

In The Matter of the Resource Management Act 1991 ("the Act") And
In The Matter Rolleston Plan Change 81/82

SUMMARY STATEMENT – SOLID WASTE MANAGER

Introduction

1. My name is Andrew Gareth Boyd, I am the Solid Waste Manager at Selwyn District Council. I have over 21 years experience in the waste and material recovery sector. I have prepared a Statement of Evidence as the Selwyn District Council's Solid Waste Manager with respect to Plan Change 81/82. My qualifications and experience are set out in that statement in more detail.
2. I have considered the plan change application in relation to the reverse sensitivity effects on the operations at the Pines Resource Recovery Park ('Recovery Park'). Because of the proximity to the Recovery Park, my statement focuses solely on PC82.
3. I have read all submissions, statements and evidence provided that relate to the Recovery Park. This summary statement is based on what the applicant submitted as part of their application (referencing the PC73 application proposed setback), as well as responding to some of the points within the Statements of Evidence from the applicant's odour consultants Donovan Van Kekem and John Iseli.
4. The following paragraphs summarise my observations and conclusions.

Key points

5. The intensification of dwellings proposed under PC82 will significantly increase the number of potentially sensitive receptors near the Recovery Park, and therefore the likelihood of complaints. I am principally concerned that future complaints do not lead to constraints on the operation of this significant infrastructure for Council.
6. These facilities (Recovery Park and Waste Water Plant) and are key components for a healthy and well functioning community, processing the district's most unpleasant and odorous wastes: our refuse, our putrescible food and garden organic waste and human and trade wastewater. The Recovery Park is the District's **only** site consented to take general waste, and hazardous waste, and the only composting operation consented to take household kerbside food scraps.
7. Council strategically located the Recovery Park where it is, alongside the Wastewater Plant, specifically because the future housing development of Rolleston was planned to be South of the township.
8. Council has invested very significant amounts of ratepayer funding into infrastructure at the Recovery Park (estimated Asset value of \$15M after current developments, with a further \$5M planned) and the

Pines Waste Water Plant (Current asset value exceeding \$100M). Extensive further development and investment by Council is planned or is already underway at both sites.

9. Selwyn is the fastest growing district in the Country. The pressure on these critical assets in terms of volumes is growing rapidly. We've seen a 24% increase in organic waste tonnes in the last year compared to the year prior. Organic tonnes are projected to increase from the 10,000 tonne per annum now, up to 53,000 tonnes by 2044.
10. Waste (and organic matter in waste particularly) is a significant contributor to climate change. In order to meet our obligations under the Zero Carbon Amendment Bill, as well as the Waste Minimisation Act 2008 we will need to divert additional organic (food and garden) waste from the refuse. This facility's ability to receive and process these wastes is absolutely key to meeting our legislative obligations.
11. There are many examples of conflicts between existing facilities and encroachment by new developments – whether it be odour, dust or noise. I noted some examples of these in my Officer Comments document dated 11 August 2022. While it can be argued some of these were breaching their consents, the crux of the matter in cases like the Gelita factory, is that the district plan allowed a retail and hospitality complex to be developed in very close proximity to a heavy industrial zoned site, thereby introducing more sensitive receptors to the industrial area.
12. The flow-on effects of reverse sensitivity issues would be significant increased costs associated with mitigating effects, the potential for Council to have to look at relocating the site or no longer being able to accept the district's kerbside, commercial and public organic material for composting. In terms of mitigation methods, the types of technologies to mitigate would be very similar to Living Earth's current site. But that facility is being forced to relocate – so we may also be unable to mitigate the effects and be forced to relocate also, should PC82 proceed as proposed.
13. Living Earth in Bromley, which uses an advanced indoor forced aeration composting method with biofilters for odour, is being forced to move at incredible expense to the ratepayers. Many of the complaints forcing Living Earth to relocate, came from beyond 600m. Odour is so subjective, and individuals become sensitised to it. With enough 'noise' eventually the issue becomes political, and the pressure mounts on compliance officers to find breaches.
14. The latest example is Te Mata Mushrooms near Havelock North. Last week they announced it was closing the plant, which had operated since 1967, because it was no longer being fit for purpose and **due to "pressures caused by urban encroachment"**.
15. There is an opportunity to err on the side of caution and to not do the same here, so that when people look back on this in 5 or 10 years, they don't shake their heads wondering how residential development was allowed to proceed to the extent that it is currently proposed, so close to the Recovery Park. The District has a population of about 70,000 people now and expects a population of 112,000 people by 2044, we need this critical infrastructure protected to ensure we can provide for these residents.

16. We already have restrictions around turning in certain wind directions and conditions. Using wind rose data, **this effectively means that we should avoid turning windrows 51% of the time between 7am-4pm.** If you add in inclement weather and breakdowns/staff issues, that doesn't leave a lot of time to compost effectively. One week of rain and unfavourable wind directions (not uncommon) and we risk anaerobic conditions by being unable to turn the windrows. The closer the houses get, the more restrictive our operations have to be. This limits our ability to be flexible for future changes in the waste sector.
17. The applicant's air quality consultant Ms Nieuwenhuijsen (for PC73 – noting this was relied on in the application for PC82) was initially comfortable to use and cite the Victoria and South Australian EPA guidelines to guide their odour setback distance when the compost volumes were at an assumed 4200 tonnes per annum, and it was assumed that we were at capacity. When it was pointed out that the site was consented to receive 53,000 tonnes, Ms Nieuwenhuijsen maintained that 600m setback was still appropriate. I have concerns that the guidelines were relied on as being appropriate to apply when the volumes assumed were incorrect, but were not then applied when the correct consented volumes were taken into account.
18. All of the Australian EPA setback guidance provided and relied upon above, recommend setback distances of greater than 1000m. With the Victoria EPA recommending a separation distance of greater than 2000m.

Types of feedstock	Technology being used	Size of the plant	Recommended separation distance (metres)
Green wastes	Open air receival Open turned windrow Open air maturation	1,200 tonnes per annum	>600
		14,000 tonnes per annum	>1,100
		36,000 tonnes per annum	>2,000
		50,000 tonnes per annum	>2,000

Where a greater separation distance is not possible, the design should be upgraded or other controls applied to meet the separation distance available. For example, for reference facility 1 it might be assessed that the highest risk of odour is the open air receival and that if an enclosed receival area was developed the recommended separation distance could be reduced.

(Environment Protection Authority Victoria, Designing, Constructing and Operating Compost Facilities, (2017), 9)

19. The applicant's air quality consultants' opinions are that there is low potential for adverse effects and that a 600m setback is considered to be reasonable. The air quality consultants engaged by the applicant contend that with the odour and dust management plan controls put in place under the air discharge consent at the Recovery Park, that the EPA setback distance recommendations can be reduced. However the controls within the odour and dust management plan are quite standard for composting facilities, with nothing unusually prescriptive in the Recovery Park's document. On that basis I disagree that the separation setback should be reduced from the EPA recommendations on the basis of the odour and dust management plan controls.

20. A larger setback than the 600m proposed, is required to safeguard the future operation and expansion of these critical community infrastructure assets. One would question - why risk it? Once the dwellings are built, it will be too late. We've seen numerous examples of this across the country.

Response to odour consultant's comments

21. In paragraph 62 when discussing the potential for increase in adverse nuisance odour effects, Mr Van Kekem states that the compost feedstocks are "lower risk". This is not the case – referring to the guidelines – composting processes receiving food waste are classified as medium to high risk.
22. Mr Van Kekem in paragraph 61 refers to guideline separation distances – but uses the range of 300m – 2000m. It's important to look at this in context. A separation distance of 300m is for a site only receiving a between 20 and 200 tonnes, not our 53,000 consented tonnes. The 2000m distance is for annual volumes of over 50,000 tonnes – of greenwaste, not of higher risk food waste and greenwaste. In the table Mr Van Kekem presents on page 12, table 2, all composting facilities with volumes remotely close to our consented volumes specify nothing less than a 1000m setback, and the Victoria EPA with 2000m.
23. Paragraph 128 *"Based on the information I reviewed at the time of consenting there had been less than 10 odour complaints relating to Intelligro's composting operation and none of these had been verified by CRC. Several field odour survey programs undertaken by two separate air quality consultancies have determined that odour from the composting operation does not extend beyond 200 m from the Intelligro operation"*. That may be, but there have still been 19 complaints lodged with ECan about the site over the last 2 years. The experts put forward their opinions from limited snap shots in time. The reality is the site gets complaints, and it's a matter of time before they result in some form of action by the regional council.
24. Other examples provided in paragraphs 129 to 139 are either from covered aerated static pile composting systems quite different to that of the Recovery Park, or are at sites processing very different feedstocks. I note there has not been any information accompanying the example given, in terms of the number of odour complaints those sites have attracted.
25. I agree with Mr Van Kekem's statement in paragraph 175: *"Therefore, I consider that the proposed rezoning of PC82 and PC81 will change the sensitivity of the land from 'low' to 'high' as defined in the MfE GPG Odour"*.
26. Mr Van Kekem discusses a 'community survey' (Paragraph 179): *"whilst the community survey identified some residents which could smell odour beyond 600 m on occasion (albeit infrequently and generally at low intensities), I am not aware of the activities which were occurring on-site during these instances"*. Yes some residents already notice the smell even though there are almost no current neighbours, and the ones that are there, are on rural blocks. Under PC82 having potentially several

thousand new urban homes there (should it achieve MDRS) will exacerbate the number of residents noting the odour exponentially.

27. Paragraph 182 *"The results of the odour scout survey indicate that the furthest extent of the odour plume is approximately 350 m from the existing PRRP composting operations"*. In my view, the value and relevance of the odour scout survey is very limited to this argument. The reasons for this are: it is a very small snap shot in time. Current volumes are less than 20% of consented volumes. We are in the low season when volumes are 40% of peak season tonnes, consequently there was little activity onsite.

28. I also note the following:

- Mr Van Kekem acknowledges in paragraph 62 that "static windrow composting is a higher risk composting methodology". This, and the nature of operations at the PRRP, with food scraps deemed medium to high risk under the guidelines, are not consistent with Mr Van Kekem's conclusion that there are *"reduced potential for odour emissions from the PRRP composting operation as compared with other composting operations"*.

- The pine trees located between the composting operation and the nearest areas of PC82, cannot be relied upon to disperse odours because in future they will have to be harvested.

- I do not consider 18% of the time to be a low proportion, in relation to winds which blow towards PC82.

- One of the sources of the odour complaints at Living Earth is from the maturation area. This supports my view that the setback distance should apply from the boundary of this area.

- Both Mr Iseli (paragraph 24) and Mr Van Kekem (paragraph 200) make mention of the lack of complaints about the Recovery Park composting facility. This reflects the low number of neighbouring dwellings, and those that are there are rural in nature.

29. In my view the site specific assessment and community survey of residents at some of the surrounding rural properties provides little or no support for a lower setback. The properties are all rural (less sensitive), and all except for two are at distances of greater than 600m. The community survey confirmed that odours were detected, despite being in winter at our low season in terms of tonnage, and at only fraction of our consented volumes.

30. Paragraph 208 The air quality experts agree that the use of published separation distances is an appropriate method for determining the potential for reverse sensitivity effects on an existing industrial air pollutant emitter. It would be logical in my view to start from the greatest setback (2000m as per Victoria EPA) and use the site specific evidence, odour scout surveys etc to work back towards the Recovery Park, to arrive at an appropriate setback.

31. While the applicants air quality consultants consider that the current proposed setback should be sufficient, the risk is that if they are not sufficient, the district ratepayers will be left to carry the cost of the encroachment of urban development on this critical infrastructure. There are other examples I have noted earlier where conflicting developments have occurred, during the consenting process air quality consultants would have been engaged and where reverse sensitivity effects of the type that I am concerned about have arisen, regardless of this advice. Envirofert in Tuakau is a site with similar material types and maximum consented volumes. Mr Van Kekem/The NZ Air assessment supporting the Envirofert application for air discharge consent also considered that a 1,000-metre separation distance was appropriate for the operation. Despite this and considerable expense associated with capital and process improvements onsite, the site has still attracted 12 odour complaints in the past 2 years. Some of which are beyond 1km from the compost operation.
32. I contend that in the case of these critical council assets with a value exceeding \$115m (and growing), processing the most odourous wastes for residents, and being a facility with very high projected volume growth in the coming years, we need more assurance than “reasonable” or “low potential”. We need to be cautious.
33. While I accept that an odour setback of 2000m may be less realistic in this case, a minimum of 1000m would be more appropriate and acceptable, if taken from the boundary of the mature compost area.
34. I note the Commissioners’ Decision on PC73 was declined, in significant part as a result of concerns about reverse sensitivity.

Conclusions

35. The odour setback distance of 600m currently proposed is insufficient for a new urban development, conflicts with accepted setback guidelines for new developments, risks constraining Recovery Park operations, limiting future flexibility and would likely add considerable expense (millions), by way of mitigation measures at this important council facility. Ultimately these mitigation measures may not be sufficient – as in the case of Living Earth.
36. A minimum 1000m odour setback with no building permitted, would be more appropriate and acceptable, measured from the boundary of the mature compost area.

Dated: 13 September 2022