

Bay of Plenty Regional Council
BO Box 364
Whakatane 3158

Attention: Danielle Petricevich

Dear Danielle

RM19-0556 - Addiction Foods NZ Limited - Review of Response to Section 92(1) Request for Further Information

1 Introduction

Addiction Foods NZ Limited (the Applicant) has applied for a resource consent to authorise discharges of odour to air from its existing dry pet foods manufacturing facility at 240 Jellicoe Street, Te Puke (the Site).

Tonkin & Taylor Limited (T+T) undertook an initial air quality review of the application documents, as set out in our letter dated 29 August 2020. Based on the recommendations of that review, the Bay of Plenty Regional Council (BOPRC) requested further information from the Applicant pursuant to Section 92(1) of the Resource Management Act 1991 (RMA) in order to better understand the proposal, its potential environmental effects and the proposed mitigation measures.¹

The Applicant has provided a response to the Section 92(1) request, which is set out in the following document:

- GHD Limited. "Addiction Foods s92 Response. Response to s92 letter" dated 11 November 2020. Reference 12540841-74209-5.

This letter sets out the findings of our review of the further information provided and provides overall conclusions in relation to air quality effects. This review has been undertaken in accordance with our letter of engagement dated 13 August 2020 and should be read in conjunction with our letter dated 29 August 2020.

2 Review of the response to the s92(1) information request

We consider that the response generally includes sufficient information to understand the effects of the proposal. We consider that the response contains some deficiencies, however that these deficiencies are unlikely to affect the conclusions of the assessment of environmental effects. These potential deficiencies are described below:

¹ Bay of Plenty Regional Council. 3 September 2020. *Resource consent application RM19-0556 – to discharge contaminants to air from a pet food manufacturing facility – Request for further information.*

- **Request 1:** A comparison of a wind rose based on observations at the Te Puke EWS with a wind rose of from the modelled meteorological dataset was not provided in the Applicant's response. The response instead provides a tabulated comparison of the wind speeds observed at the Te Puke EWS and the modelled CALMET dataset. GHD indicates that the Te Puke EWS has a higher proportion of low-wind speed events ($< 3\text{m/s}$) and calm winds ($< 0.5\text{m/s}$) than the modelled CALMET dataset. GHD concludes that this is likely due to sheltering of the Te Puke EWS and that observations at the Te Puke EWS are not considered representative of the wider area.

We generally agree with the conclusion drawn by GHD regarding the sheltering of this site. We also note that the CALMET dataset was provided to the applicant by the BOPRC for the purposes of dispersion modelling, and therefore we assume that the BOPRC is satisfied with its reliability. Given this, we consider the dataset is likely to be appropriate for use in this instance.

We note that data from the Te Puke EWS is used in Section 4.2 of AECOMs air quality assessment and in Section 6 of the draft Odour Management Plan. We recommend that this information is not adopted for the purposes of the Council's evaluation of the assessment.

- **Request 3:** GHD has extracted the Pasquill-Gifford stability classes at all modelled gridded receptor locations for the hour in which the worst-case 99.5th percentile concentration was predicted for the taller stack. GHD concludes that the majority of worst-case conditions occur during periods of neutral to stable conditions. We have reviewed this response and it appears that worst case conditions at locations near the site, where the highest 99.5th percentile odour concentrations are predicted to occur, are unstable conditions. For this reason, we do not agree with the GHD's conclusion that worst-case conditions occur during periods of neutral to stable conditions.

The odour modelling assessment criterion of 2OU/m^3 used in the GHD air quality assessment is for sensitive receiving environments where the worst-case meteorological conditions for dispersion are neutral to stable conditions. For sensitive receiving environments, where the worst-case meteorological conditions for dispersion are unstable to semi-unstable, a lower odour modelling assessment criterion of 1OU/m^3 would apply.

The predicted off-site 99.9th and 99.5th percentile odour concentration for the 'Phase 2' Scenario are 0.7OU/m^3 and 0.5OU/m^3 , respectively. These predicted odour concentrations are less than the lower odour assessment criterion of 1OU/m^3 . For this reason, despite the deficiencies in this response, we consider that the conclusions of the assessment are not likely to change in respect to GHD's assessment of the potential of offensive and objectionable off-site odour.

- **Request 6:** We consider that the draft Odour Management Plan (OMP) has not been drafted in general accordance with the recommendations of the MfE Good Practice Guide for Assessing and Managing Odour for the following reasons:
 - Operating procedures and parameters that need to be controlled to minimise emissions are not described.
 - Contingency procedures are not described (e.g. in the event of failure of key equipment or the event that offensive or objectionable odours occur off site).
 - Procedures for proposed perimeter sensory evaluations is not described.
 - We note that Section 6 of the draft OMP references use of the Te Puke EWS. We consider that the Te Puke EWS should not be used for the purpose of validating complaints for the issues described above. This means an alternative meteorological monitoring station will need to be identified.

3 Conclusions

On balance, we consider that, despite the deficiencies identified in the previous section, the s92 response provides sufficient information to understand the effects of the proposal.

As outlined in our original review, we agree that the proposed installation of a wet scrubber will reduce odour emissions and that installation of a taller stack will increase dispersion of residual odours. We also agree that these measures are generally consistent with the best practicable option to reduce the odour effects of the process emissions. Further information has been provided on the design of the wet scrubber, which provides a greater level of certainty that it will achieve the level of removal efficiency that has been assessed in the application.

The dispersion modelling presented in the AEE for the 'Phase 2' scenario (increase of stack height and implementation of a scrubber system) indicates that the highest 99.5th percentile odour concentration at off-site sensitive receptors is predicted to be 0.5 OU/m³. This is below the lowest odour dispersion modelling assessment criterion of 1 OU/m³ for sensitive receiving environments. Therefore, subject to fugitive odour emissions being minimised through good on-site management and source extraction, we agree with the conclusions of the AECOM air quality assessment that odour effects following the proposed upgrades will be acceptable.

4 Applicability

This report has been prepared for the exclusive use of our client Bay of Plenty Regional Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that this report will be used by Bay of Plenty Regional Council in undertaking its regulatory functions in connection with the resource consent application.

Tonkin & Taylor Ltd

Environmental and Engineering Consultants

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