IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER Proposed Private Plan Change 69 to the Operative District Plan: Lincoln South

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SUMMARY STATEMENT OF EVIDENCE OF CHRISTOPHER JAMES BENDER FOR SELWYN DISTRICT COUNCIL

(ODOUR)

26 November 2021

INTRODUCTION

1 My full name is **Christopher (Chris) James Bender**.

2 I am employed as a Service Leader (Air Quality) at Pattle Delamore Partners (PDP) where I have worked since April 2019. I have a bachelor's degree in chemistry and am a Certified Air Quality Practitioner (CAQP). I have over 20 years of experience specialising in air quality matters, including 13 years as an air quality consultant in New Zealand.

3 I have been engaged by Selwyn District Council (SDC) to peer review the technical odour assessment undertaken by Ms Nieuwenhuijsen and to provide my expert opinion as to the potential for adverse odour effects on PC69 from the Lincoln Wastewater Treatment Pond (LWTP). The LWTP is located immediately to the north of the proposed plan change area.

4 I am familiar with the plan change application by Rolleston Industrial Developments Limited (the Applicant) to rezone approximately 190 hectares of land on Springs Road, Lincoln to enable approximately 2,000 residential sites and a small commercial zone. In preparing this statement I have read and considered the following documents:

a) The application documents including the Odour Assessment provided as Appendix H to the application;

b) The s 42A report and its appendices**;**

c) The evidence of Cathy Nieuwenhuijsen and Donovan Van Kekem (Odour) on behalf of the Applicant;

d) Additional information provided by SDC on 21 November 2021, which details volumes of untreated wastewater and stormwater discharged to the wastewater overflow pond.

5 It is my understanding that the LWTP previously operated as a sewage treatment plant for Lincoln, and that Rule C4.9.32 of the operative Selwyn District Plan requires a 150 metre setback from the boundary of the Lincoln Sewage Treatment Plant (the Plant) to any dwelling to prevent reverse sensitivity effects on the Plant from future developments. Since 2013, Lincoln wastewater has been pumped to the Pines WWTP for treatment. However, I am advised that the LWTP has continued to be used to accommodate the need

for storage of untreated wastewater during high rainfall events and failure of wastewater infrastructure.

6 SDC on 21 November 2021 provided information regarding actual usage rates of the pond for wastewater overflow storage. This information indicates that the LWTP is used to store untreated wastewater on a more frequent basis than had been assumed in the Applicant's original assessments. The SDC advised that there were 11 events where the pond was used to divert wastewater from the Pines from March 2020 to October 2021.

7 Ms Nieuwenhuijsen's evidence (22nd November) provided an assessment of the logged usage events of the Lincoln overflow pond recently provided by SDC. Ms Nieuwenhuijsen's assessment considered the potential for the pond to become anaerobic due to wastewater addition and storage in the pond. Ms Nieuwenhuijsen concluded that the LWTP should be able to remain in an aerobic state and that adverse odour effects can generally be avoided beyond the site boundary. Ms Nieuwenhuijsen noted, however, that there is potential for odour at the point of discharge before the wastewater becomes mixed in the pond, and that consequently a small buffer distance may be necessary to protect against adverse odour effects.

8 I agree that provided the LWTP is maintained in an aerobic state, the effects of odour generated from the site will have an acceptable level of effects offsite, and that this should be the case for the most discharges of wastewater to the LWTP. I also agree that there is potential for odour to be released from the deposit of fresh wastewater to the pond, and that a setback should be applied to avoid reverse sensitivity effects.

9 I note that the applicant has agreed to a setback of 100 metres as measured from the inside bank of the LWTP, which is a reduction from the 150 metre setback that was established for the pond when it was a fully functional wastewater treatment plant. Given the SDC's current use of the LWTP, which is intermittent and represents significant reductions in wastewater volumes, I agree that a reduction in the original setback distance is reasonable. I consider that a 100 metre setback will be sufficient to avoid nuisance levels of odour on future land uses and thereby avoid reverse sensitivity effects on the LWTP.

Christopher James Bender
26 November 2021