

**Before the Hearing Commissioners appointed by Hawke's Bay Regional
Council & Hastings District Council**

In the matter of the Resource Management Act 1991
(the Act)

And in the matter of an application by The Te Mata
Mushroom Company Limited to
discharge contaminants into air from a
composting and mushroom growing
operation and associated activities at
174-176 Brookvale Road, Havelock
North

And in the matter of an application by The Te Mata
Mushroom Company Limited to
expand an existing intensive rural
production activity at 174-176
Brookvale Road, Hastings

**Supplementary evidence of Tracy Joanne Freeman
concerning amended proposal**

17 September 2019

Sainsbury Logan & Williams
Solicitors
Cnr Tennyson Street & Cathedral Lane
Napier
PO Box 41
Phone: 06 835 3069
Fax: 06 835 6746
Ref: Lara Blomfield
LJB-120563-1-80-V1:KJC

INTRODUCTION

- 1 My name is Tracy Joanne Freeman. My qualifications and experience are set out in my statement of evidence dated 17 July 2019.
- 2 The Te Mata Mushroom Company Limited (**TMM**) has provided an amended proposal to the Hearing Panel which incorporates total enclosure of Phases 1 and 2. This amended proposal is described in the Memorandum of counsel for The Te Mata Mushroom Company Ltd in response to Directions of Commissioner Hearing Panel: No. 3, dated 30 August 2019.
- 3 In the evidence that follows I respond to a request in the Hearing Panel's Direction No.5; specifically:

It would assist the panel for the applicant to provide evidence from its air quality expert, that explains how and why the changes are intended to manage odour discharges and reduce the odour risk to an acceptable risk level. A comparison to what was originally proposed is also requested.
- 4 I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses.

SUMMARY OF CHANGES

- 5 A summary of the changes proposed by TMM, in the context of effect on odour emissions, is as follows:
 - 5.1 Total enclosure of Phase 1 from point of bale break through to the end of the Phase 2.
 - 5.2 No movement of front end loaders in and out of bunker mouths into open air, so no need for canopies and ventilation at bunker mouths.
 - 5.3 No increase in production until enclosure of west end of Phase 1 tunnels is implemented and demonstrated to be effective for odour capture.
 - 5.4 Reduction in fugitive emissions from:

- Exposure of compost to open air during transfer from bale break to Phase 1 tunnels.
- Exposure of compost to open air during transfer from bunker to bunker during Phase 1.
- Escape of odours from the mouths of Phase 1 bunkers when they are open for loading or unloading.
- Exposure of compost to open air during removal from Phase 1 bunkers at the end of Phase 1 and transfer to the Phase 2 hopper.

REDUCTION IN RISK OF ODOUR EMISSIONS

- 6 The changes proposed by TMM have reduced the risk of residual uncontrolled odour emissions having the potential to cause offensive or objectionable odour effects. The reduction in risk occurs in two areas:
- 6.1 Reduction in the uncertainty around the effectiveness and capture efficiency of ventilation capture over the mouths of bunkers – this was a key area of risk.
- 6.2 Whether the extent of fugitive emissions would still cause offensive or objectionable odour effects for sensitised residents near the site.
- 7 With the modified proposal, these two risk areas are avoided as no eaves and ventilation are required around the bunker openings, and the fugitive emissions are largely avoided particularly for the stages of the composting process with the most unpleasant odour characteristics.
- 8 Some potential odour sources will still remain – such as from bale spiking and the subsequent wet bales, biofilters, the recycled water pond, removal of Phase 2 compost from the tunnels, and spent compost handling. However, these odour sources are minor in the context of the site and are not expected to have the potential to cause offensive or objectionable odour effects.

9 In the Joint Expert Witness Statement dated 1 August 2019, the following statement was made:

10. The experts note and agree that in response to Question 2, the question of whether offensive or objectionable odours may still occur can only be contemplated after all four mitigation steps are completed. The experts further agree that after Step 4 it is not possible to state confidently that there is likely to be no offensive or objectionable odour occurring beyond the boundary of the site, with the outcome depending on the effectiveness of the proposed eaves ventilation system.

10 The proposed changes by TMM remove the uncertainty expressed by the expert witnesses as the proposed eaves ventilation system is no longer necessary.

11 In that same Joint Expert Witness Statement and in response to Question 2b from the Hearing Panel “*What further mitigation is necessary to achieve an outcome where there is likely to be no offensive or objectionable odour occurring beyond the boundary of the site?*”, the expert witnesses stated:

11. In response to Question 2b, the experts agree that the only other options that could be implemented would be either:

(a) Total enclosure of the Phase 1 bunker-to-bunker turning process, such as illustrated by Mr Holyoake’s schematic on page 24 of his supplementary evidence, and additional controls for fugitive emissions during the Phase 1 to Phase 2 transfer (rather than total enclosure of that process); or

(b) Moving the Phase 1 composting process to another site.

12 In my opinion, the proposed changes by TMM meet the extent of odour control contemplated by the expert witnesses in paragraph 11(a).

AMENDMENT TO CONCLUSIONS

13 In my statement of supplementary evidence dated 31 July 2019, I stated the following conclusion at paragraph 9:

9. I am unable to state confidently that the residual odours, following the implementation of mitigation, will not on occasions still result in odour nuisance that would be considered to be an offensive or objectionable effect.
- 14 The changes proposed by TMM effectively raise the extent of odour control to best practice for the entire composting process, and I am able to modify my conclusion. In my opinion, with the implementation of the total enclosure concept now proposed by TMM and following the completion of all steps in the proposed mitigation plan, it is unlikely that the residual odours will result in odour nuisance that would be considered an offensive or objectionable effect.
- 15 I hold this conclusion if compost production remains at the current rate of 120 tonnes per week, or if production is increased to 350 tonnes per week. With the style of odour control proposed, the rate of production is immaterial.

Tracy Joanne Freeman

17 September 2019