

Fonterra Co-operative Group Ltd
Edgecumbe Site
Private Bag 1
Edgecumbe 3160
New Zealand

9 August 2017

Attention: Dave Wright

Dear Dave

Fonterra Te Rapa Section 92 request for further information

With reference to the Request for further Information under Section 92(1) of the RMA for Application No. APP137797 (dated 27 July 2017). Please find below the requested information which relates to the application to discharge contaminants to air from the Te Rapa dairy factory.

The requested information was as follows:

2) With regard to the application for the air discharge, please provide the following additional information:

- a) Input files and text output files for, CALPUFF, CALPOST and BPIP in order to fully assess the appropriateness of the model configuration;*
- b) The meteorological data file (ISC Met file) to assess its appropriateness;*
- c) Highest offsite dispersion modelling predictions for PM10 (24hr and Annual) and NO2 (1hr and 24hr).*

The input and output text files for CALPUFF, CALPOST and BPIP are attached to the accompanying email. It should be noted that the emission sources were modelled separately and then the results scaled and combined using CALSUM. The relevant CALSUM input files for the modelled emission scenarios are as follows:

- CSAVO3.inp – Average measured emissions
- CSCLO6.inp – Proposed consent limit emission rates
- CSMX03.inp – Maximum emission limits

The meteorological input file (i.e. "RkGr1515.isc") used in the assessment has also been attached.

A summary of the requested highest offsite concentrations are provided in Table 1 for the proposed consent limit emission scenario and the average measured emission scenario. The predicted concentrations exclude the contribution from background emission sources.

Table 1. Summary of maximum concentrations ($\mu\text{g}/\text{m}^3$) predicted outside the Fonterra Te Rapa boundary

Pollutant	Averaging Time	'Proposed Consent Limits' emission scenario	'Average measured emissions' emission scenario
PM ₁₀	24 hour	19	9
PM ₁₀	annual	Not applicable	1.5
NO ₂	1 hour	99.9	59.3
NO ₂	24 hour	39.9	12

Yours sincerely

Michele Dyer
Environmental Engineer

on behalf of

Beca Limited

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