TABLED AT HEARING

MCD Evidence Summary V2

I have visited the Canterbury Landscape Supplies Limited (CLS) site at Diversion Road, Swannanoa on numerous occasions since early July 2017. Initially these site visits were in order to complete an assessment of effects for odour and subsequently the surveys have been as part of a monitoring regime as requested by CLS.

During my onsite visits I have observed the strength and character of odours from the various processes onsite including mushroom compost storage and loading, paunch grass and scoured wool storage, compost mixing and screening, static compost processing piles and bark and woodchip screening. In addition I observed the compost piles in the north-east corner prior to their removal.

Overall the odour from the compost in the north east corner was generally observed as sour, silage, piggy and compost with a strength of up to 'weak' and a tone down to -2 (which is moderately unpleasant) (out of -4 'extremely unpleasant'). The material in the north east corner was removed as per the mediation agreement in November and December 2017 and the odour from that area of the site has now gone since my first visits to the site.

Since August 2017 active composting has taken place in the south of the site. The undisturbed compost piles are generally not odorous except when the piles are being turned, or are freshly turned. During turning I have observed a 'distinct' fruity, grapey, sour, woody or silage odour from the piles.

Overall since the removal of the north east piles the site has been recorded as having isolated pockets of odour that generally are not strong or offensive.

CLS has adopted practices to minimise odour generation which include minimising the turning of compost during south, southwest and westerly winds. However it should be noted that to maintain aerobic conditions within the compost piles, turning during these wind conditions may be required if unfavourable wind conditions have persisted for more than a week. The Compost Management Plan suggests that if turning is required during unfavourable wind conditions that the turning takes place between 8am and 4pm Monday to Friday and not on Saturday to minimise the potential odour nuisance to nearby sensitive receivers.

Although it is a permitted activity, mushroom compost is no longer stored on the site as it was identified as a potential source of odour. The removal of mushroom compost from the site reduces the overall cumulative odour potential from the site and therefore reduces the potential for nuisance odour effects beyond the boundary.

A range of day to day responsive management systems have been employed onsite to minimise odour effects beyond the boundary including installing windsock on site along with an onsite meteorological station which continuously records data and meteorological applications which are installed on the operators phones to help to manage current and forward workload according to current and predicted meteorological conditions.

Offsite odour monitoring was undertaken on numerous occasions from July 2017 until February 2018 to observe the potential effects of odour on the nearby sensitive receivers under prevailing wind conditions and to monitor the odour generated on site under different operating conditions. As the focus of my evidence is whether CLS can operate without causing offensive or objectionable odours on the nearby receptors, the offsite monitoring summarised in my evidence is focused on



observations taken after the removal of compost from the north east corner of the site and after the modifications to the operating practices.

Observations by Beca staff from 12 offsite odour surveys carried out between 24 October 2017 to 26 February 2018 described the character of odours observed as grass, soil, compost, manure, silage, burnt, earth and dirt with a maximum strength of 'weak', or as having no odour at all for 8 of the surveys. No sulfurous or ammonia odours were observed during the offsite odour surveys. The surveys were undertaken under various operating conditions including compost turning, screening and loading, mushroom compost turning or moving, and outside of operating hours when no activity was happening onsite. The odours described are considered to be within what may be characteristic of odours in a rural setting.

Two offsite observations were completed after written evidence was submitted. On the 22nd February 2018 an observation was made approximately 60m down Diversion Road (from the intersection with South Eyre Road) at 2:20pm under a gentle to moderate south-southwest breeze. No odour was observed. The site was visited after the offsite investigation and there was bark screening being carried out.

On the 26th February 2018 and offsite investigation was carried out at the layby area to the west of the bridge on South Eyre Road at 6:24pm under a moderate southerly breeze. No odour was detected under these conditions and as it was out of hours an onsite investigation was not completed.

From 25 May 2017 to 25 January 2018, a total of 194 complaints were received by ECan which were classified into 108 pollution events. In my evidence I have analysed the complaints in three distinct time periods: 'pre-removal' which is prior to 1 November 2017; 'removal' which is 1 November 2017 to 9 December 2017, and; 'post removal', which is from 10 December 2017 to 25 January 2018.

The frequency of events reported decreased from pre-removal to -post removal. No odour events have been substantiated by ECan officer's since the removal of compost from the north east corner, that is 'in the post-removal' period and after the establishment of the composting area in the south of the site and new operating practices were employed.

In the post-removal period, 4 of the 14 events have been investigated by the ECan officers. The investigations show there is a difference in the intensity and character of effects that are described by the complainant compared to the effects reported by ECan. Two of the events were verified by ECan but found to be compliant, which in my understanding means there was an odour found offsite but it was deemed to be not objectionable or offensive. One of the events was found to have no environmental impact, which I understand to mean there was no odour detected offsite and one event, ECan was not able to identify the source of the odour and it was not attributed to CLS. Generally the investigating ECan officer classified the events as much less severe than described by the complainant.

CLS have employed a number of changes to the operations on the site, including locations of the compost piles and the planned compacted aggregate and fabric filter pad for the active composting phase and have drafted a compost management plan to manage the odour and dust emissions from the site. In my opinion, these changes will reduce the risk of offensive or objectionable odours from being detected outside of the site boundary in the future.

Providing the compost is produced using guidance from NZS4454:2005 and other good practice guidelines, with the raw materials as stated in my evidence, the piles are located above standing water on the site, no other potentially odorous materials are stored onsite, the piles are able to be turned with adequate frequency and the proposed consent conditions are complied with, then it is



my opinion that the site will be able to be operated without causing offensive or objectionable odours outside the boundary.



