

Tuesday, 31 July 2023  
Reference: P191224LT1-R2.docm

Statutory Planning Officer  
Shire of Serpentine Jarrahdale  
6 Paterson Street,  
Mundijong WA 6123

Attention: Ms Helen Maruta

Dear Ms Maruta,

**17 Cardup Siding Road, Cardup, Environmental Noise Assessment – Peer Review**

We have undertaken an acoustic review and appraisal of a report entitled *Environmental Noise Assessment – Workshop and Moulding Facility Operational Updates, 17 Cardup Siding Road, Cardup* by Lloyd George Acoustics, dated 18/04/23, Ref: 16053600-05C [LGA]

From our review it appears the applicant has addressed the concerns we previously raised on 31 January 2023, when reviewing their earlier Revision B 13 March 2023 report.

Truck Departure Noise

The following specific item is noted in the current report:

The  $L_{Amax}$  forecast noise level at Resident B, from Truck Departures from the Alternate location is 48 dB<sup>1</sup>. The following items remain unclear:

- Is this noise due to the ‘...release [of] a light air brake noise’<sup>2</sup> or engine revving noise, or other?
- If it is air-brake noise, why is there no ‘impulsive’ adjustment to the forecast?
- Why is this forecast noise 3 dB higher than the 45 dB noise from departing trucks from the original parking location, and from arriving trucks<sup>3</sup>?

It remains unclear if an impulsive adjustment is to be applied to this noise. Were it to be applied, this noise would exceedance of the Assigned Levels at Resident B and would therefore be unacceptable.

Conditions

Where the applicant can satisfactorily demonstrate that no adjustment to truck departure noise is applicable, the following comments apply:

- The report outlines<sup>4</sup> the following treatments/conditions to control truck parking/movement noise
  - Up to eight (8) trucks pre-loaded from previous weekday (before 7pm). As a maximum, three (3) Prime Mover Trucks and five (5) smaller 260hp trucks are used.
  - Trucks starting and idling, then moving off site between the hours of 6.00am to 7.00am via the main entry onto Cardup Siding Road.
  - No additional external works or loading to be conducted outside currently approved day time period.
  - 20 km/h travelling speed
  - Trucks not reversing before 7am
  - Forklifts and other equipment not used before 7am

<sup>1</sup> LGA Table 6-1, page 19

<sup>2</sup> LGA Section 4.2, page 12

<sup>3</sup> LGA Table 4-2, page 12, and Table 4-4 page 15

<sup>4</sup> LGA Section 1, Section 3.4 & Section 6.

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- An alternative truck parking location is identified and accepted to reduce truck noise emissions
- Shielding around this alternate parking location is to be provided to the heights and extent outlined in LGA
- The report outlines<sup>5</sup> the following treatments to control Wormal workshop and Smartstream technology workshop noises outside the currently approved daytime period
  - Operation times - 24 hours Monday-Friday and 7.00 am – 1.00 pm on Saturday
  - Roto-Moulding equipment running within enclosed shed,
  - all roller doors are closed
  - No deliveries or other external works (e.g., forklifts, movement of stock)
  - Operations inside the workshop to include general assembly, morning pre-starts, operation of the wash pod, light vehicle hoisting, and servicing jobs with hand tools only
  - No rattle guns, welders, grinders, hammers or compressors or other noisy processes permitted.
  - No workshop radios permitted
- The report outlines<sup>6</sup> the following treatments to control Prime mover truck returning after 7pm
  - Arrival between 7pm and 8pm
  - No loading or unloading of truck to occur outside the hours of 7am and 7pm

As previously mentioned, where the applicant can satisfactorily demonstrate that no adjustment is applicable to departing truck noises, and so the truck noises comply with the Assigned Levels, we recommend that the conditions outlined above be included and conditioned in any Shire approval.

#### Use of Shipping Containers

A final note on the use of 40ft storage containers as the method of shielding noise to surrounding residential areas. Acoustically they have been shown to be sufficient to control noise. We remain concerned about non-acoustic issues. The following list is not considered comprehensive, and we recommend other expertise be consulted:

- shipping containers by the design may be considered temporary and liable to be transported/ removed. This means that they may not form a permanent solution
- Shipping containers may corrode more than a permanent, purpose built noise barrier
- It is unclear if they can withstand high winds, especially when stacked
- stacking of containers may additionally create workplace hazards
- etc

We recommend that the applicant justify the use of these shipping containers to the satisfaction of the Shire, otherwise an alternative permanent solution is to be implemented.

Yours sincerely,



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Director

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<sup>5</sup> Section 1

<sup>6</sup> Section 1 & Section 4.4