

Mr Lapwood has raised the following questions:

B. APPENDIX L - refer Part 4 (pg 19), notation 8 states "The annual guideline for silica....". "To convert concentrations for different averaging periods the following equation is recommended by the MfE *Good Practice Guide for Atmospheric Dispersion Modelling (2004)*(formulae given)".

Q. Will BECA please confirm whether they have sought to independently verify the information as described in the MfE formulae, specifically whether the application of the formulae is appropriately used in APPENDIX L?

C. APPENDIX L - refer 1.2 Limitations.

Will BECA kindly respond in summary as to what information contained within APPENDIX L has been independently verified?

My response to Mr Lapwood's questions are as follows:

#### Question B

The equation used to convert the guideline concentration for respirable crystalline silica from an annual average to a 24 hour average is an empirical formula that is commonly used to convert monitoring results from one averaging period to another and is recommended in the MfE Good Practice Guide for Atmospheric Dispersion Modelling. (GPG Modelling). The GPG Modelling was written by air quality professionals and was peer reviewed by the majority of air quality professionals in New Zealand.

The use of the formula in Appendix L was reviewed two of my colleagues, who are experienced environmental professionals and it has also been reviewed by WRC.

#### Question C

The assessment of effects of the air discharges from Project Martha described in Appendix L is based on the project description information that was provided to Beca by OGNZL and our observations and experience with other similar activities. The information provided to us by OGNZL includes the description of the proposed project, including the nature and scale of the work to be carried out, the locations where the work will take place and the time it will take to complete. Beca was not able to independently verify this information. Consequently, if OGNZL changes the scope of the project Beca would need to review the content of Appendix L.

The analysis of the potential effects of Project Martha included in Appendix L was reviewed by two of my colleagues who are experienced environmental professionals and it has also been reviewed by WRC.

Prue Harwood.