

Under the Resource Management Act 1991 (**RMA**)  
In the matter of an application by **Dunedin City Council** to develop a  
Resource Recovery Park Precinct at Green Island, Dunedin.

---

**Statement of evidence of Andrew Curtis**

6 November 2024

---

**Applicant's solicitors:**

Michael Garbett | Rebecca Kindiak  
Anderson Lloyd  
Level 12, Otago House, 477 Moray Place, Dunedin 9016  
Private Bag 1959, Dunedin 9054  
DX Box YX10107 Dunedin  
p + 64 3 477 3973  
michael.garbett@al.nz | rebecca.kindiak@al.nz

**anderson  
lloyd.**

## Qualifications and experience

- 1 My full name is Andrew Ferguson Curtis.
- 2 I am a Technical Director - Air Quality at Pattle Delamore Partners Limited (PDP) where I have worked since 2020. Prior to this I held similar roles at other consultancies<sup>1</sup>. Overall I have over 35 years' experience, with more than 25 years specialising in air quality.
- 3 I have a Bachelor's Degree in Chemical and Material Engineering from Auckland University, a Post Graduate Certificate in Environmental Management from the Open Polytechnic Kuratini Tuwhera, and a Post Graduate Diploma with Distinction in Toxicology from the RMIT University in Melbourne. I am also an accredited Hearing Commissioner and a Certified Air Quality Professional.
- 4 I have extensive experience in the assessment of effects associated with composting facilities, waste transfer stations and other activities that have the potential to generate odour and dust. This includes:
  - (a) Preparing air quality assessments for the following facilities:
    - (i) the Engineered Composting System (ECS) composting facility at Hampton Downs Landfill, and a proposed facility in Te Maunga.
    - (ii) a number of transfer stations including, Wiri, Pukekohe, Drury, Cass Street, Te Maunga, Rosebank Road, Sandspit Road, and Kerikeri.
    - (iii) static pile composting facilities at Te Maunga, Uruti, Cambridge
  - (b) I was engaged by Gisborne District Council to review an application for an ECS composting facility near Gisborne.
- 5 PDP was engaged by Enviro NZ Limited (who are contracted to Dunedin City Council) in 2023 to prepare an air quality assessment<sup>2</sup> (Report) to support the application for the proposed Resource Recovery Park Precinct (RRPP), and a response to the Section 92 request for further information.

---

<sup>1</sup> AECOM New Zealand Limited, URS New Zealand Limited, Woodward-Clyde (NZ) Limited

<sup>2</sup> PDP, Green Island Resource Recovery Park Precinct – Air Quality Assessment, October 2023

- 6 I confirm that I have visited the site, and I am familiar with the area from this work.
- 7 I also undertook a site visit together with a number of other consultants and Otago Regional Council Staff and consultants assisting them to the Hampton Downs Composting Facility and the Wiri Transfer Station so that they could better understand the processes that are being proposed.
- 8 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

### **Scope of evidence**

- 9 I have been asked to prepare evidence in relation to the effects of the RRPP on air quality. This includes:
  - (a) A brief outline of the proposed activities that could give rise to some form of air quality effect.
  - (b) A brief discussion of relevant background information.
  - (c) A discussion on the mitigation measures that are proposed to be used to minimise the potential for odour and dust.
  - (d) My assessment.
  - (e) Comment on the submissions.
  - (f) A discussion on the Section 42A Report.
- 10 In this evidence I have summarised the main points from my Report and my response to the request for further information rather than reproduce that information in its entirety.

### **Executive Summary**

- 11 I have assessed the potential air quality effects associated with the establishment and operation of RRPP.
- 12 I consider that like all waste transfer stations and composting facilities, the main potential air discharge from the site is nuisance odour.
- 13 There is also a potential for nuisance dust to occur from waste transfer stations.

- 14 The site location is on an existing landfill which could potentially contribute to cumulative odour and dust effects.
- 15 I am confident having reviewed the proposed management and mitigation measures and undertaking odour observations at similar operations that there is a low potential for there to be off-site odour and dust nuisance.
- 16 I have considered the combined odour impacts with the landfill and RRPP and I do not anticipate increased off-site odour intensity or offensiveness due to the distance between potential odour sources and the minimal duration of activities conducted at RRPP and the landfill being active.
- 17 I do not envisage any combined dust effects from landfill operations as its activity is 300 metres from the RRPP.

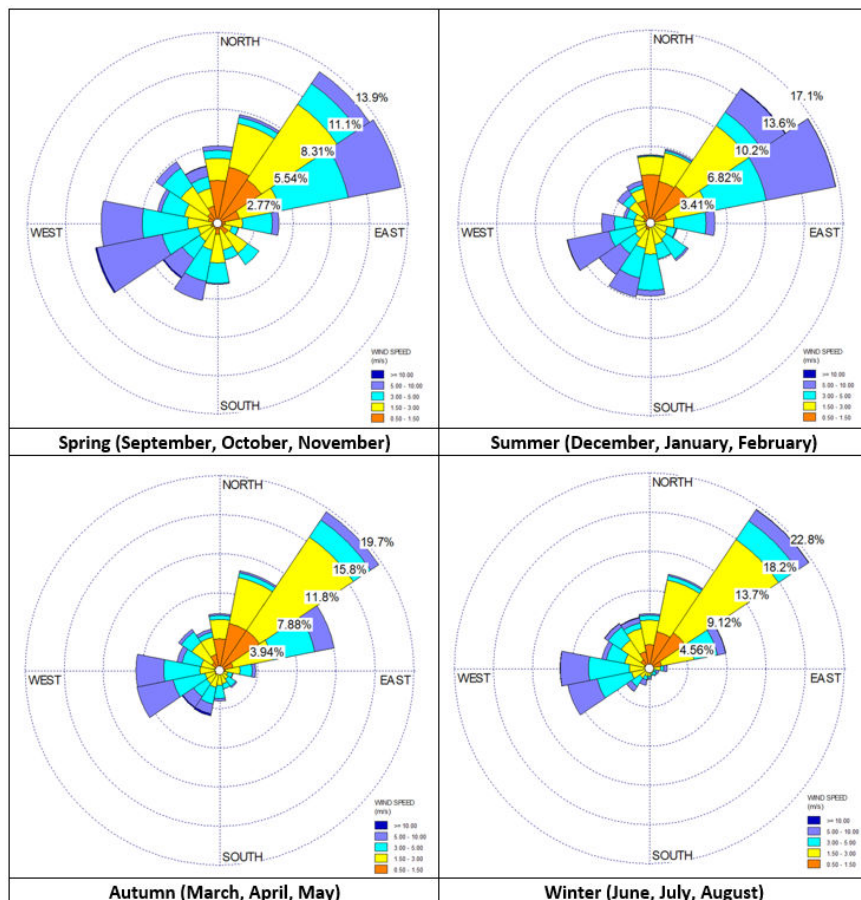
### **Proposed Resource Recovery Park Precinct**

- 18 The proposal is detailed in the Application and evidence of Laurence Dolan, with relevant information also set out in Sections 1 and 4 of my Report.
- 19 From an air quality perspective, the main activities that have potential to result in some form of air discharge are the:
  - (a) materials recovery facility (MRF) which will sort kerbside mixed recycling bins;
  - (b) bulk waste transfer station (BWTS) to facilitate the compaction and trucking of waste to landfill and includes a construction and demolition (C&D) sorting pad;
  - (c) organic receivals building (ORB) which will be used to store organic waste prior to it being composted; and
  - (d) organic processing facility (OPF) which will process organic waste (kerbside collection, green waste and commercial organic waste) using forced air static composting.
- 20 From an air quality perspective, the key points are that:
  - (a) There is potential for activities on the Site to cause odour and dust discharges if they are not controlled correctly.
  - (b) The ORB and OPF have the highest potential to generate odours if not well controlled, however, there is also control for odours from the BWTS and MRF if they receive odorous material.

- (c) The highest potential for dust is associated with the BWTS and C&D waste.
- (d) The Site is well placed, in a location designated for landfilling and the proposed activities have a reasonable separation distance to nearby receptors.

**Background Information**

- 21 One of the important aspects of my assessment is an understanding of the background conditions, nearby activities and prevailing weather as this helps inform the potential for dust or odour effects to occur at the site.
- 22 In this case I have reviewed the data from the Green Island Landfill. The seasonal distribution of wind direction and wind speeds between March 2022 to April 2024 is presented in Figure 1.
- 23 As can be seen the prevailing lighter winds (less than 3 m/s) are from the northeast which would generally carry odours away from nearby residential areas.



**Figure 1: Green Island Seasonal Windroses – 1 March 2022 to 14 April 2024**

- 24 As part of my assessment, I also considered the complaints that have been received in relation to all site operations at Green Island. Of the 166 complaints relating to odour from Green Island Landfill between July 2017 and June 2023, only six appear to relate to the existing static pile composting operation and none to the transfer station.
- 25 As the proposed Aerated Static Pile (ASP) system is quite different to the existing composting operation, the complaints related to it are not relevant. I am not aware that there are any odour complaints associated with operating ASP systems in New Zealand, apart from the one at Bromley which I discuss later, and two small systems which are not comparable due to the lack of appropriate control systems.
- 26 In my assessment I also identified a number of sensitive receptors around the proposed RRPP as shown in Figure 2. I undertook representative assessments at these receptor sites.



**Figure 2: Landfill, RRPP and Sensitive Receptors**

## **Activities on Site and Potential Dust and Odour Discharges.**

27 As I mentioned earlier there is the potential for odour and dust from some of the activities if there are not appropriate controls or mitigation measures in place. These measures are detailed in Section 4 of my Report and have been discussed briefly above.

## **Odour Mitigation Measures**

28 The proposed odour mitigation measures are commonly used at other sites and are consistent with the guidance in the Ministry for Environment's (MfE) good practice guide for odour<sup>3</sup>, as well as documents produced in other jurisdictions.

29 Rather than reiterate the material in full I have briefly summarised the main odour controls below:

- (a) Highly odorous loads are not accepted at the Site, and signs specifying this will be clearly posted at the entry to the site.
- (b) All incoming loads will be screened and if there are loads with unacceptable odour they will not be accepted.
- (c) All food scraps and other putrescible waste that is going to be composted will be stored in the ORB.
- (d) A spray odour/dust suppressant misting system will be installed in both the MRF and BWTS buildings.
- (e) Green and organic waste will be shredded in the ORB building to contain odour, this building has no ventilation to reduce odour to be discharged.
- (f) All composting will be undertaken in the ASP bunkers with the material remaining in the bunkers for at least 21 days. Compost will only be transferred to the curing area once it returns a Solvita<sup>4</sup> test indicating that the active phases of the composting process are complete (6 or greater).

---

<sup>3</sup> MfE Good Practice Guide for Assessing and Managing Odour, November 2016

<sup>4</sup> The Solvita test measures carbon dioxide and ammonia simultaneously determine if compost is stable and mature. Based on the combined measurements a Compost Maturity Index can be determined.

- (g) Emptying of compost bunkers will not be undertaken when windspeeds are less than 3 m/s and blowing in the direction of receptors to the north or northeast.
- 30 There are also contingency measures if odorous material is found on site that has a risk of resulting in off-site odour. The main contingencies to mitigate this odour are:
- (a) Immediately covering the odorous load with other waste;
  - (b) Applying deodorant chemicals directly to the odorous material and manually activating the misting suppressant system to run continuously until the material is removed or covered; and
  - (c) Removing the offending waste or composting material as soon as possible.

### **Dust Mitigation Measures**

- 31 Dust mitigation measures proposed for the site are also detailed in my Report, and are all measures that are currently successfully employed at other transfer stations. The measures are consistent with the guidance in MfE's good practice guide for dust<sup>5</sup>.
- 32 I have briefly summarised the main dust controls below:
- (a) Sweeping and hosing down of transfer areas will occur on a daily basis;
  - (b) Highly dusty loads will not be accepted on site;
  - (c) All refuse material is placed inside the MRTS, reducing the likelihood of dusty material becoming airborne;
  - (d) If a load is particularly dusty, tipping will be stopped and the load dampened with water;
  - (e) Site access and transfer areas will be sealed; and
  - (f) Vehicle speeds on-site will be limited to a maximum of 20 kilometres per hour in order to minimise dust from the site.

---

<sup>5</sup> MfE Good Practice Guide for Assessing and Managing Dust, November 2016



## **Assessment of Effects**

- 33 My assessment of dust and odour effects is set out in detail in Section 5 of my Report, which I have summarised below.

## **Assessment Criteria and Methodology**

- 34 I have used the FIDOL<sup>6</sup> assessment tool, to assess the potential for effects from both odour and dust. This tool is recommended by MfE for both odour and dust assessment and also by ORC in The Regional Plan: Air for Otago. This qualitative tool allows the potential for “an offensive or objectionable effect” from odour or dust to be determined.
- 35 To obtain information for the FIDOL assessment my colleagues and I have undertaken odour observations using a methodology recommended by MfE, at Hampton Downs composting facility in the Waikato and the Sunshine Avenue waste transfer station in Hamilton to understand the potential odours that could be produced at the proposed RRPP.

## **Assessment of Odour Effects**

- 36 During our observations at the Sunshine Avenue waste transfer station no odour was detected more than 50 metres from the receival buildings. To be conservative I assessed that the proposed BWTS and MRF at the proposed RRPP could result in weak odours up to 100 metres from the source on occasions. These distances are also consistent with observations I have made at other sites.
- 37 During our observations at the Hampton Downs composting facility no odour that might be considered objectionable or offensive was detected more than 50 metres from the composting operations. Given that this facility is larger than the proposed OPF at RRPP the use of monitoring from Hampton Downs is likely to be conservative.
- 38 I have used the wind data from the site to assess the potential frequency that off-site receptors may be impacted by odour. In general, the potential for odour effects is greatest when wind speeds are less than 3 m/s, and therefore I have set out in Table 1, the percentage of time that the receptors (identified in Figure 1) are likely to be downwind when wind speeds are less than 3 m/s.
- 39 The data in Table 1 indicates that if odours were present there is the potential in the absence of appropriate mitigation, for receptors to the

---

<sup>6</sup> FIDOL stands for Frequency, Intensity, Duration, Offensiveness and Location

southeast to southwest to be moderately to frequently affected. There is less potential for receptors in all other directions to be affected.

**Table 1: Frequency of low wind speeds in the direction of nearby receptors**

Receptor Name	Percentage of low windspeeds downwind of the RRPP	Combined Percentage of low windspeeds	Frequency of wind
R1	1.8	3.5	Infrequent
R2	2.0	4.1	Infrequent
R3	2.0	4.1	Infrequent
R4	9.0	11.4	Moderately frequent
R5	3.3	5.4	Moderately frequent
R6	3.5	6.6	Moderately frequent
R7	5.4	8.5	Moderately frequent
R8	8.5	13.8	Frequent
R9	1.9	4.2	Infrequent
R10	1.9	3.5	Infrequent
R11	1.5	3.1	Infrequent

*Notes:*

1. *The closer the receptor is to the source a wider angle of wind direction is used.*
2. *<5% infrequent, 5-12% moderately frequent, 12-20% frequent, >20% very frequent.*

- 40 Based on our observations the intensity of any odours will reduce with distance from the source due to dispersion, and therefore receptors further from the sources will experience less intense odour.
- 41 Given this, and the fact that all receptors will be more than 100 metres from activities on site, it is my opinion that receptors will not experience intense odour effects.
- 42 In addition, the RRPP will have a strict waste acceptance criteria, an active composting system and other odour mitigation measures. Therefore, the likelihood of intense odours from the site is further reduced.
- 43 In terms of the duration, odour events would typically be expected to be short and intermittent based on day-to-day operations at the RRPP. Potentially the longest duration will be when composting material is moved from the bunkers to the curing area. While this could result in a longer duration of odour, odours are unlikely to be observable at off-site receptors. In addition, it is not intended, as far as reasonably practicable, to undertake

this activity when the wind is blowing less than 3 m/s and towards sensitive receptors.

- 44 Odours associated with refuse and composting of organic waste can be generally considered offensive by a member of the public, particularly if the compost becomes anaerobic. However, the RRPP will employ best practice composting procedures which will maintain the compost in an aerobic state, use mitigation measures such as using odour suppression sprays and blending waste within buildings which will reduce the potential for off-site odours.
- 45 Location is one of the key factors that needs to be considered in any odour assessment. In this case, the closest receptors are located 300 metres from the OPF, 210 metres from the BWTS and 140 metres from the MRF.
- 46 I consider that the proposed location of the RRPP is appropriate and that the odour effects will be acceptable for the given environment.
- 47 Overall, it is my opinion that with the mitigation proposed and the distance between the potential receptors and the RRPP activities, that there is a low potential for there to be off-site odour nuisance.
- 48 I have also considered the combined odour impacts with the landfill and RRPP.
- 49 As the landfill nears closure, the completion of final capping in more areas is expected to reduce the release of odour. This reduction will reduce any combined effects from the proposed RRPP and the landfill operating at the same time.
- 50 While there may be a small increased frequency of odour experienced during this period of simultaneous operation, I do not anticipate increased off-site odour intensity or offensiveness due to the distance between potential odour sources and off-site sensitive activities.
- 51 As the landfill nears closure, the completion of final capping in more areas is expected to reduce the release of odour. This reduction will reduce any combined effects it may have with the proposed RRPP.

### **Assessment of Dust Effects**

- 52 For the FIDOL dust assessment I have set out in Table 2, the percentage of time that the receptors are likely to be downwind when wind speeds are greater than 5 m/s (which are the conditions that are most likely to generate or carry dust off-site).

- 53 Data in Table 2 indicates that sensitive receptors are infrequently downwind of the site when winds are greater than 5 m/s.

**Table 2: Frequency of high wind speeds in the direction of nearby receptors**

Receptor Name	Downwind direction	Percentage of high windspeeds	Frequency of wind
R1	S	0.3	Infrequent
R2	W	2.6	Infrequent
R3	NNW – WNW	1.4	Infrequent
R4	NW	0.5	Infrequent
R5	NNW	0.5	Infrequent
R6	N	0.2	Infrequent
R7	NNE	0.2	Infrequent
R8	E	0.5	Infrequent
R9	ESE	0.1	Infrequent
R10	SSE	<0.1	Infrequent
<i>Notes:</i>			
1. <5% infrequent, 5-12% moderately frequent, 12-20% frequent, >20% very frequent			

- 54 The intensity of the dust is related to the concentrations that might be experienced. The greatest potential for dust on this site will come from the BWTS and the C&D sorting pad. However, based on my experience at other sites there is generally relatively little dust from this activity. In addition, the mitigation measures proposed such as using dust fogging cannons and keeping drop heights to a minimum will further minimise the potential for dust from this activity. Given the distance to sensitive receptors, any residual dust that might be present will settle<sup>7</sup> prior to reaching the sensitive receptors. Consequently, it is my opinion that it is unlikely that any receptors will experience intense dust effects.
- 55 In terms of the duration of any dust event, I consider that any event would be limited to a period of less than 15 minutes, from the time to recognise that dust emissions are occurring and to implement mitigation.
- 56 Due to the limited frequency of suitable meteorological conditions, the distance to sensitive receptors and mitigation measures that will be

<sup>7</sup> It is generally accepted that even in the absence of mitigation the majority of the dust from these types of activities settles within 200 metres.

implemented, dust emissions are unlikely to result in any off-site offensive effects.

- 57 Location is one of the key factors that need to be considered in any dust assessment. Given that the closest sensitive receptor is approximately 210 metres from the site, even with no mitigation, it is unlikely that dust effects will be experienced at this receptor.
- 58 Overall, it is my opinion that with the mitigation proposed, the low frequency of strong winds and the distance between the potential receptors and the site activities, there is a low potential for there to be off-site dust nuisance.
- 59 I do not envisage any combined dust effects from the landfill operations as the tipping face and cover placement occurs at least 300 metres from the RRPP.

### **Submissions**

- 60 There were four submissions received that raised concerns in relation to air quality. These submissions raised the following concerns:
- (a) General concerns about odour and dust;
  - (b) Concerns about the composting of raw fish and meat;
  - (c) Concerns about odour from the disturbance of the old landfill; and
  - (d) The need for air quality monitoring

I have addressed each of these in turn.

- 61 Two submissions raised a general concern about dust and odour from the RRPP. I have already dealt with these matters in my evidence, and therefore will not reiterate that discussion in it is entirety here. However, in summary, the key points are:
- (a) While the RRPP has the potential to generate nuisance odour and dust from the onsite activities. I am confident that due to the distance between the off-site receptors and on-site activities and the proposed mitigation, there is a very low potential for nuisance odour and dust to cause off-site effects.
  - (b) Contingency measures are also available if necessary to deal with odour of dust effects if undeclared materials are found on site.
- 62 One submitter raised concerns about odour caused by composting raw fish and meat, particularly referring to odour issues from composting in

Christchurch. The issues in Christchurch are assumed to refer to the Bromley composting site.

- 63 I am not aware that the site is intending to receive commercial quantities of raw fish or meat. Proposed condition 5 would not allow this material to be composted.
- 64 I also consider that it is helpful to briefly explain why it is not appropriate to make any comparisons between Bromley and the RRPP. The key points are:
- (a) Material was only being composted for 10 days in the tunnels at Bromley, compared to 21 days proposed for the OPF. This means that the compost at Bromley was still very active (Solvita 3 c.f. 6 for the OPF) and potentially highly odorous when it was placed outside to mature.
  - (b) The ASP control system proposed for the RRPP is significantly more sophisticated than that used at Bromley and will allow for air to be both sucked and blown through the compost to ensure that it is maintained in an aerobic state.
  - (c) There were issues with the Bromley site not being able to consistently achieve the optimal carbon to nitrogen ratio in their compost. This results in the compost becoming anaerobic and more odorous.
  - (d) Some of my colleagues at PDP and I have been to Hampton Downs (similar to what is proposed for the RRPP operation) and the Bromley composting facilities and our experience was that the odour experienced at Hampton Downs was much more contained compared to Bromley with no composting odour detected beyond 200 metres from the site, and any odour experienced at Hampton Downs was less offensive than that experienced at Bromley.
- 65 Given the above, I do not believe offsite odour relating to composting activities on the RRPP will be an issue.
- 66 One submitter raised concerns about odour issues relating to the disturbance of the old landfill during the construction of the RRPP. The construction of the MRF will require disturbance of the landfill capping and this may, depending on capping thickness, expose some refuse. The refuse in this area is quite old (placed in the 1970s and therefore should be well degraded, with relatively little potential for odour).

- 67 Notwithstanding this Section 10 of the Draft Construction Environmental Management Plan sets out the mitigation measures that will be employed to ensure that if odours are detected they are controlled as quickly as possible. I consider that these measures are appropriate and am comfortable that as long as they are appropriately implemented there will be no off-site effects from this source.
- 68 One submitter raised the need for air quality monitoring at the boundary of the site, however it is not clear exactly what type of monitoring was being requested.
- 69 In my opinion there is no need for monitoring of the pollutants that are regulated under the National Environmental Standards for air quality, as these standards are primarily associated with combustion activities, and apart from vehicles accessing the site this activity will not generate those air pollutants.
- 70 I also consider that there is no value in undertaking monitoring for nuisance particulate, as based on my assessment there is essentially no potential for the onsite activities to generate nuisance particulate that would lead to off-site effects.
- 71 The only other potential discharge from the site is odour, and as far as I am aware there is no practical way of continuously monitoring odour. This is why I have recommended that site odour scouts regularly monitor odour at the site boundary.

### **Proposed Conditions**

- 72 I have reviewed the air quality conditions (RM24.143.03) attached to the Section 42A report. I consider that the majority of the consent conditions are appropriate and reflect those proposed by the Applicant and form a good basis for granting consent.
- 73 I note that Mr Dolan has made a number of suggested changes to reflect concerns in relation to the operation of the site and for example correcting Condition 5 to reflect the wastes that will be processed in the ORF. I am comfortable with the changes that Mr Dolan has recommended.
- 74 In addition to Mr Dolan's suggested changes, I would add the following suggested changes.
- 75 Condition 21 sets out the monitoring parameters of the biofilter. In my experience it is normal practice to measure the pressure drop across the biofilter rather than the inlet pressure. The former provides information on

the state of the biofilter and for example whether the media is degraded and needs to be replaced (pressure drop is high), or there is bypassing occurring (pressure drop is low). Therefore, I consider it is more important that this information is recorded than the inlet pressure which tells you nothing about the biofilter and more about the operation of the fan.

- 76 In addition, if you are recording the pressure drop there is no need to monitor the static pressure.

### **Section 42A Report**

- 77 I have reviewed the relevant sections of the Section 42A report and in particular Appendix G, which contains a statement of evidence prepared by Tracy Freeman who reviewed the air quality aspects of the consent application.

- 78 Section 6.1.2.6 of the Section 42A report sets out the assessment of air quality effects and concludes that there are:

“could be at least minor adverse (cumulative) odour effects on specific sensitive receptors, less than minor odour effects on the wider environment and other persons, and less than minor (negligible) dust effects”

before concluding that:

It is considered that these effects can be adequately avoided, remedied, or mitigated through imposition of the consent conditions set out in Appendix A.

- 79 While I agree with the Council Officer that any residual odour and dust effects can be mitigated through consent conditions, I do not agree with the conclusion that there could be “*at least minor adverse (cumulative) odour effects*” on specific receptors and I discuss that further in the following paragraphs where I comment on Ms Freeman’s evidence.

### **Evidence of Tracy Freeman**

- 80 I agree with the majority of Ms Freeman’s evidence and in particular I note the following areas of agreement:

- (a) Paragraph 17, Ms Freeman agrees that odour and dust are the only types of air discharge that need to be considered.
- (b) Paragraphs 18 to 20, Ms Freeman notes that, with respect to odour that appropriate assessment tools have been used.



(c) Paragraph 24, Ms Freeman agrees that there is no potential for more than minor dust effects at sensitive receptors.

81 In paragraph 23 Ms Freeman also notes her agreement with my conclusion that there is a low likelihood of odours and dust being characterised as “offensive or objectionable off-site, concluding that:

I consider that if any odours are detected at sensitive receptors, these odours are likely to be weak, infrequent, and of short duration.

82 Ms Freeman qualifies her conclusion by stating in paragraph 24 that this is dependent on all of the mitigation and contingency measures being effectively implemented.

83 I consider that this is a reasonable qualification and agree with her that it is important that the site is well controlled in order to minimise the potential for off-site effects.

84 That having been said it is my experience, that it is extremely unusual for facilities of the type proposed for the RRPP to result in off-site effects.

85 In paragraphs 33 to 37 Ms Freeman discusses some changes to the proposed consent conditions. I have already discussed the conditions but note here that apart from one area as discussed below I am comfortable with changes and commentary around the changes.

86 In paragraph 37 (3) Ms Freeman states that she considers that there is “... *an unquantifiable risk of increased odour emissions when the BWTS is opened up for operation after a period when putrescible wastes have been stored overnight or over a Sunday/public holiday...*”. I strongly disagree with this statement, the situation that Ms Freeman describes (that is storage of waste inside the building overnight and for up to 72 hours) is normal practice at virtually every BWTS, or enclosed transfer station that I am aware of throughout New Zealand.

87 Waste being held overnight probably occurs at virtually every transfer station that I am aware of and does not generate any appreciable change in odour based on my experience. Waste held for extended periods typically only happens a few times per year and again I am not aware that this practice has resulted in any off-site odour effects at any transfer station or BWTS.

88 Consequentially I consider the potential risk of off-site odour effects associated with this is extremely low. This means that I do not consider

that the potential for effects at receptors in Source Groups R3 and R4, are any greater than for other groups of sensitive receptors around the site.

### **Conclusion**

- 89 I have reviewed the potential air quality effects associated with the establishment and operation of RRPP.
- 90 As with all waste transfer stations and composting facilities the main potential adverse effect on air quality from the site is nuisance odour. There is also a potential of nuisance dust being discharged from the operation of the site.
- 91 I am confident that the use of the proposed management and mitigation measures including best practice composting operations will ensure that the effects on sensitive off-site receptors will be less than minor.



**Andrew Curtis**

6 November 2024