MEMO

MARSHALL DAY Acoustics

Project:	Fonterra Darfield Dairy Management Area	**Document No.:**	Mm 002		
To:	Fonterra Co-Operative Group Ltd	**Date:**	2 August 2016		
Attention:	Ian Goldschmidt	**Cross Reference:**	Rp 001 R01 2013648C		
Delivery:	email	**Project No.:**	2013648C		
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Subject	SDC RFI dated 2 August 2016				

This memo is in response to the Selwyn District Council (SDC) RFI dated 2 August 2016. Two questions have been posed. These are reproduced below, together with our response.

The assessment outlines that rail movements have been assessed but not whether this includes noise from unloading activities or shunting on the spur line. Has this been considered in the assessment? If not can this be included in the noise assessments.

In section 4.4 of our report we stated that two scenarios have been assessed. The first of these is the 'peak tanker' (shift change) scenario, together with normal plant operation including loading of rail. The second is during a rail movement with normal plant operation and 'normal hour' tanker movements, including outdoor container handling, but excluding loading of rail.

The reason two scenarios were presented is because, as noted in section 4.4, some activities are mutually exclusive. For instance, rail movements are scheduled to avoid tanker shift change as this conflicting high intensity use of the rail crossing would cause congestion and potentially increase safety issues. Similarly, a wagon rake cannot be both moved and at the same time loaded (although we have still assumed that Hysters will be moving containers in the outdoor area). Given these exclusions we chose to assess the two worst case noise generating scenarios that occur. The resulting noise contours are presented in Figures 3 & 4 of our report and the effects discussed in sections 4.5 (Resulting Noise Effect – Operational Noise) and 4.6 (Resulting Noise Effects – Rail Noise).

We note that no shunting occurs on the spur line as the process used is a rake exchange.

Why has a peak hour been assessed in section 4.4 (of the MDA assessment)? Would there be any change to the predicted noise levels if a 15 minute assessment period were used instead (as per the proposed NCB limits)?

In scenario one (no rail), a tanker shift change takes place over approximately a 1-hour period. We have assumed that this will always be the case. As it is not possible, due to tanker turn around and driver briefings, to significantly reduce this time period, using a 15-minute assessment will result in the same predicted noise levels. Similarly, plant noise and container loading noise is assumed to be constant in our model.

In scenario two (rail movement) we have assessed a 15-minute period.

No adjustments are necessary.

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