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**ROYDON QUARRY, TEMPLETON**

**MINUTE 14**

**REPLY SUBMISSIONS – FURTHER COMMENTS AND QUESTIONS**

**INTRODUCTION**

- [1] On 5 February 2020 we reconvened the hearing to receive Fulton Hogan's pre-circulated legal submissions in Reply and the Supplementary Evidence of various Fulton Hogan experts who had prepared responses to queries that we raised during the hearing.
- [2] In addition, at the reconvened hearing and in response to directions in our Minute 13, new evidence was tabled by Mr Cudmore<sup>1</sup> addressing potential PM<sub>10</sub> offsets in relation to Regulation 17(3) of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (NESAQ). Additional legal submissions<sup>2</sup> from counsel for Fulton Hogan were also tabled in relation to those NESAQ matters.
- [3] Mr Cudmore's new NESAQ PM<sub>10</sub> offset evidence and Fulton Hogan's legal submissions addressing these NESAQ matters are available on the Environment Canterbury website.
- [4] In response to a query from a submitter relayed to us by the Hearings Administrator we advised that, while it was not normal practice, in this case we would receive written questions from submitters at the reconvened hearing and put those questions to Fulton Hogan should we ourselves desire answers to those questions. The questions that we request Fulton Hogan to respond to in that regard are attached as Appendix 1.
- [5] We also have several further questions for Mrs Wagenaar who understandably was not able to attend the Reply hearing. Those questions are attached as Appendix 2.

**DIRECTIONS AND INVITATIONS**

- [6] We direct the Environment Canterbury section 42 report authors Ms Ryan and Ms Goslin to provide us with written comments on Mr Cudmore's new NESAQ PM<sub>10</sub> offset evidence and the NESAQ legal submissions, and in particular to advise whether or not that material has led them to amend their end of hearing recommendations to us.
- [7] We invite submitters, and in particular those who previously engaged air quality experts Ms Whickham<sup>3</sup> and Mr Kirkby<sup>4</sup>, to provide us with written comments on Mr Cudmore's new NESAQ PM<sub>10</sub> offset evidence.
- [8] With regard to Ms Ryan, Ms Whickham and Mr Kirkby, we would appreciate hearing whether or not they agree or disagree (with reasons) with Mr Cudmore's new NESAQ PM<sub>10</sub> offset evidence.
- [9] The responses to [6] to [8] above are to be provided to the Hearing Administrator on or before Friday 21 February 2020.

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<sup>1</sup> Supplementary Statement of Roger Steven Cudmore on behalf of Fulton Hogan Limited, PM10 Offsetting, 5 February 2020.

<sup>2</sup> Addendum to Synopsis of Closing Legal Submissions for Fulton Hogan Limited, PM<sub>10</sub> Emissions, 5 February 2020.

<sup>3</sup> Canterbury District Health Board.

<sup>4</sup> Templeton Residents' Association.

[10] We direct Fulton Hogan to provide us with their response to any comments provided by the s42A authors and submitters (particularly comments from the air quality experts) on Mr Cudmore's new NESAQ PM<sub>10</sub> offset evidence on or before Friday 28 February 2020.

[11] We also direct Fulton Hogan to provide answers to the questions attached as Appendices 1 and 2 on or before Friday 28 February 2020.



Rob van Voorthuysen

**Independent Commissioner – Chair - on Behalf of the Commissioners**

Dated: 10 February 2020

## **Appendix 1**

### **Submitter Questions**

1. What route will trucks accessing or departing the proposed quarry take if the Dawsons Road railway crossing is unavailable due to planned maintenance or unforeseen events?
2. How much land does FH own in the CCC quarry Zone that has been consented for quarrying but has not yet been quarried?
3. How much other land does FH own outside of the CCC quarry Zone (apart from the Roydon site) that has been consented for quarrying but has not yet been quarried?

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## Appendix 2

### Panel Questions for Mrs Wagenaar

1. Does Mrs Wagenaar have any response to Dr Kelvin Duncan (submitter who appeared at the hearing on Tuesday 3 December 2019) particularly in relation to:
  - (a) use of PM<sub>10</sub> instead of PM<sub>2.5</sub> in studies (in order to include all respirable particles);
  - (b) higher exposure to residents than workers because of 24/7 exposure;
  - (c) use of data from the personal monitor study to extrapolate annual exposure;
  - (d) use of MOTE study data to adjust for an annual dose to do a dosimetric analysis; and
  - (e) need for a longer-term study of RCS (at least a year).
  
2. In paragraph 7.4 of your Supplementary Evidence (dated 29 January 2020) you state “...*concentrations below a specific threshold are eliminated by the body and are not cumulative*”. How is this statement reconciled with the evidence of Dr Seddon-Smith (a submitter who appeared at the hearing on Wednesday 4 December 2019) who submitted that particles smaller than PM<sub>2.5</sub> are deposited in the bronchioles (which are the smallest parts of the lungs with cilia) before the alveoli. He stated these particles cannot be expelled and are therefore cumulative, causing tissue damage and inflammation. He stated this is why there is “no safe dose” and that even small amounts inhaled over time are not considered safe.
  
3. Paragraph 7.5(d) of your Supplementary Statement states “*The WHO (2006) chronic (e.g. long term or annual) air quality guidelines are based on a PM<sub>2.5</sub> concentration that is just below the lower level of the range at which significant effects on survival were observed in several large international studies on cardiovascular and respiratory effects.*”

Can a level just below the range of significant effects be interpreted as a ‘minor effect’ or “acceptable” and is this sufficiently precautionary given the level of uncertainty?