

TABLED AT HEARING

Application: Canterbury Landscape
Supplies
Date: 7/3/2018

**BEFORE ENVIRONMENT CANTERBURY AND
(THE WAIMAKARIRI DISTRICT COUNCIL)**

In the matter of:

The Resource Management Act 1991

And

In the matter of:

Resource consent applications by Canterbury Landscape Supplies
Limited for the discharges of contaminants to the air and
discharge of contaminants to potable water under consent
applications CRC 175344 and CRC 175345.

STATEMENT OF OPPOSITION BY RAY & CHERYL BRIGGS
831 South Eyre Road, RD2, Kaiapoi

FEBRUARY 2018

TO THE COURT

- 1 We have lived at this address since 2003. Before this, we had lived at the next door address at 821 South Eyre Road since 1986. Having lived there for so long we know the area well.
- 2 The CLS site is in a direct line approximately 900 metres from our house. We are one of the closest dwelling to the site. We don't have a clear line of sight to the area where CLS operate because it's purposely hidden in a large acreage of mature forestry trees on that property. There are also trees on the boundary of our property which obstructs our view of the property where CLS operate but not the putrid and offensive smells and associated dust and vermin.
- 3 This submission is provided to set our opposition to the consent applications sought by Canterbury Landscape Supplies Ltd (CLS) dated 14 August 2017.
- 4 We strongly oppose the proposed consent applications sought by CLS because of the following reasons.
 - (a) Offensive smells/odours/dust - Apart from the ongoing offensive and objectionable smells and odours, there is also uncontrolled clouds of dust permeating the air as shown in the photographs from different locations. One lot is seen exiting the north west corner (9th December 2017 dust totally obscuring power pylon and same location on 4th March 2018 showing the power pylon when there was no wind on this day). These photos clearly show the dust travels well beyond the boundary of the CLS site and forestry block and into neighbouring properties on South Eyre Road, clearly contradicting the evidence of 'Prudence Mary Harwood page 17, (h). Another anomaly in Ms Harwood's evidence (page 8, (i)) stating that odours 'causing offensive or objectionable effects beyond the boundary of the site is low' which is contradictory to what the neighbourhood has been smelling. The meteorological conditions in this area (Canterbury Plains) is that the majority of the time the wind drift is from the southerly quarter first thing in the morning until the plains heat up and as we all know heat rises and in comes the prevailing

easterly wind. The majority of the odour complaints in our odour diary have been mainly in the morning.

The other location was the south boundary(5th November 2017 showing clouds of dust escaping the site - also video evidence can be shown on request). I also have concerns about trucks on site not covered and contents steaming as per the attached photographs taken on 18th September 2017.

I also have concerns about the accuracy of the evidence in the 'Second Affidavit of Michele Claire Dyer dated 2nd October 2017, with the locations and wind directions she reported. At no stage was she downwind from the CLS site. Her comments - eg her point number 10 - seem to be contradicting. (Attachments) It is common knowledge that the fertile soils in the Heathcote/Avoca Valleys arrived courtesy via the north west winds of the Canterbury Plains and the approximate distance travelled would be at least 25 kilometers.

- (b) Risk to the water supply - The offensive smells is not the only issue of concern, the leaching effects of the waste being dumped there is a major concern for our waterways. Having visited the CLS site many times now at the invitation of Phil Wylie, I was concerned about the paunch grass and other waste material dumped at the site on a supposedly water tight pad, but there is no bunding to contain any moisture from the paunch grass and there are cracks in the concrete slab enabling the runoff to leach into the soil and potentially our drinking water.
- (c) Vermin/flyes/Seagulls - With the dumping of waste and organic matter to this site will increase the number of rats/mice and flies. There has also been a large influx of seagulls and we are nowhere near the sea. I noticed animal hide lying with the paunch grass and when I queried Mr Wylie about it he advised me that it came with the paunch grass, which raises the question what else in the paunch grass delivery that is attracting seagulls and cats I saw cats on all of my three visits). I walked on a pile of uncovered pile of paunch grass disturbing thousands of flies. 'Paunch contents, if not stored appropriately, may contaminate waterways or groundwater and potentially cause public nuisance, particularly with respect to odour, and attracting vermin' (Ref: epa.tas.gov.au; page 6)
- (d) Fire hazard/risk - With 'composting' being a potential combustible operation, I am concerned about the fire risk to my property and surrounding properties if

fire was to take hold. We have had evidence recently with the Port Hills fire last year of how quick fire can spread in dry conditions and being unable to be contained and have major concerns with this site having limited water supply to combat any fire.

- (e) Notification of affected parties: In Barry Loe's Affidavit, page 4 (19) after contact details were 'provided by Environment Canterbury on 18th April 2017.... written approvals were sought'. Only a selected few received this notification and although we received a letter, we absolutely had no consultation process from CLS and our immediate neighbours were not consulted in any way.

NZ is under pressure to preserve its clean green image. Many waterways and lakes are now polluted. At Waitangi weekend, the government's agenda mainly covered water quality in New Zealand, yet down here we have a company applying for a consent to release contaminants into the air (we breathe), the land on which we walk and the water that we drink. Prevention is better than cure.

DATE 2 March 2018

Name: Ray & Cheryl Briggs

Residential Address: 779 & 831 South Eyre Road, Eyreton, RD2, Kaiapoi, 7692

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Email: cheryl@longfield.co.nz

BeIGAS - Attachments

9/12/17

8-19 am



4/3/18



- (c) The microorganisms within any bioaerosols generated during composting are also present in other habitats where decomposition of organic matter takes place, such as improperly stored hay, manure, straw and grains. These habitats are likely to be prevalent in a rural area such as the area surrounding CLS where materials such as silage, hay, manure and animal feed are found.
- (d) Occupational health studies of workers at composting sites suggest that there is an elevated risk of respiratory illnesses occurring where workers are exposed to high levels of bioaerosols.
- (e) Limited studies of the exposure of residents to bioaerosols living in the vicinity of composting plants found higher than background levels of microorganisms at distances of between 150m to 1400m from a composting operation. Most studies, however, found that the concentration of bioaerosols decrease with distance from the source, due to mixing and dispersion, and concentrations fall to near background levels within 250m of composting sites.
- (f) Some health studies of people living in the vicinity of composting plants found no relationship between respiratory symptoms and place of residence and others found that residents living within 150-200m of a composting plant were affected. Symptoms included irritative respiratory complaints similar to mucous membrane irritation and excessive tiredness.
- (g) Most of the microorganisms present in bioaerosols (with the exception of spores which have a protective layer) are rapidly inactivated in air due to desiccation, warm temperatures or ultra violet radiation, which means that, although the microorganisms may be present in the air, they are not able to cause an infection.
- (h) The discharge of dust from the CLS site is minimised by the use of water to keep the compost piles damp. The nearest dwellings are located beyond the distance which dust is expected to travel from the site, therefore the chance that people living in the vicinity are exposed to dust and bioaerosols from the site is minimal.
- (i) Overall, it is considered that the risk of of bioaerosols in the discharges to air from the site will result in adverse health effects on residents, living in the vicinity of the site, is negligible. In this respect I am in full agreement with the opinion expressed by Mr Cudmore in his report prepared for ECan.

Standard and the guidance provided in the GPG Dust and GPG Odour;

- (h) Providing CLS operates the composting plant in accordance with the methods described in the Odour Management Plan prepared for the site, odours generated by the activity can be adequately avoided, remedied and mitigated;

- (i) The risk of odours causing offensive or objectionable effects beyond the boundary of the site is low due to the large separation distances, the low frequency of meteorological conditions which will blow odours towards the residences and the rural character of the receiving environment; and

- (j) The potential effects of odours from the site are expected to be less than minor.

DESCRIPTION OF SITE AND ENVIRONMENT

- 27 As the environmental setting of the site is described in detail in the application and supporting documents, I will only briefly highlight the main features, which are of relevance to the assessment of odour effects.

Site Layout

- 28 Since the application for resource consent was lodged, the layout of the site has been changed. The active composting piles are now located in the southeastern corner and mushroom compost is no longer stored on site. In the northeastern corner of the site, where active compost piles were previously located, CLS now stores bark in this area. Figure 1 in **Attachment 2** shows the present layout of the site.

Location and Topography

- (a) The site is located in a rural area on a 9.8 hectare (ha) site within a larger 278 ha property;
- (b) The site and surrounding land is generally flat;
- (c) The site is surrounded to the west, north and east by a plantation of pine trees. The land to the south is in pasture and is separated from the site by a row of mature trees along Pashbys Road, which is a paper road;
- (d) The predominant land use in the area is pastoral farming;
- (e) The closest dwelling to the CLS site is 820m to the northwest with the next closest houses being 1000m to the west and 1000m to the

From Stop bank

5/11/17

2-12 pm





From Waimak Shapbank
5/11/2017
2:12pm

From Waialeale Stopover

5/11/2017

2-12 pm



CLS Site

18/9/2017

10-14 gm



I, Michele Claire Dyer, Environmental Engineer at Beca of Christchurch, affirm

1. I am employed by Beca Limited ("Beca") as an Environmental Engineer. I have held this position since September 2014.
2. I hold the qualifications and experience set out in my first affidavit dated 15 September 2017
3. I confirm that I have read the Environment Court's Code of Conduct for Expert Witnesses and agree to comply with its terms.
4. I have been asked by Canterbury Landscape Supplies Limited (CLS) to comment on the Notices of Opposition submitted by the following: Darryl Brown; Robert Famularo; Graham and Rosina Rouse; Alastair Leslie Millar; Simon Beswick; Gregory Greenwood; Ray and Cheryl Briggs; Wayne and Jill Randle; Michelle and Daniel Power, and Sally Beale and Brett Stackhouse.
5. The Notices of Opposition refer to unpleasant odours associated with the CLS composting operation. These odours are described in terms such as "obnoxious" and "horrific", with the most common characteristic of the odour being assessed as rotten egg or sulphurous.
6. I have undertaken 5 odour surveys at the CLS site and in the vicinity.
7. When carrying out these odour surveys, I have generally followed the good practice for investigating odour complaints as described in the Ministry for the Environment Good Practice Guide for Assessing and Managing Odour (MfE GPG 2016), Section 4 and Appendix 3 and in the Proposed Air Canterbury Regional Plan (pCARP) Report and Recommendations of Hearing Commissioners - Appendix B (Sep 2016), Schedule 2.
8. My first three assessments are described in the Beca Report: *Assessment of Environmental Effects of Discharges to Air*, which is annexed as "BAL2" the affidavit of Barry Anthony Loe, dated 29 August 2017.
9. I have since undertaken two further odour assessments on 19th and 27th of September 2017 at various times and locations.
10. Beginning at 9:43am on 19 September 2017, I assessed and recorded odour at the north end of Harris Road, on the boundary of 677 South Eyre Road approximately 2.4km north-east of the CLS site, every 10 seconds for 5 minutes. The wind was southerly with a strength of 5 on the Beaufort Scale. I did not detect any odour during the assessment period.
11. Beginning at 9:57am on 19 September 2017 I assessed and recorded odour at the corner of No.10 Road and South Eyre Road approximately 1100 metres north-east from the CLS site every 10 seconds for 10 minutes and detected odours of intensity 0 to 1 (no odour to very weak) with a character of soil/pine/grass. The wind direction was varying, blowing from southeast to west with a strength of 3 on the Beaufort Scale.
12. From these assessments, I did not deem the odour to be objectionable or offensive at either of these two locations for any duration or frequency.
13. Beginning at 10:16am on 19 September 2017 I assessed and recorded the odour at the driveway of 971 South Eyre Road, approximately 1100 metres northwest of the CLS site, every 10 seconds for 10 minutes. I detected odours of intensity 0 to 3 (no odour to distinct) and with a character of pine. The wind was blowing from the south to southwest with a strength of 4 on the Beaufort Scale.
14. At 971 South Eyre Road I recorded four occasions, where one occasion is the beginning of a 10 second window, when a 'sour' odour with a strength of 1 (very weak) and a hedonic tone of -1 was detected.

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(12)

Module Clare Dye

15. I did not deem the odour to be objectionable at this location for any duration or frequency.
16. Beginning at 11:23am on 19 September 2017, I assessed and recorded the odour at the end of Diversion Road near the South Eyre Road intersection, approximately 1100 metres north of the CLS site, every 10 seconds for 10 minutes. I detected odours of intensity 0 (10% of the assessment points), 1 (37%), 2 (42%) and 3 (12%) (no odour to distinct), a hedonic tone of -1 (78% of the assessment points) to -2 (12%) and generally an odour character of compost. The wind was blowing from the southwest with a strength of 4 on the Beaufort Scale.
17. Of the seven assessment points that were distinct, 6 were of the hedonic tone -2 and one was of the hedonic tone -1. The samples of strength 3 occurred intermittently throughout the sample, with a maximum of 3 samples in a row of strength 3.
18. I considered that the odour could be objectionable if it were to become continuous and if it were experienced at a sensitive receiver. However, it should be noted that there are no sensitive receivers at this location.
19. After carrying out the odour surveys, I visited the CLS site. Screening of mature compost was being undertaken. I noticed that some compost piles on the northeast corner were odorous, with a character of compost or silage, however the amount of odorous compost and the strength of the odour from these piles had reduced in comparison to my previous inspections discussed in the Beca Report.
20. CLS staff informed me that some of the piles that were previously at the northeast of the site had been moved to the southwest corner. At the new location these compost piles were covered in bark and chip and did not have a noticeable odour.
21. I again undertook odour assessments on 27 September 2017.
22. Beginning at 09:42am on 27 September 2017 I assessed and recorded the odour at a location approximately 200m west of 821 South Eyre Road and approximately 1500 metres north east of the CLS site, every 10 seconds for 10 minutes. I detected odours of intensity 0 for 75% of the assessment points, and intensities of 1 to 2 (very weak to weak) for the remaining 25% of assessment points.
23. The odours had a hedonic tone of -1 and were of a character similar to soil, silage, compost or manure. The wind was blowing from the southwest with a strength of 2 on the Beaufort Scale during the assessment.
24. I did not consider the odour to be objectionable at this location for any duration or frequency.
25. Beginning at 9:59am on 27 September 2017 I assessed and recorded odour at the corner of No.10 Road and South Eyre Road approximately 1100 metres north-east of the CLS site, every 10 seconds, for ten minutes. I detected odours of intensity 0 (no odour), with one assessment point with intensity 1 (very weak) with a character of soil. The wind was blowing from the southwest to west with a strength of 2 to 3 on the Beaufort Scale during the assessment period.
26. I did not consider the odour to be objectionable at this location for any duration or frequency.
27. Beginning at 10:14am on 27 September 2017 I assessed and recorded odour at the end of Diversion Road near the South Eyre Road intersection approximately 1100 metres north of the CLS site, every 10 seconds for ten minutes. I detected odour of intensity 0 (no odour) for 80% of assessment points, and 20% of points with an intensity of 1 to 2 (very weak to weak). The odour had a character of compost or silage and hedonic tone of -1. The wind was blowing from the southwest with a strength of 0 to 2 on the Beaufort Scale.

epa.tas.gov.au



contamination from the slaughtering process. When spread on pasture, paunch contents may be ingested by grazing animals unless appropriate management occurs.

4.2.2 Risk Management

Paunch contents should be adequately segregated from the rest of the carcass at the abattoir, such that no mixing occurs. In addition, this content should be treated to reduce the pathogen load either by composting to the current version of the Australian Standard 4454 Composts, soil conditioners and mulches or treated with lime to a pH of 12, for instance by addition of hydrated lime. No grazing animals should be able to access stored paunch contents. Grazing of pastures should not occur before at least minimum 42 days and until spread paunch contents have been absorbed into the soil and are no longer visible on the soil surface. Turning in and establishing a crop on the area is an acceptable alternative use to grazing.

4.3 Transport

4.3.1 Risks

Transporting paunch contents has potential to cause odour nuisance and nutrient contamination via spills to roads, property and waterways. Spillage may also present a risk to human and animal health.

4.3.2 Risk Management

Transport routes, times and vehicle type must be planned to avoid public nuisance, particularly with respect to odour. In Tasmania, only businesses that are registered to handle Controlled Waste category K100, may transport paunch. Registration as a Controlled Waste Handler for K100 is subject to compliance with conditions for preventing and managing odour and spill risks during transit and loading/unloading. Spills kits must be carried by these vehicles. Procedures must be followed, and monitoring and reporting systems must be implemented to ensure that the material is disposed of correctly.

4.4 Storage

4.4.1 Risks

Paunch contents, if not stored appropriately, may contaminate waterways or groundwater and potentially cause public nuisance, particularly with respect to odour, and attracting vermin.

4.4.2 Risk Management

The material should preferably be stored in a bunker with a sealed floor in which any leachate or rainwater is collected and directed to appropriate and approved wastewater treatment facilities. If stored on the ground, a compacted earthen or concrete pad should be used to prevent leaching into the ground.

Under most circumstances, a cover is not normally required. However, if odour or vermin become an issue, the material may be covered with a layer of inert material such as bark or woodchips.

4.5 Composting

4.5.1 Risks

Composting is a means of reducing pathogens and environmental risks associated with paunch contents. However, if not managed well, composting itself may result in odour nuisance, animal and human health risks, leachate entering the natural environment, and increased vermin.

Properly composted paunch contents which meets Australian Standards AS 4454-2012 Compost, soil conditioners and mulches is not classified as a Controlled Waste and therefore the land spreading criteria in these guidelines do not apply.

Evidence: Barry Loe ~~FB~~

14. The Application includes a detailed assessment of potential discharges associated with the proposal, together with associated analysis against the relevant policies of the Regional Policy Statement and regional plans. The Application also includes a Management Plan for the composting component of the activities on the site.

15. In undertaking my assessment of the actual and potential environmental effects of the operation, I took into account prevailing wind speed and direction, the FIDOL (Frequency, Intensity, Duration, Offensiveness and Location) factors and the best practice approach to be adopted in managing the operation. I concluded that offensive or objectionable effects from odours beyond the boundary were not expected.

Wrong
16. In respect of discharges to land and water, I concluded that the management of the composting operation to achieve optimum carbon to nitrogen ratios in the composting material would, as described in international literature, minimise the potential for contaminants that may affect soil or water quality. On that basis, I concluded that any discharge of contaminants to land or water would result in less than minor adverse effects.

17. Annexed hereto and marked "BAL1" is a true and correct copy of the Application lodged with Environment Canterbury on 05 April 2017.

Progress With Resource Consent Application Since Lodgement

18. As referred to above, the Application was lodged on 5th April 2017, and was accepted for processing by Environment Canterbury on 11th April 2017.

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19. Environment Canterbury subsequently advised CLS that potentially affected parties would be those within 1500 metres of the Site. A list of these parties' names and contact details was provided by Environment Canterbury on 18th April 2017. As a result, CLS requested the Application be placed on hold while the Company contacted the various land owners and occupiers about the Application. At the same time written approvals were sought, and subsequently obtained from one of the identified parties. This consultation process with neighbouring landowners took until 15th June 2017.

20. On 28th June 2017, Environment Canterbury sent me a request for further information (RFI) under s 92 of the RMA and advised that the Application would be put on hold again. The RFI was extensive in terms of the information sought, including detailed assessment of effects on air quality, operational management of leachate generation and rainfall on the site, as well as an assessment of potential effects on groundwater and surface water quality from any contaminants that may enter groundwater. The

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