree Precinct.

The decision on where to locate was based on some key principles in the NSW Energy From Waste Infrastructure Plan. The Southern Goulburn Mulwaree Precinct was seen by the government as meeting these core principles.

The Woodlawn Eco Precinct provides a suitable location for the ARC for the following reasons:

- Existing land use - the project is complementary with existing land use, which has operated as a major waste management and disposal centre for 19 years and is progressively rehabilitating the old mine site.
- Existing infrastructure - can utilise existing approved rail and road transport infrastructure licences from the Eco Precinct.
- Existing waste supply - residual waste is already being sent to the Eco Precinct. The project will simply divert 380,000 tonnes of it from landfill per year to supply the ARC, achieving a more sustainable outcome.
- Location - the Eco Precinct is located within the Southern Goulburn Mulwaree Precinct, a location identified by the NSW Government's EfW Infrastructure Plan as one of four priority infrastructure areas to deliver EfW infrastructure in NSW.

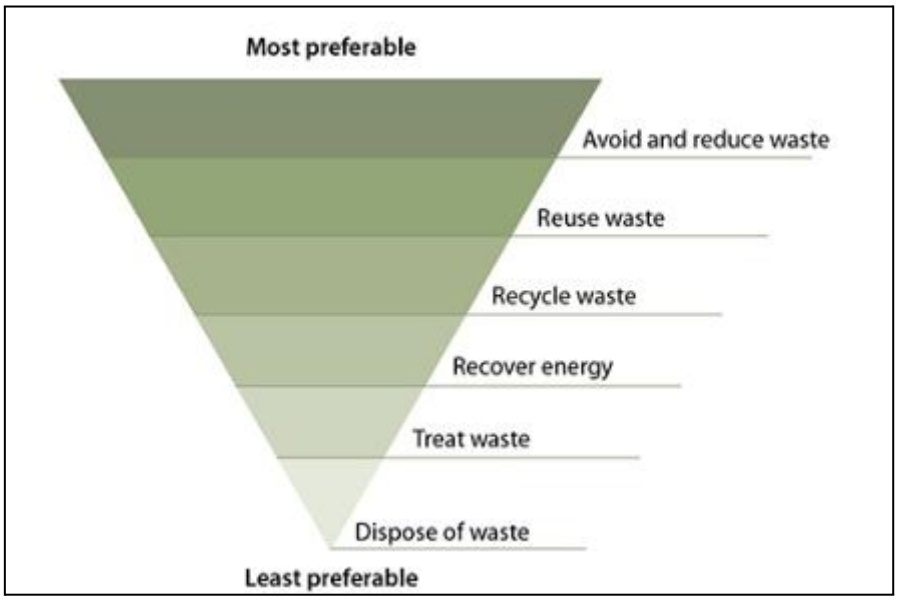
***Where does the ARC fit in a circular economy?***

The name of the facility itself is the first clue. It tells us that something is recovered. In this case it is energy. Recovered energy is used to generate electricity and raw materials, like metals and aggregate that can be recycled and used again. In doing this, the ARC also reduces the state's greenhouse gas emissions.

The fuel source for an ARC is household residual red bin waste only, which would otherwise go straight to landfill. No other waste is accepted. With the ARC, 96% of the waste in a red bin can be recovered or used to generate energy. For the proposed ARC, that equates to around 380,000 tonnes of waste generated every year that doesn't go to landfill, the equivalent of 172 Olympic swimming pools.

Without energy generated from waste facilities — like that proposed for Woodlawn — NSW and Australia will miss the sustainability targets set by their governments. This is because energy from waste facilities, like the ARC, have been designed for non-recyclable residual waste that once placed in landfill would contribute to methane emissions.

The waste hierarchy used by State and Federal governments gives the clearest picture of where the ARC fits into the circular economy transition. The hierarchy is often pictured as an inverted triangle with the best environmental benefits for waste at the top and the worst at the bottom. From best to worst we have to avoid/reduce, reuse, recycle, recover, treat, dispose.




Caption: The Waste Hierarchy as found on the website of the NSW EPA.

Woodlawn ARC shifts household waste that would be at the bottom of that pyramid — dispose — and raises it to treat, recover energy, and recycle. Thus, the ARC takes our current waste process from the very bottom of the hierarchy, being the worst way to dispose of waste, to much closer to the very best way to dispose of waste. This hierarchy illustrates it is important to change the way we dispose of waste.

On the recycled side of the equation, the combustion process of the ARC melts metal that would otherwise be impossible to recycle, like that found in ballpoint pens, spirals on notebooks etc. This metal is extracted in the ARC from the ash and recycled to be used in other products. Parts of the ash are also used in road base, which reduces by 20% the amount of natural material that

need to be dug up to pave roads. Again, this reduces greenhouse gas emissions and contributes to the circular economy that we need for a better future.

The combustion process in the ARC generates enough energy to power up to 40,000 homes while the remaining 4% of waste is treated and immobilised for safe disposal in an approved facility.

The ARC helps us shift waste further up the hierarchy, which is our only option for some waste until we can avoid, reuse and recycle every bit of the current waste we generate. It is not some backward step to when rubbish was burnt in our backyards but is a sophisticated, technologically efficient approach that is subject to a huge range of restrictions set by the NSW EPA to keep the environment clean. It is a vital and practical piece of technology we need today to transition from our current disposable society to tomorrow's circular economy.

**Reporting to site**

Your feedback is incredibly valuable as we measure the performance of our operations and odour management. To report incidents of odour, please fill out our online odour report form at **veolia.com/anz/WoodlawnEcoPrecinct**, contact Veolia's Community Feedback line on **1800 241 750** or simply send an email to **woodlawn@veolia.com**. To report a leaking container please use the feedback line or email.