

Traffic analysis

Update: 01/2019





The location of the waste will determine which transport option is chosen

The proposed EfW plant located at Australian Paper's Maryvale Mill will require an estimated 650,000 tonnes each year of non-hazardous residual

waste diverted from landfill. Australian Paper estimates that 80 per cent will come from Municipal Solid Waste (MSW) or 'household waste' and 20 per cent from Commercial and Industrial waste (C&I).

Waste volumes and supply locations will not be finalised until the outcome from the Victorian Government's MSW tender process, which is due to commence in July 2018. During this process Australian Paper will seek to secure up to 55,000 tonnes each year from Gippsland councils, and up to 465,000 tonnes each year from metropolitan Melbourne Councils. The balance will come from similar residual waste streams from the C&I sector.

Feed Stock Source	MSW (tpa)	C&I (tpa)	Total (tpa)
South East & Melbourne	465,000	100,000	565,000
Gippsland	55,000	30,000	85,000
Total	520,000	130,000	650,000
Percentage	80%	20%	100%



Three transport methods have been identified

The final logistics plan will be dependent on the location of the waste in question, the distance from

Maryvale, and the available transport capacity of the road and rail network at collection times. We expect that the optimum solution would utilise all options.







Waste transfer options





Direct Deliveries in the Latrobe Valley

Regional Refuse Collection Vehicles (RCV) would collect the kerbside MSW from homes and C&I from local businesses and deliver directly to the EfW plant at Maryvale Mill.





Line Haul trucks from Metropolitan Melbourne

South East Melbourne councils would collect waste in RCV's and deliver to a waste transfer station (WTS). The WTS would combine and compact waste volumes to optimise payloads for line haul trucks and deliver to Maryvale.



Analysis of local roads and intersections





Rail deliveries

A Melbourne WTS would combine and compact waste volumes into 40ft containers which would be shuttled to Australian Paper's existing rail siding at Dynon Rd. Extra rail wagons would be added to the existing freight train running 6days/Wk to Maryvale Mill. Potential rail container waste volumes would avoid the equivalent of 8 line haul trucks per day.

Existing traffic volumes

Vehicles accessing the Maryvale site during construction and when the EfW facility is operational will use Alexanders Road and Tramway Road to connect to the Princes Freeway (M1). These roads will provide access to the site from Melbourne. East of Princes Drive in Morwell, the M1 carries 29,000 vehicles on an average day across both directions according to the VicRoads Open Data website with trucks making up 9% of this total. To the west of Morwell, 30,000 vehicles travel on the road daily across both directions and trucks make up 10% of this number.

Alexanders Road carries 7,900 vehicles per day across both directions, while Tramway Road carries 10,200 vehicles per day. 16% of vehicles on Alexanders Road are trucks and 15% are trucks on Tramway Road. Both roads have significant spare capacity to meet future demand from the EfW facility.





The additional EfW vehicles travelling on the local roads has been assessed with VicRoads.

This analysis included software modelling of the traffic volumes and the road network capacity.

The geometry of the key intersections were evaluated using sweep path software to check the suitability of the proposed A-Double trucks.

The results were verified by conducting trials which were recorded on drone video.

VicRoads reviewed the analysis and determined the existing roads and intersections are suitable and require no alternations.



Estimated truck volumes when the EfW plant is operational

The volume of trucks used by the EfW facility at Maryvale will depend on the volume of rail that is used for transport. At this point in time the modeling includes the utilisation of the available spare capacity on the AP "paper train"

together with road utilisation for the balance. The final truck volumes are likely to be lower than this modelling as we continue to identify efficiency improvements and payload opportunities.

An estimated 97 trucks will be associated with deliveries to and from the EfW plant. Of these, 40 will originate from the Gippsland region and just over half (up to 57= 32+18+7) will be from Melbourne. Traffic (including heavy vehicles) accessing the proposed EfW site during operation will be primarily routed along roads that do not have residences. The largest traffic flow will travel along Alexanders Road.



