



21 February 2013

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Our ref: 31/29006/6531

Dear James

**DA 42-12/13 Transpacific Cleanaway Organic Composting Facility
Response to GHSC request for further information - Transport of Compost Product**

Please see below GHD's response to the request for further information sought by the Greater Hume Shire Council in relation to the transport of composted material from the proposed Transpacific Cleanaway Gerogery Organic Composting Facility (DA 42-12/13) (letter dated 15 February 2013).

As requested, this letter clarifies the information provided in the Environment Impact Statement which accompanied the above Development Application. Where appropriate we have referenced the relevant section(s) of the Traffic Impact Assessment (TIA) submitted as part of the EIS document (Volume 2, Appendix J). It is important that this response is read in conjunction with this TIA, which provides a greater level of detail and the full context associated with the assessment. Key points are provided below.

1 Quantity of Material, Truck Type and Movements

When the proposed composting facility is operating at full capacity it is expected that 18,000 tonnes of compost product would be produced on an annual basis.

It is estimated that the removal and transport of this material from the site (approximately 350 tonnes per week) would require approximately 25 truck movements per week or 5 trucks per day. It has been assumed that these trucks would be a truck and trailer or semi-trailer configuration.

It has been assumed that haulage of this material would be done during Monday to Friday which translates to an average of 5 truck movements per weekday. It should be noted that the actual number of trucks may vary according to the specific operational arrangements at the facility, and market and seasonal requirements for the compost material.

The majority of compost material is expected to be utilised in broad acre agricultural applications. As a result it has been assumed that when transporting compost product from the site the majority of trucks would turn right at the Rogers Road / Olympic Highway intersection and travel in a northerly direction.

Note: Appendix C of the Traffic Impact Assessment details a number of project assumptions used in the Traffic Impact Assessment. Further clarification of two items is provided. Dot point 13 refers to 75% of vehicles exiting the facility travelling to the south and 25% travelling north. This refers to the *total volume of traffic associated with the operation of the facility* (all vehicle types). The second last dot point in this Appendix indicates that there would be 25 trucks /week with a northbound departure on the Olympic Highway. This point refers to the *transport of the compost product*.



2 Olympic Highway Traffic and Intersection Characteristics

2.1 Traffic Volume

Transport of compost product is estimated to contribute an additional 5 trucks per day to the existing road network. Based on traffic count information provided by Roads and Maritime Services, the average weekday total volume of northbound traffic on the Olympic Highway is in the vicinity of the project is 1,819 vehicles per day with 31% of this figure being heavy traffic (Refer Appendix J, Section 2.4.1). The additional contribution of traffic associated with the transport of compost product (5) is considered negligible in terms of total northbound traffic volumes.

2.2 Sight Distance

As stated in Section 2.6 of the assessment report, the *Austroads Guide to Road Design – Part 4A*, (Section 3) specifies that the Rogers Road and Olympic Highway intersection sight distances need to comply with the following three sight-distance requirements:

- Approach sight distance;
- Safe intersection sight distance; and
- Minimum gap sight distance.

2.2.1 Approach Site Distance

The approach sight distance (ASD) is defined in the *Austroads Guide to Road Design – Part 4A*, (Section 3.2.1) as 'the minimum level of sight distance which must be available on the road approaches to all intersections to ensure that drivers are aware of the presence of an intersection'. The existing approach sight distances exceed the minimum requirements as stated in Table 2 in Section 2.7 of the assessment report (Appendix J) and are considered adequate.

2.2.2 Safe Intersection Sight distance

The safe intersection sight distance (SISD) is defined in the *Austroads Guide to Road Design – Part 4A*, (Section 3.2.2) as 'the minimum distance that provides sufficient distance for a driver of a vehicle on the major road to observe a vehicle on the minor road approach moving into a collision situation and to decelerate to a stop before reaching the collision point'. This includes vehicles travelling downhill on the Five Mates Bridge overpass ramp that are required to come to a stop before the Rogers Road intersection. The existing sight distances exceed the minimum requirements as stated in Table 3 in Section 2.8 of the TIA (Appendix J) and are considered adequate. The sight distance calculation includes an allowance for the southbound downhill grade in accordance the above guidelines.

2.2.3 Minimum Gap Sight Distance

The minimum gap sight distance (MGSD) is defined in the *Austroads Guide to Road Design – Part 4A*, (Section 3.2.3) as the distance 'required for the driver of an entering vehicle to see a vehicle in the conflicting streams in order to safely commence the desired manoeuvre'. This refers to the gap required for a vehicle to turn left or right from Rogers Road and enter the Olympic Highway safely. This includes vehicles making a right hand turn onto the Olympic Highway in order to transport compost material in a northerly direction. The existing sight distances exceed the minimum requirements set out in Section 2.9 of the TIA (Appendix J) and are considered adequate.



2.3 Influence of Five Mates Bridge on Northbound vehicles

The intersection of Rogers Road and the Olympic Highway forms the approximate start of the southern ramp of the Five Mates Bridge overpass and has an approximate grade of 2.5% (Appendix J, Section 2.3.1).

Trucks making a right hand turn onto the Olympic Highway in order to proceed in a northerly direction are anticipated to accelerate across the intersection at a similar speed to other essentially level intersections.

After entering the northbound lane of the Olympic Highway trucks would then be required to accelerate up the Five Mates Bridge overpass ramp. There is the possibility that other northbound vehicles travelling behind an accelerating truck may have to temporarily decelerate while the truck crests the Five Mates Bridge overpass. Given the number of trucks involved (5 loads of compost product per weekday) this is not considered to be a significant issue.

As discussed in the above sections and summarised in Table 4 of the TIA report, sight distances to the south exceed 1,000 m and provide the truck driver with the opportunity to select an appropriate time to enter the northbound lane so as to minimise conflicts with existing northbound traffic. The sight distance also provides significant opportunity for northbound vehicles to decelerate in the event that a truck enters the ramp to Five Mates Bridge overpass.

We trust that this response adequately meets the requirements of the request for further information. Please do not hesitate to contact me should you wish to discuss further.

Yours faithfully
GHD Pty Ltd

A handwritten signature in blue ink, appearing to read 'John Ellwood', is written over a light blue rectangular background.

John Ellwood

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