



The design and development of a new drop and sort pad in the City of Hume

The issue

Poor conditions at the City of Hume's Waste and Recycling Transfer Station and Landfill at Riddell Road, Sunbury made it difficult for staff to sort waste and recover recyclable materials. Conditions relating to safety, visibility and accessibility also affected customer use of the site.

Customers with car and trailer loads of mixed waste had to unload their material straight to the landfill tipping face, which could be difficult and unpleasant, especially in wet and windy weather. Driving conditions could be hazardous because of car traffic mixed with trucks on gravel/dirt roads. Muddy conditions after rain made driving particularly difficult for cars that were not designed to go off-road.

Staff also experienced difficulties sorting through the disposed mixed waste at the landfill tipping face due to exposure to the sun, rain and wind. This meant that opportunities to recover resources from landfill were being missed.

The response

The City of Hume improved the Riddell Road facility by designing and building an all-weather drop and sort pad (DSP) and upgrading roads on site. The DSP project was part-funded by a grant of \$169,500 from Round Two of the Metropolitan Local Government Waste and Resource Recovery Fund (Metro Fund).

The DSP is a 30 metre long, roofed concrete structure. It has an upper deck where customers with cars and trailers can drop off recyclables and mixed waste loads and a lower deck where staff sort recyclables and load and cart the residual waste. The DSP has significantly improved efficiency and customer and staff amenity at the site.

Features of the DSP that make the facility easier and safer for customers and staff to use are:

- a 10 metre roof span that protects customers and staff from the sun and rain
- separate handling and sorting areas for customers and staff
- LED lighting for improved visibility
- an upper to lower deck height of less than one metre to reduce the risk of injury associated with falling from heights.

Access for customers and staff has been improved by:

- asphaltting pavements and access roads to eliminate previously muddy conditions
- better traffic management such as one-way traffic flow, defined vehicle unloading bays and clear traffic signs to reduce turn-around times and distance travelled
- separate access to the unloading areas for heavy vehicles/trucks and customer cars/trailers.

Operations are more efficient because, in addition to the points above:

- waste management operations are consolidated
- residual waste can be loaded from either end of the sorting deck
- the DSP has skip bins where customers can drop off their recyclables.



Benefits

The DSP can safely and efficiently recover a greater range and quantity of recyclables than was previously practical at the landfill tipping face. The site is now a more convenient and attractive place for people to recycle and dispose of their waste.

The main benefits are:

- resource recovery rates have increased from 40% to 60%, and are expected to rise to 70%
- improved amenity for customers and staff
- increased waste diversion will extend the landfill lifespan by one year
- more vehicles catered for onsite than previously
- one kilometre reduction in travel distance to unload mixed waste.



New signage was installed at the Riddell Road Sunbury Landfill

Next steps

The DSP project has potential to be rolled out to other metropolitan and rural councils that are considering upgrading their waste transfer stations. The design of the DSP can be used as a template for other sites and tailored to fit the service demand, so that sites can recover material more safely and efficiently.

Conclusion

Funding from the Metro Fund enabled council to bring forward the timing of the much needed Drop and Sort Pad. The Riddell Road facility now recovers more resources and will continue to be used long after the landfill operations cease in 2031.

Background

As the population of Hume grows, the City of Hume must continue to plan and provide essential services for residents including safe and accessible facilities for waste and resource recovery.

The design and development of a new Drop and Sort Pad at Hume's Waste and Recycling Transfer Station and Landfill at Riddell Road, Sunbury aimed to improve the existing facility so that staff could sort recyclables safely and efficiently, and customers could recycle and dispose of their waste safely and conveniently.

The project also aimed to:

- encourage more people to use the resource recovery facilities
- improve recovery of resources for recycling
- provide better environmental, social and economic outcomes.

For more information about this project contact the Waste Department at the City of Hume on (03) 9205 2200.

This project received funding as part of the Metropolitan Local Government Waste and Resource Recovery Fund.