

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

Applications to the Canterbury Regional Council for consents CRC163501 and CRC163505 in relation to a composting operation at 379 Parish Road, Oxford.

APPLICANT

T W Transport Limited

CONSENT AUTHORITY

CANTERBURY REGIONAL COUNCIL

DECISION OF HEARING COMMISSIONER

John G Iseli

30th August 2016

Heard on the 25th of July at Oxford.

Decision:

Both consents sought from the Canterbury Regional Council are granted, subject to conditions.

1. APPOINTMENT AND SITE VISIT

1.1 I have been appointed and empowered by the Canterbury Regional Council (CRC) to determine two consent applications by TW Transport Limited. These consent applications are:

- CRC163501 – To use land for the stockpiling of compost and to discharge contaminants to land from the compost material.
- CRC163505 - To discharge contaminants including odour to air from the composting operation.

1.2 I visited the site of the existing composting operation and the surrounding area after the conclusion of the hearing, during the afternoon of July 25th 2016. At this time I observed the location of dwellings owned by the submitters and visited the Beets, Hicks and Bell properties.

1.3 Both prior to and during the hearing I have had the benefit of comprehensive application documentation and evidence, and detailed assessment by the council reporting officer. These documents contain a significant amount of information and are publicly available from the records of the relevant council. I therefore do not attempt to set out all the background information and evidence in this decision; rather I focus on the central facts and key evidence relating to the aspects of the proposal in contention.

2. THE PROPOSAL AND BACKGROUND

2.1 Composting activities have been undertaken at 379 Parish Road (the site) since August 2011.

2.2 The original discharge to air consent for this site was granted to Cribb Farming Limited on 13 June 2012 (CRC122434). After the sale of this business, resource consent was transferred to TW Transport Ltd on 15 April 2013 (CRC135706).

2.3 Resource consent CRC135706 is due to expire on 11 June 2047.

- 2.4 There was a major fire on the site beginning in January 2015 that continued for a significant period of time. This event caused numerous complaints and the risk of fire is an ongoing concern for submitters.
- 2.5 The applicant and the Environment Canterbury reporting officer (Ms Chalmers) agree that the proposal does not require resource consent from the territorial authority, Waimakariri District Council.
- 2.6 There have been a significant number of complaints relating to the odour originating from the existing compost operation. The complaint history has been described in detail by Ms Chalmers in her s42A report and in additional documentation provided at the hearing.
- 2.7 Numerous odour complaints were received during 2012 to 2015. Thirty-eight complaints in 2015 related to the compost fire. Ms Chalmers reports that seven odour complaints potentially relating to the composting facility have been received by the CRC since the fire was extinguished in March 2015. Ms Chalmers stated that these odour complaints were unsubstantiated and could not conclusively be attributed to the compost facility. She noted that some complaints may have related to an offal pit serving the dairy farm at 379 Parish Road.
- 2.8 A complaint was received by the CRC in February 2016 in relation to dust and in March 2016 in relation to litter from the composting operation.
- 2.9 The applicant has been issued with three abatement notices during 2013 to 2015 due to odour from the composting operation, as well as infringement notices for breaching abatement notices and conditions of the existing consent.
- 2.10 Mr Barry Loe of Loe Pearce & Associates Limited prepared the applications on behalf of TWT and provided evidence at the hearing.

3. NOTIFICATION AND SUBMISSIONS

- 3.1 The application was limited notified on 18 March 2016 to six potentially affected parties owning property within 500m of the composting operation. The notice contained the following wording:

Applicant: TW Transport Limited Address for service: Loe Pearce & Associates, 100 Weston Road, Christchurch 8052 Attention: Barry Loe
<p>CRC163501 - Land use consent for the stockpiling of garden green waste compost, and a discharge permit for any associated discharges of contaminants onto or into land in circumstances which may result in that contaminant entering water; and</p> <p>CRC163505 - Discharge permit for the discharge of contaminants (odour) into air from the composting of garden green waste.</p> <p>The applications relate to changes to an existing compost operation at 379 Parish Road, Oxford (Topo50 BW22:2706-9948). The existing activity is authorised by resource consent CRC135706.</p> <p>The material being composted will be garden green waste and gypsum powder only. A maximum of 30,000 tonnes of green waste may be composted each year, with a maximum of 40,000 tonnes of pre-processed green waste, actively composting green waste and cured compost on the site at any one time. Compost will be stored at least:</p> <ul style="list-style-type: none">• 10 metres from the northwest and southwest boundaries of the property;• 390 metres from the southeast boundary; and• 650 metres from the northeast boundary of the property. <p>Property owners and occupiers within 500 metres of the composting site have been considered potentially affected by the proposal and are limited notified in accordance with s95B RMA.</p> <p>An expiry date of 11 June 2037 is sought.</p>

- 3.2 Limited notification resulted in four submissions being received, from A & C Hicks, G & T Lovelock, B Beets & I Beets-Huchshorn, and R & L Bell. The matters of concern raised in submissions have been detailed in the Section 42A report. In summary the expressed concerns relevant (directly and indirectly) to these applications include:

- Odour from composting;
- Dust;
- Fire risk and associated potential effects;

- Windblown litter;
- Leachate and effects of nutrients discharged;
- Adequacy of water supply;
- Monitoring and composting operational procedures.

3.3 I have read all the written submissions and taken these into account in reaching my decision. Mr Beets and Mr & Mrs Hicks provided verbal submissions at the hearing.

4. RELEVANT STATUTORY PROVISIONS

4.1 Section 104 of Resource Management Act (the Act) provides the statutory requirements for the assessment of the application and sets out those matters that I must have regard to when considering the applications. Subject to Part 2 of the Act, the relevant matters for the assessment of this application include:

- *Any actual or potential effects on the environment of allowing the activity;*
- *The requirements of National Policy Statements and National Environmental Standards;*
- *The relevant provisions of the Regional Policy Statement and the Regional Plans; and*
- *Any other matter that the Council considers relevant and reasonably necessary to determine the applications.*

4.2 Section 104(2) allows the Council when forming an opinion in relation to any actual or potential effects on the environment of allowing the activity to disregard any adverse effects of the activity on the environment if the relevant District or Regional Plan permits an activity with those effects.

The Proposed Canterbury Air Regional Plan (pCARP)

- 4.3 Ms Chalmers' report states that the rules relevant to the discharge of dust from the proposal are Rules 7.37 and 7.38 of the pCARP. The applicant considers that the discharge of dust is classified as a permitted activity under Rules 7.37 and 7.38 of the pCARP. There is some uncertainty associated with that analysis because there is potential for the short term rate of compost handling to exceed 20 tonnes per hour, requiring a dust management plan to be prepared according to Condition 4 of Rule 7.37. Further, under Condition 3 of Rule 7.38 the outdoor storage of more than 200 tonnes of bulk materials would require a dust management plan. Therefore, in the absence of a dust management plan prepared in accordance with Schedule 2 of the pCARP, I determine that the discharge of dust would be classified as a discretionary activity under Rule 7.59 of the pCARP. This determination is not pivotal to this case because, as discussed later, I find that in any case the discharge of contaminants to air (including odour, dust and litter) requires consent under the NRRP.
- 4.4 I accept the analysis of Ms Chalmers that the discharge of odour beyond the property boundary is classified as a restricted discretionary activity under Rule 7.28 of the pCARP as the proposal cannot meet the relevant permitted activity rule, Rule 7.53.

The Natural Resources Regional Plan (NRRP)

- 4.5 The applicant has assessed the discharge of contaminants (primarily dust) into air from the handling, processing, conveying and storage of a bulk materials as a permitted activity under Rule AQL42B of the NRRP as the proposal is assessed to meet all of the conditions of the rule.
- 4.6 However, Ms Chalmers noted that the discharge of contaminants into air from the storage, transfer, treatment or disposal of solid waste cannot meet Rule AQL63 as the facility was not established prior to 1 June 2002. Consequently, the discharge of contaminants to air is classified as a discretionary activity under Rule AQL69 of the NRRP. The contaminants discharged to air in this case include odour, dust and litter.

Land and Water Regional Plan (LWRP)

- 4.7 Both Mr Loe and Ms Chalmers accept that the discharge to land from composting where a contaminant may enter water is classified as a discretionary activity under Rule 5.6 of the LWRP.
- 4.8 The use of land for stockpiling compost cannot meet the conditions of the relevant permitted activity rules in the LWRP (Rules 5.38 - 5.40) as the activity will be within 50 metres of the property boundary and the applicant has not prepared a Farm Environment Plan.
- 4.9 Ms Chalmers noted that Rule 5.6 of the LWRP does not cover the use of land for composting as it does not include activities controlled by section 9 of the Act. The activity is therefore classified as innominate under section 87B of the Act. Consequently, the use of land for composting is classified as a discretionary activity.
- 4.10 I accept the conclusion of Ms Chalmers that overall the proposal is to be considered as a discretionary activity.

5. THE HEARING AND EVIDENCE HEARD

The Case for the Applicant

- 5.1 Mr B Loe presented evidence on behalf of the applicant. He had prepared the application documents and assessment of effects (AEE) and was assisted by Mr P Macaulay, Operations Manager at TWT, in answering questions regarding the proposal.
- 5.2 Mr Loe's evidence described the history of the existing composting operation and described the measures now implemented via a management plan to control odour emissions and reduce the risk of fire. He emphasised that there is a significant difference between the effects of the former composting operation and the effects of the current activity. He described the addition of gypsum in powder form to the compost and how this would be managed to prevent significant dust emissions.

- 5.3 Mr Loe discussed the duration of consent requested. He considered that the duration should align with the expiry of the existing consent, being 11 June 2047. Mr Loe stated that the 15-year term recommended by Ms Chalmers is not appropriate because the assessment concluded that the activities should not adversely affect groundwater quality.
- 5.4 Mr Loe responded to numerous questions regarding the proposed operational procedures, assessment methodology and suggested conditions of consent. He also addressed some of the issues raised by submitters. Mr Loe agreed to provide an updated set of proposed consent conditions, based on the matters that had arisen during the course of the hearing.
- 5.5 Mr T Sheppard, Principal Rural Fire Officer for the Waimakariri District Council, provided evidence regarding the handling of the large fire event at the site and the likely effectiveness of the management measures now in place to minimise the risk of fire. He stated that the management techniques at the time of the fire were not adequate, with the windrows being too high and too compacted. Mr Sheppard considered that the revised procedures will reduce fire risk, whereby the compost rows are smaller and turned more regularly. He noted the importance of regular monitoring with temperature probes so that any internal heat build-up is identified. He also noted that more water is now stored on site.
- 5.6 Mr Sheppard stated that in the unlikely event of a fire occurring, the smaller rows would be significantly easier to manage and any fire could be isolated and extinguished more quickly. In response to questions, he noted that significant heavy machinery resources (such as loaders and diggers) are now available on site to work on extinguishing any fire. He also stated that irrigation of crops on the land downwind of the north-westerly winds could reduce the risk of any fire spreading to neighbouring properties during strong winds, if it occurred.

The Submitters

- 5.7 Mr B Beets owns a 61-hectare rural property to the east-southeast of the composting operation. He stated that he has concerns regarding odour effects at his property caused by the composting operation. He referred to the Victorian EPA recommended buffer distance from open air composting to residential dwellings of 2000m, which would not be met in this case. Mr Beets noted that any subdivision of the rural properties bordering the site in future would be affected, with new dwellings being closer than the existing affected dwellings.
- 5.8 Mr Beets stated that he experiences ongoing nuisance effects associated with litter from the composting operation blowing onto his property. He considered that dust blowing from the composting site is significant during strong north-westerly wind conditions. He also considered that the water supply is not adequate to maintain the composting operation in accordance with the management plan.
- 5.9 Mr Beets' written submission also raised several other concerns relating to the composting operation, including: non-compliance with various planning rules; ongoing fire risk; effects of leachate on groundwater; inadequacy of operational procedures and mitigation measures; insufficient site area; site security; history of non-compliance and the proposed conditions.
- 5.10 Mr A Hicks also expressed concern regarding the effects of odour beyond the Parish Dairies Ltd property boundary at a distance of approximately 400m from the composting operation. He stated that there is potential to subdivide his property in the future and the resultant dwelling could be affected by odour. In response to questions regarding odour effects from the existing operation, Mr Hicks stated that odour is experienced by him approximately once per month on average, typically during cool calm morning conditions. By way of clarification Mrs C Hicks noted that her sensitivity to odour is greater than her husband's and she considered that odour is detectable on "almost every still morning". She also stated that odour is detectable during light north-westerly winds.

- 5.11 Mr Hicks stated that fire risk is a primary issue of concern in relation to the proposal. Like Mr Beets, Mr and Mrs Hicks noted that they had collected a significant quantity of windblown rubbish near their north-western boundary and have concerns that stock may ingest this material.

The Officer's Report

- 5.12 Ms J Chalmers prepared a section 42A report in relation to the applications. Her review concluded that any adverse effects would be minor and the consents sought could be granted. Ms Chalmers found that the applications are generally consistent with the relevant objectives and policies of the applicable planning provisions. She recommended a set of conditions to be imposed if consents are granted. She has further suggested some written amendments to conditions in response to the revised conditions submitted by Mr Loe.
- 5.13 Ms Chalmers recommended that consents be granted for a duration of 15 years. She considered that consent duration relates to the new applications made and does not need to be tied to the term of the existing consent.
- 5.14 Turning to suggested conditions of consent, Ms Chalmers stated that more prescriptive conditions in relation to compost operational procedures are appropriate in this case, given the non-compliance with the existing consent conditions. She considered that relying solely on the operational and monitoring procedures in the management plan is not appropriate, and that critical measures such as the frequency of temperature monitoring should be included in consent conditions.
- 5.15 With regard to the dust and litter discharged from the composting operation, Ms Chalmers considered that these contaminants were within the scope of the application to discharge contaminants to air and could accordingly be controlled by consent conditions.

6. PRINCIPLE ISSUES, EVALUATION AND FINDINGS OF FACT

6.1 The officer's report sets out the scope of matters to be considered when assessing the applications. My conclusions regarding the statutory provisions in Section 4 of this decision are also relevant. I consider that the significant matters to assess in this case are as follows:

- Adverse effects of odour;
- Adverse effects of dust and litter;
- Adverse effects on groundwater quality and drinking water;
- Adverse effects on amenity and cultural values;
- Any positive effects which may offset adverse effects; and
- Monitoring and consent conditions.

6.2 Fire risk is understandably a matter of significant concern to submitters. Fire risk falls outside the matters directly controlled by consents required from the Regional Council. However, I agree with Ms Chalmers that fire risk is indirectly managed via improved control of the composting process, including temperature and moisture monitoring. Mr Sheppard stated that the smaller compost rows would be significantly easier to manage in the event of fire and any fire could be isolated and extinguished more quickly. He noted that the improved site management procedures proposed would significantly reduce fire risk. I consider that the consent conditions proposed and the requirements of the Compost Management Plan would contribute to a reduction in the risk of fire from the composting operation.

Odour

6.3 One of the primary issues in this case is odour from the composting operation. As discussed in Section 2, numerous odour complaints have been received in relation to the composting operation on the site in the past and abatement notices have been issued.

- 6.4 There has been a substantial reduction in odour complaints to the CRC during the past year. Ms Chalmers stated that these recent odour complaints were unsubstantiated and could not conclusively be attributed to the compost facility. She noted that some complaints may have related to an offal pit serving the dairy farm at 379 Parish Road.
- 6.5 There are significant limitations to relying on complaints to assess the effects of odour in this type of case. Because of the relative isolation of the site, complaints have been rarely investigated by a Council officer and there is potential for conditions to have changed by the time of any site visit. Odour from other sources, such as offal pits, can also be a complicating factor. Only limited weight can therefore be placed on the complaints record and I agree with Ms Chalmers that other tools should also be used to assess the effects of odour from the composting operation.
- 6.6 The applicant has proposed improved process controls to be implemented via the Compost Management Plan. Cows ears are no longer composted at the site and the proposed source material consists of only green waste and gypsum. Windrow turning machinery is now used and various enhanced monitoring and process controls are proposed. The critical aspects addressed by the management plan include: the composition of compost materials; the process of windrow formation and turning; the moisture content, temperature and aeration of the compost; the water supply; response procedures relating to any odour complaint; and monitoring requirements.
- 6.7 The Compost Management Plan has been prepared in general accordance with Appendix K 'The Best Practice Guidelines for Composting Systems' of the New Zealand Standard for Compost, Soil Conditioners and Mulches NZS 4454:2005 (New Zealand Standard, 2005). The applicant has stated that since the changes to the composting process were implemented, the odour generated at the site has been significantly reduced. I note that Ms Chalmers assessed the applicant's proposed Management Plan and agrees that the procedures are generally in line with best practice as per the New Zealand Standard, 2005.
- 6.8 The applicant has undertaken a brief assessment of odour effects in relation to the FIDOL (frequency, intensity, duration, offensiveness and location) factors. That

assessment relies primarily on complaints records and community feedback. Dispersion modelling of odour emissions has not been undertaken in this case and buffer distance guidelines (specifying the separation distance between the composting facility and sensitive receptors) have not been analysed.

- 6.9 Mr Beets discussed the Victorian EPA recommended buffer distance from open air composting to residential dwellings or other sensitive receptors of 2000m. This is a very conservative separation distance to rural dwellings and I am aware that lesser separation distances are recommended by some other EPAs in Australia and various other agencies internationally. The limited notification of the application was based on a separation distance of 500m recently recommended to the Auckland Council.
- 6.10 Mr Loe's assessment of odour effects places reliance on the expected effectiveness of the proposed improved management procedures and also on the complaints record. In addition, the separation distances to affected dwellings are sufficient to indicate that good compost management, in accordance with the conditions proposed, is likely to be able to prevent odour nuisance effects at neighbouring properties. I accept Ms Chalmers' conclusion that odour from composting according to the Best Practice Guidelines is likely to be acceptable given the rural nature of the receiving environment.
- 6.11 Submitters living on Browns Rock Road have also raised concerns regarding potential effects on the future dwelling sites, should they decide to subdivide their blocks in future. The separation distance from the composting operation to the boundary with submitters' land to the southeast of the site is approximately 400m. Any future dwellings would likely be set back from that boundary by some distance. The Waimakariri District Council has stated that the expansion of the compost facility will not prevent adjacent land owners from building in certain locations as currently there are no dwelling setback requirements from compost operations. Taking into account these factors, the consent conditions now proposed and the rural nature of the area, I find that adverse effects of odour on future development are unlikely to be significant.

- 6.12 My conclusion regarding odour effects is contingent on compliance with the set of consent conditions now proposed. These conditions require that there be no offensive and objectionable odour beyond the property boundary. Monitoring of the conditions would typically occur in response to complaints, but compliance need not be determined solely based on the opinion of council officers. Ultimately the Court would determine compliance based on all relevant evidence, including odour diaries kept by neighbours and verification of the detected odour by suitably qualified experts. An annual review condition is included that could be invoked by the Council if significant adverse odour effects are found to occur.

Dust and Litter

- 6.13 The composting operation has potential to generate dust emissions, particularly during dry summer time conditions. I accept that appropriate site management and application of water can adequately control dust discharges, given the separation distances to potentially affected dwellings. Proposed Condition 5 of consent CRC163505 requires that there be no objectionable or offensive dust beyond the property boundary. I also intend to require that any consent is subject to a compost management plan addressing odour, dust and litter from the site.
- 6.14 The evidence from submitters is that litter (typically shredded plastic material) has been a cause of significant nuisance effects associated with the existing composting operation. I accept that evidence and the submission that this litter poses a risk to livestock health. I find that the discharge of litter in this context is a “discharge of contaminants to air” from composting and subject to consent. I also find that the revised condition proposed by the applicant does not go far enough to prevent such nuisance effects and I intend to impose an amended condition as follows:

“(a) The composting operation shall not cause the deposition of litter beyond the property boundary as identified on Plan CRC163505, attached to and forming part of this consent. Measures shall be implemented within three months of the commencement of consent to prevent litter originating from the composting operation from being deposited on neighbouring properties.

(b) Measures to comply with Condition 13(a) shall include, but are not limited to, installation and maintenance of shade cloth or similar material to trap litter, to a height above the ground of at least 1.8 metres in the following locations:

- i) along the south-eastern perimeter of the Compost Area;*
- ii) for at least 200 metres to the north-east along the south-eastern boundary of the property, commencing at the southern corner of the property, as shown on Plan CRC163505, attached to and forming part of this consent.*

Advice note: Condition 13(b) describes minimum measures to be implemented within the first three months of consent. Further measures may be required to comply with Condition 13(a), including extending the length of shade cloth described by Condition 13(b)ii.”

- 6.15 The condition includes the minimum requirement to install 1.8m high shade cloth fencing for at 200m of the south-eastern boundary of the property, as proposed by the applicant. However, it is likely that additional shade cloth and further control measures at source may be required to achieve compliance with part (a) of the condition. The condition is deliberately and appropriately more stringent than the “no objectionable or offensive” standard applied to odour and dust, given the potential degree of nuisance and the risk to livestock health associated with such litter. The deposition of such litter on neighbouring properties, as occurred under the existing consent, is not in keeping with effects anticipated in the rural environment. Under this condition the onus will firmly be on the applicant to take measures to prevent litter from being discharged beyond the property boundary.

Groundwater Quality

- 6.16 Nutrients leached from the compost, notably nitrogen and phosphorus, have potential to adversely affect groundwater quality. Ms Chalmers stated that groundwater beneath the site is at least 40m below ground level.
- 6.17 The applicant’s assessment states that compost management and monitoring practices will ensure that the discharge of leachate is minimised. Contaminants discharged will be filtered by the soil and substrata before entering groundwater.
- 6.18 Ms Chalmers asked Ms Maureen Whalen, CRC Team Leader Groundwater Science North, to advise on the local groundwater environment and potential adverse effects on groundwater quality. Ms Whalen stated that, provided the facility is operated in accordance with best practice guidance, she is not concerned about the effect of

nutrient discharges from the composting operation on groundwater quality. Specifically, Ms Whalen wrote:

“Given the depth to groundwater (~40m), in my opinion, as long as the C:N ratio is maintained so that it approaches 30:1 in the raw material and the proper moisture content (40 to 60%) is maintained, there shouldn’t be a detrimental impact to groundwater quality.”

- 6.19 Ms Chalmers determined that there are no active bores within 1,000 metres of the compost site and there are no community drinking water supplies within 2,000 metres. I accept her conclusion that the effects of the leachate discharge on groundwater quality is likely to be negligible if the operation occurs in accordance with the Compost Management Plan and recommended consent conditions.

Amenity and Cultural Values

- 6.20 Adverse effects of odour, dust and litter on amenity values have been evaluated separately. In terms of visual amenity, the applicant stated that the area is a rural working environment, dominated by large-scale dairy and pastoral farms, but also with small rural holdings and lifestyle blocks. The compost facility is not able to be seen from public roads, nor from any rural dwellings, therefore the applicant has assessed that there is no impact on visual amenity.
- 6.21 Ms Chalmers noted that the applicant is currently consented to operate a compost facility at the site and therefore there would be no additional effect on visual amenity values on the majority of the adjacent property owners from the granting of CRC163501 and CRC163505. While the proposed compost site is extending towards the dwelling on Section 46 RES 2331, there remains over 600 metres of separation to that dwelling and she concluded that effects on amenity values would be minor.
- 6.22 Taking into account the existing environment (including the established consented composting operation), the separation distances to dwellings, the rural nature of the area and the vegetative screening in place, I find that adverse effects of the proposal on visual amenity values will be acceptable.

- 6.23 With regard to effects on cultural values, Ms Chalmers explained that comment on the application has been provided by Tuahuriri Runanga. I accept her conclusion that, based on the comments received, any adverse effect on tangata whenua values are likely to be less than minor.

Positive Effects

- 6.24 Mr Loe has identified positive effects associated with the proposal. Firstly, granting of consent would allow the applicant to continue to operate the business at the site subject to improved management practices. Secondly, the compost operation would continue to provide employment opportunities in the local area. These are valid positive effects to be taken into account in reaching my decision.

Monitoring and Consent Conditions

- 6.25 Revised conditions of consent were proposed in writing by the applicant, with comments also provided by Ms Chalmers. There was a large degree of agreement between Mr Loe and Ms Chalmers regarding the content of those conditions. I have discussed some changes to those conditions that I intend to impose during the evaluation of effects.
- 6.26 Some difference remained between the parties regarding the need to specify the frequency of monitoring of temperature and moisture in the compost. Mr Loe argued that reliance on the Compost Management Plan would be sufficient. However, I find that specifying a minimum frequency of temperature and moisture monitoring via consent condition is appropriate in this case. Regular monitoring of these parameters is critical to ensuring that the process is undertaken to ensure optimal composting conditions, thereby minimising potential for odour and leachate generation and also minimising fire risk. I have determined that the relevant condition should be as follows:

“Temperature and moisture content of the compost windrows shall be measured:
a. in accordance with procedures described in the CMP; and
b. at least twice in each seven day period for the first three weeks following the initial windrow formation; and
c. at least once per each seven day period until the composting is completed.”

- 6.27 The condition's clauses b) and c) specify minimum frequencies of monitoring, whereas more frequent monitoring could be specified in the CMP as varied in future.
- 6.28 The applicant has stated that the squeeze test is an industry recognised acceptable practice of monitoring the moisture status of compost. Mr Beets raised concerns about the accuracy of the squeeze test method due to the importance of maintaining appropriate moisture levels in reducing fire risk.
- 6.29 The applicant has provided results of testing to calibrate the squeeze test against the oven dry method specified in NZS 4454:2005. I have considered this matter and find that the proposed squeeze test provides a sufficiently accurate indication of moisture content to maintain optimal composting conditions and minimise fire risk.

7. EVALUATION OF OBJECTIVES AND POLICIES OF PLANS AND POLICY STATEMENTS

- 7.1 The key objectives and policies of the National Policy Statement for Freshwater Management, the Regional Policy Statement, the Natural Resources Regional Plan, the Land and Water Regional Plan and the Proposed Canterbury Air Regional Plan that are relevant to this proposal are set out in Ms Chalmers' report.
- 7.2 Overall Ms Chalmers concluded that the proposed activities are consistent with the relevant objectives and policies of the plans and policy statements. Her analysis in relation to objectives and policies was not contested by the parties.
- 7.3 I have considered the relevant objectives and policies. Subject to good management of the revised composting operation and diligent implementation of the mitigation measures proposed in accordance with the Composting Management Plan, I find that the proposal is consistent with the relevant provisions of the NPS, RPS, pCARP, NRRP and LWRP.

8. STATUTORY ASSESSMENT AND PART 2 OF THE ACT

8.1 Consideration of applications under section 104 of the Act is “*subject to*” the purpose and principles of the Act set out in Part 2, Sections 5 to 8. The Part 2 matters of particular relevance to this case are as follows.

(a) The purpose of the Act to promote the sustainable management of natural and physical resources. Section 5 imposes a duty to promote sustainable management, which includes enabling people and communities to provide for their social, economic and cultural wellbeing, while avoiding, remedying or mitigating adverse effects of activities on the environment.

(b) Section 7 requires that particular regard be had to various matters, including:

- The efficient use and development of natural and physical resources;
- The maintenance and enhancement of amenity values; and
- Maintenance and enhancement of the quality of the environment.

8.2 I have had regard to all of these matters and the matters specified in Section 104 of the Act and I am satisfied that the proposal, subject to a comprehensive set of conditions, would on balance meet the purpose of the Act. With appropriate controls the proposed activity could be undertaken in a way that represents efficient use and development of the rural zoned site. The composting operation is located in a suitably zoned area with substantial separation distances to rural dwellings. Improved mitigation and monitoring measures are proposed and can be implemented to enable amenity values and the quality of the rural environment to be maintained.

8.3 Specific changes to the conditions proposed by Mr Loe have been discussed during the body of this decision. I am satisfied that the mitigation measures required by the conditions of consent are sufficient to ensure that adverse effects are acceptable in terms of the purpose and principles of the Act.


Duration of Consent

- 8.4 The applicant has requested an expiry date of 11 June 2047 for both consents. That date aligns with the expiry of the existing consent to discharge contaminants to air. Ms Chalmers has recommended a duration of 15 years for both consents.
- 8.5 I have carefully considered the matter of duration and have had regard to the guidance in Chapter 1 of the NRRP. In this case significant improvements to the composting operation have been implemented and there has been investment in heavy machinery to optimise the process, including a windrow turning machine. Conditions of consent will require that composting occurs in accordance with best practice guidance and set out minimum temperature and moisture content monitoring requirements for the windrows. The conditions will also require on-site meteorological monitoring (as proposed by the applicant) and a record of any complaints received and action taken in response to odour, dust and litter.
- 8.6 Nevertheless, I am aware that diligent ongoing management and monitoring of the process (in accordance with the CMP) and careful attention to odour, dust and litter mitigation will be required to meet the conditions of consent. Both consents will be subject to a review condition that will annually allow the CRC to review the conditions of consent if significant adverse effects occur. Bearing in mind all the above factors and my conclusions regarding effects, I find that an expiry date of 11 June 2047 is appropriate for both consents.

9. DECISION AND REASONS

- 9.1 For the reasons detailed in this report I grant the two resource consent applications, under sections 104, 104B, 104C and 108 of the Resource Management Act 1991, subject to the conditions attached as Appendix 1.
- 9.2 In summary I find that, subject to a comprehensive set of conditions, the proposed activities could be undertaken in a way that meets the purpose and principles of the Act. The proposal represents efficient use and development of the rural site. With

appropriate mitigation and diligent management of the composting operation, the amenity values and quality of the rural environment can be adequately maintained.

A handwritten signature in black ink, appearing to read "John Iseli". The signature is written in a cursive, flowing style with a large initial "J" and "I".

John G Iseli
Hearing Commissioner
30th August 2016

Appendix 1. Conditions

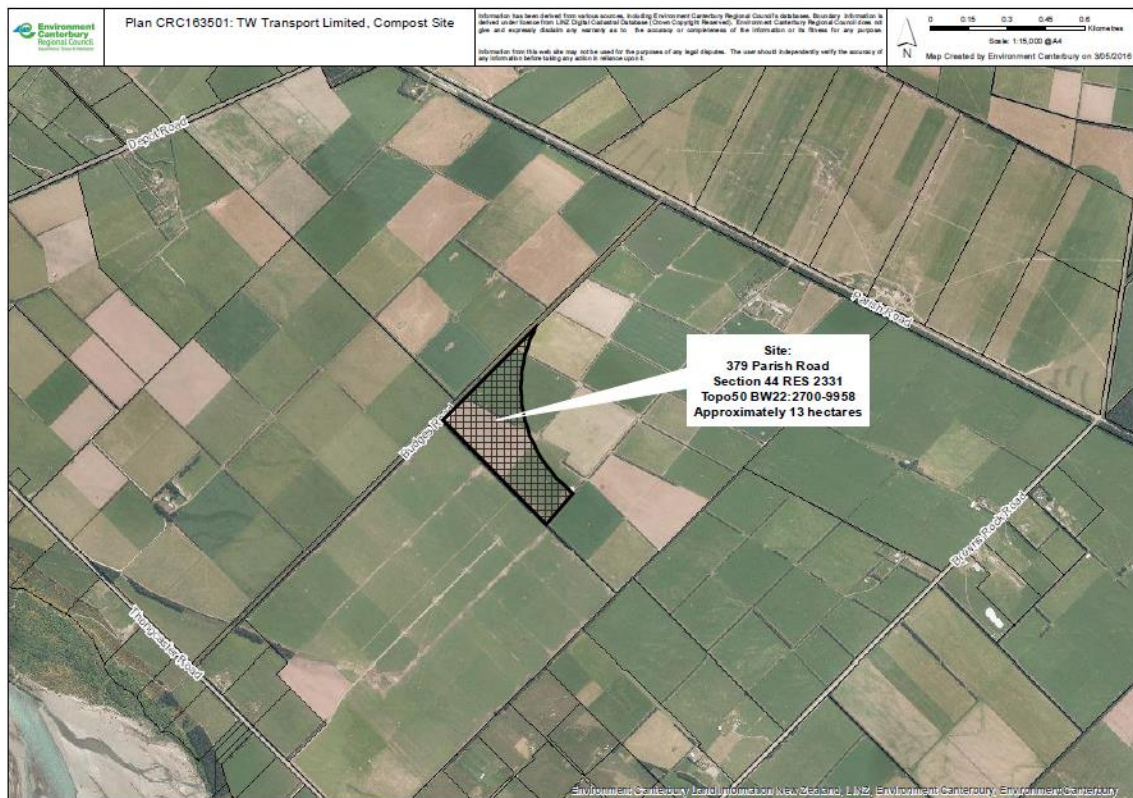
Resource consent [CRC163501](#) to use land for stockpiling of compost and to discharge associated contaminants to land is granted subject to the following conditions imposed under Section 108 of the Act.

Consent Expiry Date: 11 June 2047

1	<p>The land use shall only be for the stockpiling of green waste, gypsum and compost, and any discharges into or onto land, associated with a composting activity located at 379 Parish Road, Burnt Hill, at or about map reference NZ Topo50 BW22:2700-9958, as shown on Plan CRC163501, attached to and forming part of this consent.</p> <p>Advice note: <i>This does not restrict other activities on the site that do not require resource consent.</i></p>
2	<p>The material being stockpiled and composted shall only consist of:</p> <ol style="list-style-type: none"> Green waste; and Gypsum powder. <p>For the purpose of this consent, green waste is defined as garden organics or green waste materials derived from commercial or domestic sources that may include: grass clippings, woody and non-woody materials, tree and shrub prunings, branches, stumps and root balls.</p>
3	<p>The volume of material brought on-site to be composted shall not exceed a combined volume of 30,000 tonnes between 01 January and the following 31 December, with gypsum powder making up no more than 600 tonnes of this combined volume.</p>
4	<p>The volume of material on-site at any one time shall not exceed a combined volume of 40,000 tonnes.</p> <p>Advice note: <i>This includes pre-processed green waste, actively composting green waste and cured compost.</i></p>
5	<p>The material to be composted and/or compost being stockpiled shall not be located:</p> <ol style="list-style-type: none"> Within 10 metres of any property boundary; Within 20 metres of any surface water body; Within 20 metres of an existing bore.
6	<p>The composting process shall not result in the ponding of liquid containing contaminants on the ground surface.</p>
7	<p>All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery used on site.</p>
8	<p>The activity at the site shall be operated in accordance with the Compost Management Plan (CMP). The CMP shall:</p> <ol style="list-style-type: none"> set out the measures used to minimise leachate caused by the composting activity;

	<ul style="list-style-type: none"> b. reflect best practice guidelines for commercial vegetative waste composting in New Zealand; c. include but not be limited to: <ul style="list-style-type: none"> i. a location and site plan. ii. a list of on-site management and monitoring procedures; and iii. a procedure for recording and addressing complaints. d. be prepared and submitted to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 20 working days of exercise of this consent; and e. be displayed on-site.
9	<p>The CMP may be amended at any time. Any amendments shall be:</p> <ul style="list-style-type: none"> a. only for the purpose of improving the efficacy of the composting process and shall not result in a decrease in groundwater quality; b. consistent with the conditions of this resource consent; and c. submitted in writing to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, prior to any amendment being implemented.
10	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:</p> <ul style="list-style-type: none"> a. Dealing with any adverse effect on the environment that may arise from the exercise of the consent; or b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
11	<p>If this consent is not exercised before 30 September 2021 it shall lapse in accordance with section 125 of the Resource Management Act 1991.</p>

Attachment: Plan CRC163501



Resource consent [CRC163505](#) to discharge contaminants to air from a composting operation is granted subject to the following conditions imposed under Section 108 of the Act.

Consent Expiry Date: 11 June 2047

Limits	
1	The discharge of contaminants to air shall only be from a green waste composting operation located at 379 Parish Road, Burnt Hill, at or about map reference NZ Topo50 BW22:2700-9958, as shown on Plan CRC163505, attached to and forming part of this consent.
2	<p>The material being stockpiled and composted shall only consist of:</p> <ul style="list-style-type: none"> a. Green waste; and b. Gypsum powder. <p>For the purpose of this consent, green waste is defined as garden organics or green waste materials derived from commercial or domestic sources that may include: grass clippings, woody and non-woody materials, tree and shrub prunings, branches, stumps and root balls.</p>
4	<p>The volume of material on-site at any one time shall not exceed a combined volume of 40,000 tonnes.</p> <p>Advice note: This includes pre-processed green waste, actively composting green waste and cured compost.</p>
5	The discharge shall not cause odour or particulate matter which is offensive or objectionable beyond the boundary of the property, as identified on Plan CRC163505, attached to and forming part of this consent.
Operation and Monitoring	
6	<p>The activity at the site shall be operated in accordance with the Compost Management Plan (CMP). The CMP shall:</p> <ul style="list-style-type: none"> a. set out the measures used to minimise odour and dust emissions caused by the composting activity and to avoid litter being dispersed from the site; b. reflect best practice guidelines for commercial green waste composting in New Zealand; c. include but not be limited to: <ul style="list-style-type: none"> i. a location and site plan. ii. a list of on-site management and monitoring procedures; and iii. a procedure for recording and addressing odour complaints. d. be prepared and submitted to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 20 working days of exercise of this consent; and e. be displayed on-site.
7	<p>The CMP may be amended at any time. Amendments shall be:</p> <ul style="list-style-type: none"> a. only for the purpose of improving the efficacy of the composting process and shall not result in a decrease in air quality;

	<ul style="list-style-type: none"> b. consistent with the conditions of this resource consent; and c. submitted in writing to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, prior to any amendment being implemented.
8	<p>Gypsum powder shall be mixed with shredded green waste as soon as practicable after gypsum powder arrives on the site.</p> <p>Advice note: <i>Gypsum powder should not be handled in weather conditions that result in gypsum powder causing an offensive or objectionable effect beyond the property boundary.</i></p>
9	The contact phone number of the site manager shall be notified to all land owners within 500 metres of the site. Any complaint shall be investigated and necessary corrective action taken within 24 hours of receipt of the complaint.
10	<p>Composting activity shall follow best practice guidelines for the operation, as set out in Appendix K of NZS4454:2005 or any replacement. Best practice guidelines include:</p> <ul style="list-style-type: none"> a. maintaining aerobic conditions in the green waste and compost at all times; b. achieving and maintaining the temperature of the material within the windrows of active compost between 35°C and 65°C; c. achieving and maintaining the moisture content of the material within the windrows of active compost between 45 and 65 percent; d. turning windrows as necessary to meet a, b and c above.
11	<p>Temperature and moisture content of the compost windrows shall be measured:</p> <ul style="list-style-type: none"> a. in accordance with procedures described in the CMP; and b. at least twice in each seven day period for the first three weeks following the initial windrow formation; and c. at least once per each seven day period until the composting is completed.
12	Windrows and stockpiles shall be managed to avoid creating conditions that may lead to spontaneous combustion of the green waste or compost.
13	<p>(a) The composting operation shall not cause the deposition of litter beyond the property boundary as identified on Plan CRC163505, attached to and forming part of this consent. Measures shall be implemented within three months of the commencement of consent to prevent litter originating from the composting operation from being deposited on neighbouring properties.</p> <p>(b) Measures to comply with Condition 13(a) shall include, but are not limited to, installation and maintenance of shade cloth or similar material to trap litter, to a height above the ground of at least 1.8 metres in the following locations:</p> <ul style="list-style-type: none"> i) along the south-eastern perimeter of the Compost Area;

	<p>ii) for at least 200 metres to the north-east along the south-eastern boundary of the property, commencing at the southern corner of the property, as shown on Plan CRC163505, attached to and forming part of this consent.</p> <p>Advice note: Condition 13(b) describes minimum measures to be implemented within the first three months of consent. Further measures may be required to comply with Condition 13(a), including extending the length of shade cloth described by Condition 13(b)ii).</p>
Records	
14	<p>The monitoring undertaken in accordance with Condition 11 shall be recorded and the records shall detail the:</p> <ul style="list-style-type: none"> a. location of the measurement; b. temperature of the location sampled; c. moisture content of the location sampled; d. name of the operator; and e. date and time of the monitoring. <p>The records shall be retained until the composted material is removed from the site. A copy of the recorded entries shall be submitted to The Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 20 working days of written request by the Canterbury Regional Council.</p>
15	<p>The consent holder shall maintain records of the amount, source and condition of all materials processed on site. A copy of the records shall be provided to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 20 working days of written request by the Canterbury Regional Council.</p>
16	<p>The consent holder shall maintain records of any odour, dust or litter complaints that have been received. The records shall include, but not be limited to:</p> <ul style="list-style-type: none"> a. The name and address of complainant, if supplied; b. The date and time that the contaminant was detected; c. The nature and duration of the reported effect; d. The location where the contaminant was detected; e. A general description of the weather conditions, including the wind speed and wind direction, when the contaminant was detected; f. The most likely cause of the contaminant; and g. Any corrective action undertaken by the consent holder to avoid or mitigate the contaminant detected by the complainant. <p>These records shall be made available to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 20 working days of written request by the Canterbury Regional Council.</p>
17	<p>Within three months of the issue of this resource consent, instruments capable of continuously monitoring and providing representative meteorological data of the site and surrounding area shall be installed. The instruments shall be capable of measuring the following:</p> <ul style="list-style-type: none"> a. Wind speed;

	<ul style="list-style-type: none"> b. Wind direction; c. Rainfall; and d. Temperature. <p>The instruments shall be installed and maintained in accordance with the manufacturer's specifications.</p>
18	<p>The meteorological monitoring instruments shall be installed and used in accordance with the following:</p> <ul style="list-style-type: none"> a. The anemometer shall be installed at a height of at least six metres above natural ground level and in accordance with AS 2923 – 1987 Ambient Air Guide for Measurement of Horizontal Wind for Air Quality Applications; b. The meteorological monitoring results shall be continuously recorded using an electronic data logging system with an averaging time for each parameter of not more than two minutes. The results shall be available to the consent holder in real time and the logging system shall be able to send alerts to the consent holder via text message; c. The meteorological data shall be retained in the form of an electronic record for the duration of this resource consent and copies provided to the Canterbury Regional Council on request.
Administration	
19	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:</p> <ul style="list-style-type: none"> a. dealing with any adverse effect on the environment which may arise from the exercise of this consent and which it is appropriate to deal with at a later stage; or b. requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
20	<p>If this consent is not exercised before 30 September 2021 it shall lapse in accordance with section 125 of the Resource Management Act 1991.</p>

Attachments: Plans CRC163505

