

Community Liaison Group

15 February 2022, 6:30pm

Venue: Online

Welcome to the Community Liaison Group, a community forum to discuss consent compliance for the Organics Processing Plant; discharging contaminants to air, discharging contaminants to water and use of land to store organic matter and decaying organic matter.

Agenda

- Welcome and introductions (5 minutes)
- Michael Croucher of Christchurch City Council to provide an update on the Waste Water Treatment Plant fire (15 minutes)
- Confirm previous meeting's minutes (5 minutes)
- Questions arising from the reports of Environment Canterbury and Living Earth (30 minutes)
- Update on the Organics Processing Plant Transition Plan (15 minutes)
- A discussion about consent compliance for the Organics Processing Plant (15 minutes)
- Concluding remarks (5 minutes)

Attachments

- Environment Canterbury Community Liaison Group report
- Living Earth Community Liaison Group report

Any questions or feedback following the meeting can be sent to Bromley@ccc.govt.nz

Bromley Community Liaison Group Minutes

Minutes

16 November 2021, 6:30pm

Venue: Environment Canterbury, 200 Tuam Street, Christchurch Central City, Christchurch 8011

Facilitator: Ian Whitehouse (Whit)

Presenters: Christchurch City Council (CCC) – Jane Davis, Helen Beaumont, Vincie Billante, Ross Trotter and David McArdle

Environment Canterbury (ECan): Ruth Sarson, Marty Mortiaux and Nicole Mosshall

Living Earth: Jaco Kleinhans

Bromley Residents: Andy Walker, Vickie Walker, Margaret Macpherson, Michael Williams, Bruce King and Carol Anderson.

Other: Yani Johanson (Councillor for Linwood) and Nicole Moshall (ECan Councillor)

Minutes: Nichola Ainslie

Apologies: Janet Stokes, Councillor Cotter and Geoffrey King

Present: Action – Collect details of who is present at the beginning of the next meeting

Introductions and Welcome

- The facilitator welcomed everyone and reminded the group to remain respectful, ensuring that only one person speaking is at a time.
- Permission for recording of the meeting was then confirmed with all those in attendance.

Purpose and structure of Meeting

- The community gave approval for the meeting and recording to continue.
- The facilitator re-outlined the purpose of the meeting.

Helen Beaumont of CCC gave an update and referred to a diagram on the whiteboard of the workings and damage to the Waste Water plant since the fire on 1 November 2021.

Helen explained that the wastewater pump has more than one treatment process in it so the loss of the trickling filters doesn't mean that the waste water cannot be treated.

The Primary sedimentation tanks are still operating along with the sludge digesters. The liquid on the top was going to the two trickling filters and this was the part of the plant where the fire started. The

fire started on the roof, and when the roof collapsed the air handling system which they share and it is thought this caused the fire to push through to the second. Secondary contact tanks which do much the same job as the trickling filters but not as efficiently.

It was also explained that in terms of what has changed with these not working no longer working, for the first two or three days after the fire there were a few issues which was rectified quickly, however there are odour omissions from a few places, however residents can smell more smoke than sewerage.

There is now a chemical dosing plant, which is allowing more material into the digesters which will take around two to three weeks to work its way through. There has also been another dosing plant added to assist the ponds which means they are slowly recovering.

Question from residents

- Q) **Community Question:** How long will the sewerage smell be around?
- A) **Helen:** Damage assessment is being done and further repairs being carried out to improve things, however still unable to get inside as yet to see how bad the damage is and until the assessment is complete it is impossible to say, although things are moving as quickly as they possibly can.
- Q) **Community Question:** If mostly contained, why is the smell so bad?
- A) **Helen:** This is due to the clarifiers being open, but they are being worked on.
- Q) **Community Question:** Has raw sewerage signs been put on the beach in New Brighton?
- A) **Helen:** No, as no change in composition of the effluent and no changes have been seen. There are 6 ponds with a lot of mixing going on in there and the effluent is much the same and no expectations of change.
- Q) **Community Question:** Concerned chemical intake (headaches etc.) it is a concern that as the smell is so bad that there may be a possibility that breathing in the chemicals coming from the smell and also the burning plastic from the fire could have an adverse effect on the residents.
- A) **ECan:** Ruth Sarson replied that there has been monitoring done but this is more to do with the smoke and dust. There was a request put out in the days following the fire for anyone that could measure toxicity as this is hard to measure and outside expertise is required for this. The CDHB have put out some advice to say that if you feel ill or nauseas to stay inside and speak with your doctor.
- Q) **Community Question:** How much confidence is there that the odours can be mitigated and processes put in place due to the damage of the structures and not being able to function correctly?
- A) **Helen:** A recovery plan is being put together for the plant at the moment along with a couple of sets of engineers to discuss what alternative treatment processes can be put in place on top of rebuilding the ventilation system and getting it back to the Bio Filters. It was discussed that the ventilation system should be in by Christmas, however guarantee all cannot smell gone by then.

- Q) **Community Question:** Where is the bulk of the smell coming from and what is being done to notify the residents in the surrounding areas?
- A) **Helen:** The smell is coming from the screening building as this is the first part of the process. There has been a series of news line releases and also going through FB and there are discussions with communications people regarding a leaflet drop.
- Q) **Community Question:** Is it possible to use the Emergency Alert text system to make residents aware of the potential health risks due to toxicity levels?
- A) It was discussed that is a Civil Defence system and is only used in emergencies. It was also discussed that this would be taken on board as it was a good idea it could possibly be used in the future but it would need to be discussed with FENZ as they control the site.

It was discussed that a communications meeting is being held on Thursday 18 November 2021 and then more information would be available. It was noted that Christchurch City Council website has a really good diagram that explains how this all works.

It was noted that representatives of each group were listed on the previous meeting minutes except for the residents. And it has been noted to include residents in future minutes.

Ruth discussed the ECAN Report and went over the key things on the report. Firstly there were a total of 16 incidents reported through this reporting period. This is done by counting all the smelt it complaints coming in through the app and adding them together for the one day. This is a reduction over this period although this was through winter which usually does bring a reduction in reports.

There were 7 assessments carried out during this time, however during lockdown assessments had been suspended.

1 Notice of non-compliance issued in August and a comparison was added for the same time last year where there were between 200 to 250 reports for the month and this has dropped dramatically this year.

- Q) **Community Question:** Smelt It doesn't seem to register the address or the map.
- A) It was advised Smelt It was put together for the Bromley Auto-pilot in March last year and was put together quickly for a short period of time. It is not perfect and a number of people do use it, however, it was advised if problems are experienced then let someone know and it can be looked into.
- Q) **Community Question:** 5 calls were made by one member of the community group in one day over the weekend after the fire regarding the smell and noticed new categories had been added, however heard nothing back.
- A) **ECAN:** It was noted that there is a huge increase of people using the app and using Smelt It. For this reason a few categories were added regarding the fire and the smell of sewerage from the wastewater treatment plant in order that it could be narrowed down to which issues were being reported. This then helps with the response and the impact that it is having on the community.
- Q) **Community Question:** It was asked how many incidents were reported and how many were not attended and is there anything ECAN can do to improve the response?

- A) **ECan:** It was advised that there were 60 incidents reported and 7 site visits were made over this period, a lot of which were after hours. In the last 2 months 2 weekly proactive monitoring has commenced by officers along with responding to reports along with employing a new staff member who has been out on training.

It was also discussed that it is frustration during both lockdown periods that there was no response to reports, however due to the government mandate it was not possible to attend as ECAN was not recognised as an essential service during this time.

Living Earth Report

The Living Earth Report was referred to and explained.

Dust (c25)

It was explained by Jaco Kleinhans that there are two deposition gauges offsite and one downwind from the Bromley site and they have reported a reduction in the dust during the last part of this period.

The dust report was independently reviewed by OPP although Fulton Hogan will do the sampling and put the figures together on a monthly basis which is reported to the council and also independently reviewed.

Boundary plantings (c25)

With regards to the boundary plantings, it was discussed that the containers were moved and all planting has been done.

Odour (c27/c14)

It was confirmed that minimising the odour on site is still top priority and is part of the transitional plan for the requirements with the council.

Transitional Plan

With regards to the Transitional Plan it is understood there is a Bio Weekly report going out to the community and a lot of the information being discussed will be on part of that report.

The stockpiles of material (screened compost) has been moved off site and around one week of material is being kept on site that goes to the customers and from mid-November all material will go from the tunnels, to the screen and then offsite.

- Q) **Community Question:** Where is the material going to be located now?
- A) **Living Earth:** Wastewater Treatment Plant have piles that you can see are not coming from our site and is WWTP own processors and material.
- Q) **Community Question:** Is there more material being moved at night as the odour coming over in the evening is very strong.
- A) **Living Earth:** Jaco Kleinhans explained there is work in the tunnels at night but not moving material. Sometimes they turn a row, but this is reducing drastically.
- Q) **Community Question:** If this is the case, why is the smell worse at night than during the day?

- A) **Living Earth:** There is a lot more operation on site, not specifically at night, but certainly during the day.
- Q) **Community Question:** Resource Consent says – during the operation clearing out the tunnels and there is a strong odour it should be moved back to the tunnels. How often does this happened in the last couple of months?
- A) **Living Earth:** In the building itself the doors are closed and there is a ventilation system. If there is a product in there that has a strong smell during this process then it just goes from one tunnel to the other in the. If the product goes outside and the technical staff fix it up that product is returned for processing.
- Q) **Community Question:** How many times has the compost been returned back to the tunnels in the last couple of months?
- A) **Living Earth:** There was one incident as lockdown hit and this caused it to sit outside 1 to 2 days then put back in tunnel?
- Q) **Community Question:** Is the probiotic helping with the stability?
- A) **Living Earth:** Yes, it is helping and you can see the difference between the older rows that do not have any and the new ones that do.
- Q) **Community Question:** Is there someone monitoring the compost in the tunnels that are being brought out?
- A) **Living Earth:** Odour Assessments are being carried out on site by around 6 certified staff who go around all the windrows and record. There is also a technologist and a technician onsite that specifically carries out the odour assessment on a day to day basis.
- Q) **Community Question:** Before relocation of windrows has anyone spoken to residents advising them of the process in any way.
- A) **Living Earth:** Transitional plan is out in the public and the neighbours in the local vicinity are aware.

Several Windrows goes through screen then trucked and moved.

How much odour from the relocation – Is it someone else's problem?

Commercial sales and farmland

- Q) **Community Question:** If 90% of the odour was coming from windrow and it has now been reduced by 50% and according to what was being said the least smelly stuff has been taken away and the more smelly stuff has been there for around 6 months now, why are the smells so excessive. Is it coming from the Bio Filter as has been asked previously and can we get something done about it?
- A) **CCC -** By elimination there is a thought it is not B filter but with the removal of the remaining W/R, and there is still an issue with odour, then it could possibly be an issue with the B/Filter. At this point we have had multiple checks by the regulatory authorities and they don't believe this is the source. Come the end of December beginning January all the windrows should be gone so that will help prove or dismiss this.

Point 14: Odour and Bateman Papers

Point 27: Transitional plan in place to comply

Q) **Councillor for Linwood:** Yani Johanson referred to last year BDP Report on the dust and queried how many exceedances of dust since consent and can it be circulated again with ECan report?

A) **Living Earth:** Jaco Kleinhans explained there have been no formal complaints to the complaint line. There was quite a few but the report is tied up to the ECan Report and can be circulated once finished.

There was a discussion around **Section 33** in the **Living Earth Report** with regards to dust and how many complaints had come through. It is thought there may be an issue with reports coming through the complaint line and Ruth Sarson from ECAN advised she will look into this for the next meeting.

Q) **Councillor for Linwood:** Yani Johanson asked how many Incidents exceeded trigger level.

A) **Living Earth:** Complaints received 1

It was agreed that incidents should be included in the report to give the community the information.

Action: Incidents to be included in next report.

It has been agreed that as the dust issue has consistently been raised it would be useful to give the community an understanding of how many exceedances there have been and have this included in the next report.

Q) **Councillor for Linwood:** Yani Johanson asked if Living Earth is compliant with the consent or in breach of the consent, and if in breach then what does this mean.

A) **Living Earth:** At this time it is not compliant, however this is why there is a transitional plan in place, to get back to compliance with a deadline of 31 January 2022.

The community members thanked Living Earth for presenting the report and for answering all the questions asked.

Q) **Community question:** How confident is Living Earth that they will be able to comply by 31 January 2022?

A) **Living Earth:** The main focus for Living Earth is to make the required changes on how the plant is operating and make the area clean.

For Christchurch City Council, Ross Trotter explained that the council is committing a lot of resource in investigating a new location for the site, where there is currently a project manager appointed who is dedicated to the investigation along with a steering group from the council from numerous departments who meet on a fortnightly basis to discuss and look at the options available to them. As well as this group there is a working group made up 3 councillors, who the council also meet with fortnightly for updates with the process.

Ross also advised there has been a consultancy company (Jacobs) appointed, who have been tasked with the independent assessment of the options and there will be multi-criteria assessment which will include things such as the location, technology, fully enclosed operations along with the feedstock etc.

With regards to unsolicited proposals, where companies and organisations approach the council with ideas that they would like considered, the council has now requested an OIA so that this opens things up to the wider business community or organisations who may have an interest in providing a solution.

This then allows us to get as much input as possible to get the best result and this work will be Completed by mid-February for consideration by the councillors in early March.

Q) **Community question:** At this time, what specifically will be provided to the council?

A) **CCC:** There will be options as to what has come out of this process and what is a viable option going forward and this will be for the elected members to decide how they would like to progress.

Q) **Community question:** Are the concepts going to be socialised with the community before it goes to the council?

A) **CCC:** Ross Trotter explained that any information that is possible to share, will be.

Councillor for Linwood Yani Johanson queried that if extra budget submissions are made then Council will have to consult part of its annual plan as there will be an opportunity for people to make submissions and it and make sure and it is important to have options that the community might want. It is important for elected members have responsibility to ensure that as much information is given to the public in order that they can give feedback.

Q) **Community question:** Is there a shortlist of option on where the plant might go?

A) **CCC:** Ross explained that the property team have been working with a number of options Council would like to consider, however this is not something that can be put in the public domain at the moment but it is something that will go in for consideration.

Q) **Community Question:** Has there been a discussion with the possibility of using rail for bulk shipping?

A) **CCC:** Nothing is being ruled out at this moment as transport is a huge consideration. The carbon footprint will be also considered.

Q) **Community Question:** Still looking at future option for where and what the organics processing plant is going to be?

A) **CCC:** This work is still ongoing and will be completed by early March.

Q) **Community Question:** How long is it expected after this decision has been made for action to be taken?

A) **CCC:** Ross explained that this will depend on which option is selected and have no time frames at this time.

Q) **Community Question:** If after 31/01/2022 notices are being served every other day, what happens then?

A) **CCC:** It is not intended to have material outside and it is understood from the regulatory body that this is where the odour is generated and the turning of the windrows and the operation that has existed since the plant opened.

It was requested that ECan consider ways of how to enforce compliance after hours and on holidays, as this is where the community feels frustrated due to no response to their concerns.

ECan explained that when the Smelt it app was initiated it was for the Bromley Odour Pilot and this allowed the option of contact to be made to discuss concerns, however this was changed around 7 months ago with a pop up advising that monitoring is only active in Bromley and Timaru.

ECan discussed that the format of the Community Liaison Group was initially put in place when the consent started as a forum for the community to talk about Living Earth and when then when Bromley over pilot was done last year it was widened to the Bromley Liaison Group mainly to discuss the other odours around the area. The question was asked on the thoughts on reconsidering changing the format back to the original and if this is the case considering where future meetings will be held.

It was discussed that it would be an idea to have any future meetings at the Bromley Community Centre and that a chairperson would be required to be in place, who would be neutral and impartial.

Q) **Community question:** Would it still be possible to discuss other issues other than just Living Earth?

A) **CCC:** Vincie Billante explained that the Terms of reference would require to be changed as they were put in place specifically for this consent, but there are other options via the community board.

It was suggested that the group remains the way it is at the moment and once the issues outstanding have been dealt with then it can be looked at changing things. It was suggested by Vincie that if a major event happens then you can request for invites to go to anyone required.

In closing the meeting ECan explained that they need to prove beyond reasonable doubt where the dust is coming from and they assured the community group that they are fully committed and advised to make any reports directly to ECan.

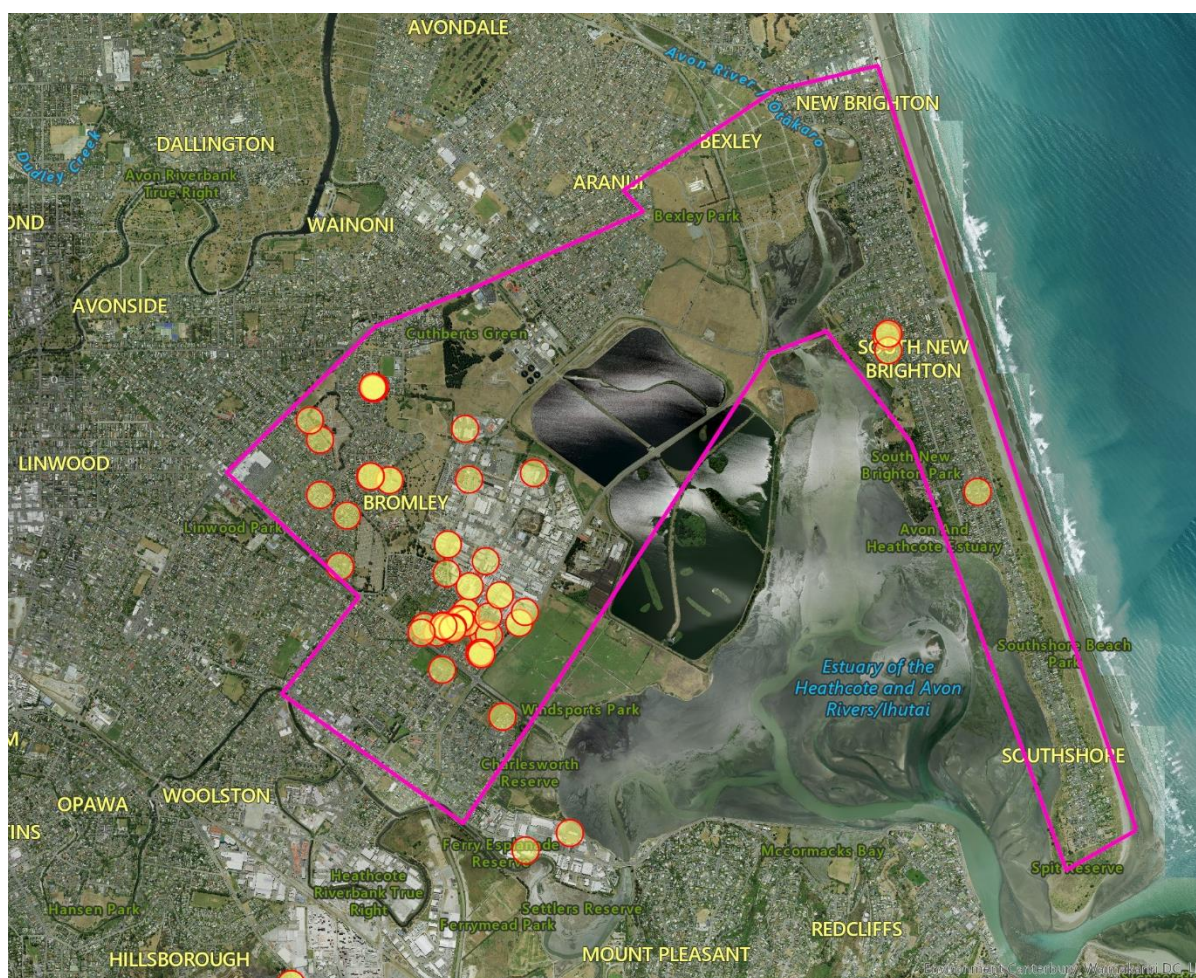
It was also suggested that at the next meeting that there could be a discussion around a new reporting system dealing with the dust similar to what is happening in Halswell.

Environment Canterbury Odour and Dust Report November 2021 – January 2022

(Prepared for the Community Liaison Group meeting 15 February 2022)

Bromley Reporting Area

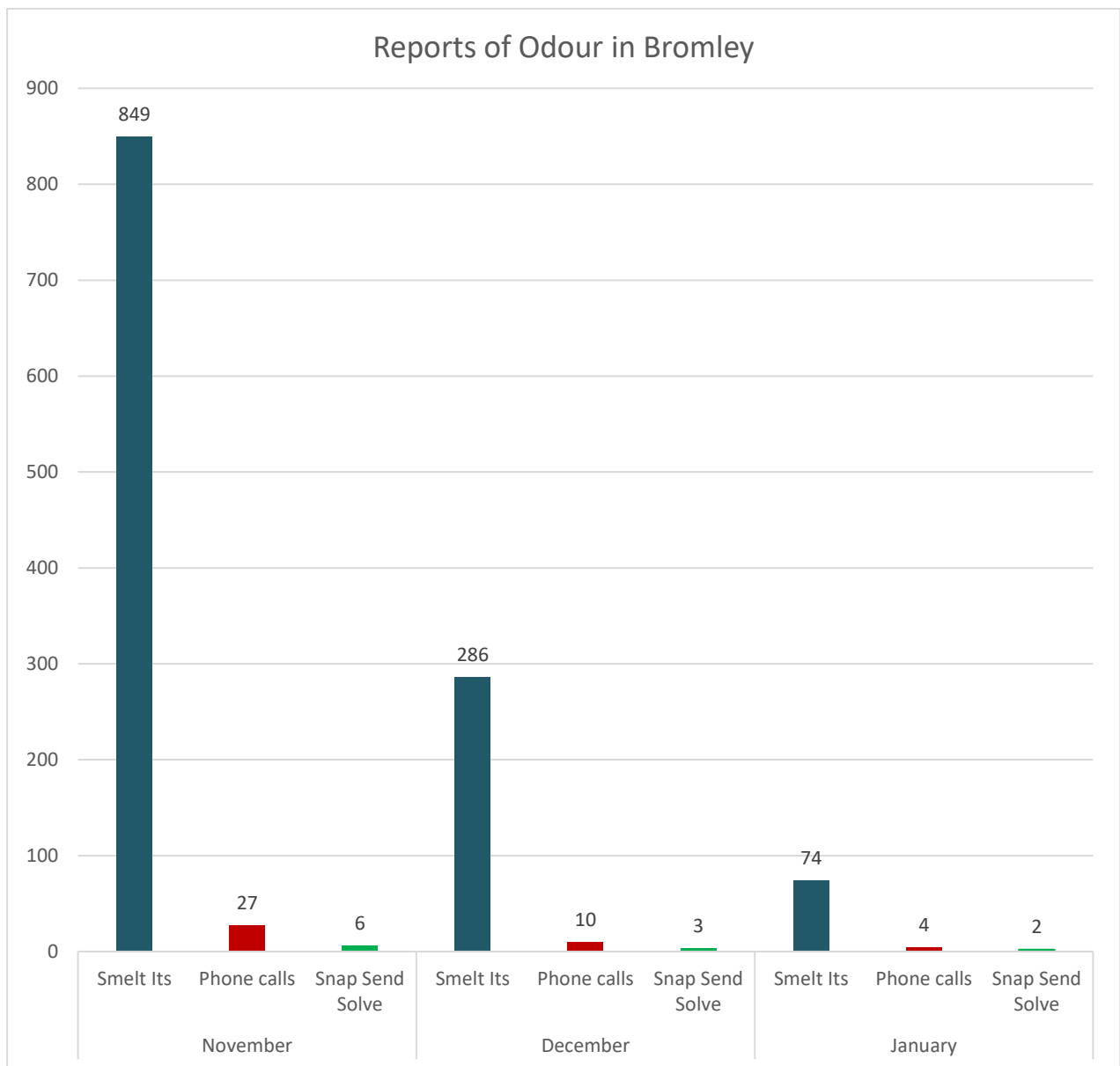
The data used in this report relates to incidents received within the Bromley pilot area, as outlined by the purple area in the map below. For consistency of reporting, only Smelt Its within the purple boundary are considered, with the exception being circumstances where officers substantiated odour from Bromley outside of the specified area.



Reactive Odour Monitoring

A total of 118 incidents were logged with Environment Canterbury during the reporting period for Bromley. A large proportion of incidents are now reported using Smelt It. As Smelt It does not ask the submitter where the odour is confirming from, Smelt Its are not “assigned” to a business. However, an odour from Living Earth may be attributed to it. We recognise that some submitters choose to add where they think the odour is coming from in the comments field of the app.

Note: There may be multiple Smelt Its assigned to one incident for administration purposes.



We noticed immediately a substantial increase in the number of Smelt It submissions following the devastating fire at the Christchurch City Council (CCC) operated Wastewater Treatment Plant (WWTP) on 5 November 2021. The following day, we made some changes to the Smelt it app to make it clearer whether submitters were noticing odour resulting from the fire or from Living Earth. These changes were cancelled shortly after as we attempted to get the community to contact CCC directly about the fire and odour effects rather than using the app.

This decision was made as it was becoming increasingly difficult for us to administer and respond to complaints about Living Earth due to the increase in submissions on the app relating to WWTP.

Note: we do not respond to complaints about odour resulting from the WWTP fire currently.

During the reporting period, 15 assessments were carried out by warranted officers in Bromley. Of those assessments, no Notices of Non-Compliance (NONC) were issued.

Proactive Odour Monitoring

From 10 November last year, we started conducting proactive monitoring of Bromley as CCC made changes to the operation of the plant and spreading of compost near the treatment ponds. This was started so we can monitor any impacts of these changes.

We completed 10 proactive monitoring assessments during this reporting period. Of those 10 assessments, our officers confirmed odour from Living Earth on 2 occasions and 2 NONCs were issued.

The below table shows the results of the assessments where we confirmed odour from Living Earth that was considered offensive and objectionable beyond the property boundary.

	November 2021	December 2021	January 2022
Living Earth	0 NONCs	2 NONCs	0 NONCs
Other sites	0	0	0

NONC – Notice of Non-Compliance A warranted officer confirmed the source of the odour and that it was offensive and objectionable beyond the boundary of the site, by completing an odour assessment (including a 360 appraisal) at the site or site boundary in accordance with Ministry for the Environment guidelines.

Dust

Reports of Dust in the Bromley Area:

During this reporting period, we did not receive any reports of dust in the Bromley area.



Living Earth
CLG Report – 15 February 2022
Organics Processing Plant

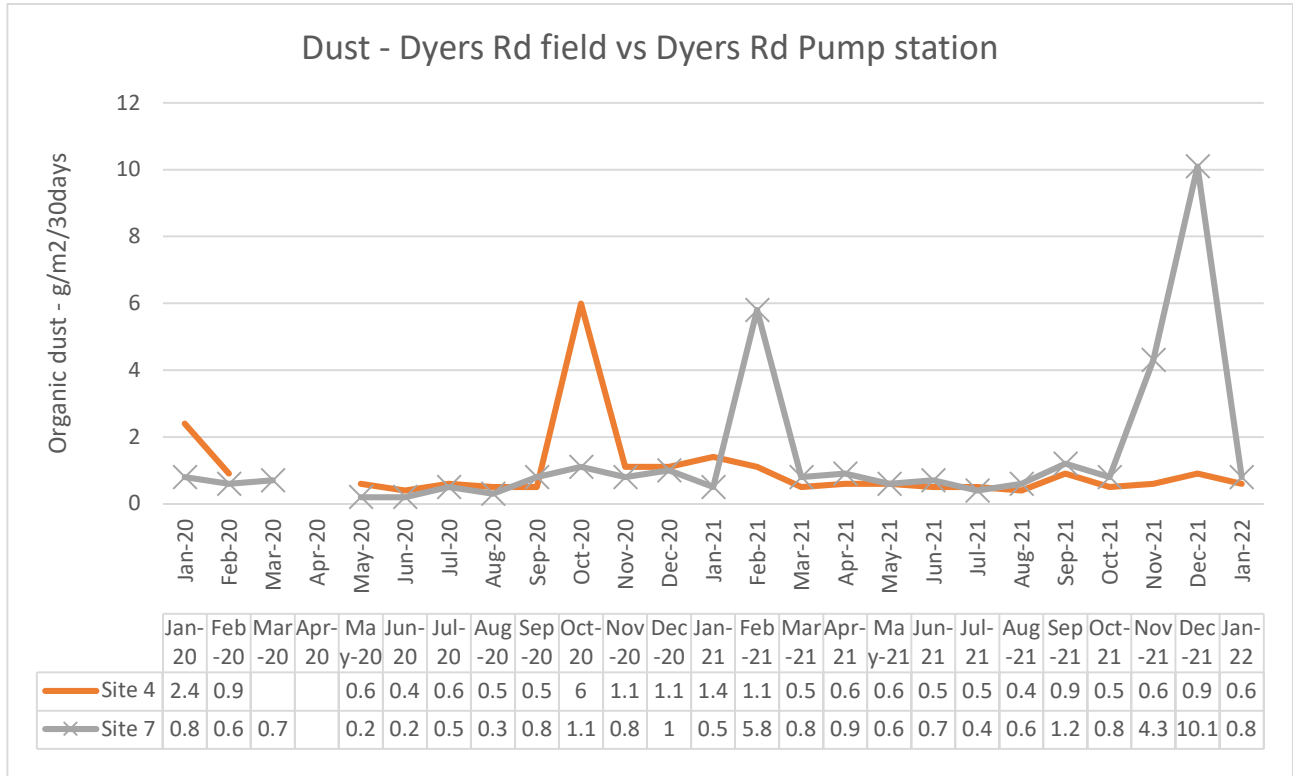
October 2021 – February 2022

Prepared by: Jaco Kleinhans
8 February 2021

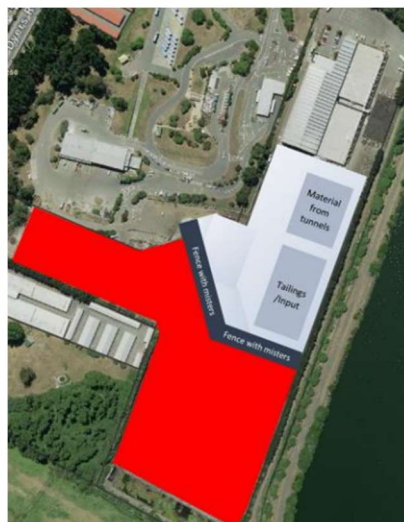
The consent conditions of CRC 080301.1 are detailed in this report and comments provided on current status. Key matters are discussed below:

Dust (c25)

We have two deposition gauges located close to Dyers Road. One is situated in a field North of Metro Place (upwind of the organics plant) and the other in at the old pump station near the end of Maces Road (downwind of the organics plant and near the residential Bromley area).



The formation of an open clear area in red below will have an impact on the dusts deposition gauges and the changes will be monitored over the coming months.



Boundary plantings (c25)

The small (<10m) section of our boundary where trees were needed to be replanted has been done.

Clear buffer zone created on site.

Odour (c27/ c14)

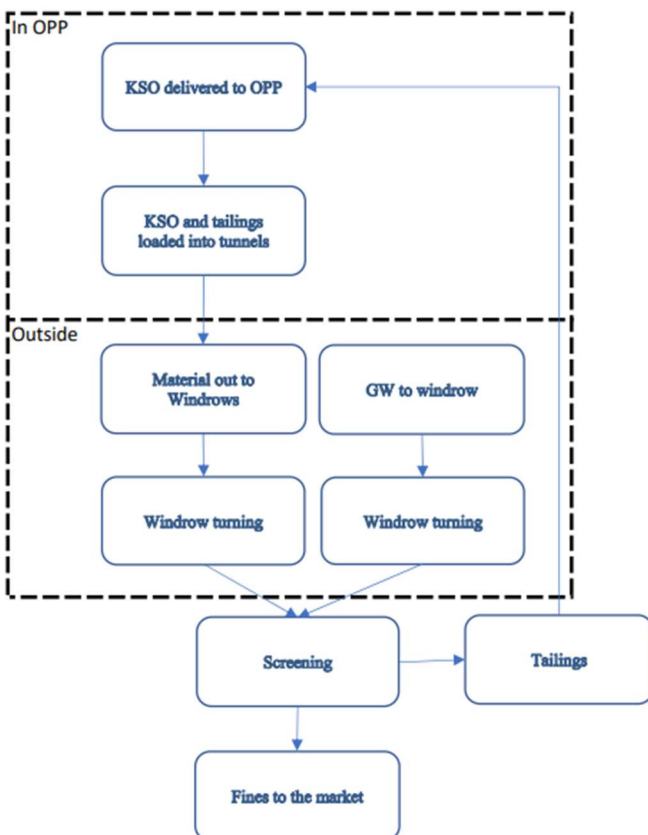
Managing on site odour remains a priority with significant changes made to the onsite processes.

Transition Plan

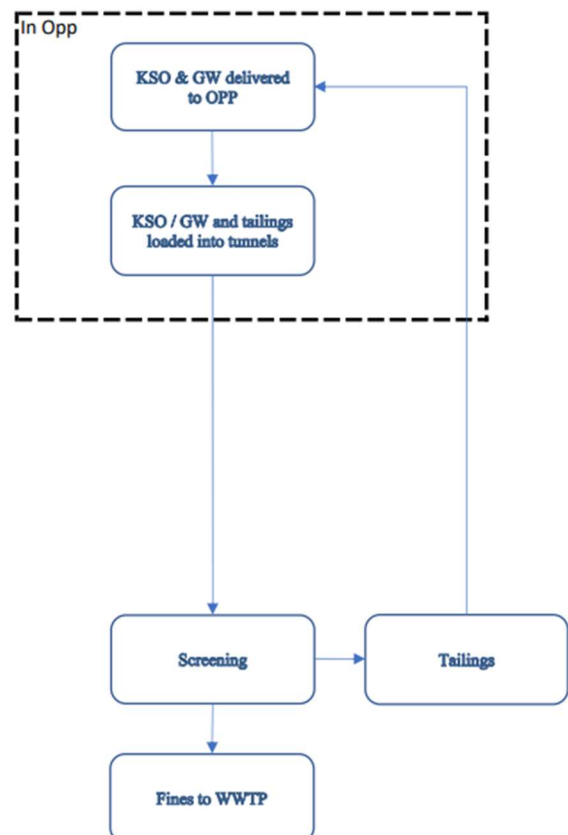
To minimise the environmental impacts of the OPP leading up to the redevelopment the following tasks are being undertaken:

1. All compost stockpiles moved off site. This was piles of material that was already screened and ready to go to market.
2. All KSO windrows was cleared. In the old process material was removed from the tunnels and placed in windrows where it was monitored and regularly turned. This used to be done towards the bottom of the site, the area that has now been cleared.
3. All material from the tunnels is screened, the fines is moved off site and the larger tailings is brought back into the OPP for reprocessing. no material is put into windrows anymore.

Old process



New Process





RMA Authorisation Number: **CRC 080301.1**

Description		Compliance (Y/N)	Findings Comments & Problems
1	The discharges shall be only odour and dust from an organics processing plant and green waste composting facility located at 40 Metro Place, Bromley, Christchurch at map reference NZMS 260 M35: 8627-4087 and indicated as "Applicant's Site" on plan CRC080301A attached as part of this consent.	Yes	No discharge except odour and dust occurs from the facility other than storm and wastewater that are covered under different consents.
2	The organics processing plant shall process not more than 90,000 tonnes of organic material per year.	Yes	Plant operates under the set limit.
3	The discharges of odour and dust shall only occur from the following sources: <ul style="list-style-type: none"> a. From construction activities associated with the establishment of the organics processing plant; b. From an odour extraction system on the process building that discharges to air via biofilters; c. From composting of organic material in managed windrows; and d. From screening, blending, packaging and stockpiling of matured compost. 	Yes	<ul style="list-style-type: none"> a) n/a during this period b) Activity undertaken during this period c) Outdoor windrow process stopped 15 Nov 2021. d) Activity undertaken during this period
Construction of Organics Processing Plant			
4	The consent holder shall provide to the Canterbury Regional Council a Construction Management Plan to be submitted for approval before commencement of the works on site that includes but is not limited to the following requirements: <ul style="list-style-type: none"> a. Regular watering of dusty surfaces during dry windy conditions; b. Restricting traffic speed within the site to less than 15 kilometres per hour; c. Covering loads of excavated soil whenever visible dust occurs from this source; d. Locating stockpiles in areas that are less likely to be affected by prevailing winds and at least 50 metres from boundaries; and e. Stabilisation of exposed areas as soon as possible after work is completed. 	Yes	No construction during this period
Organics Processing Plant			
5	The consent holder shall provide to the satisfaction of the Canterbury Regional Council a Facilities Operation Manual before operating the organics processing plant.	Yes	A copy was provided in 2012 as required under the consent.
6	The material processed shall only include the following: <ul style="list-style-type: none"> a. Green waste; b. Food waste; and c. River weed. 	Yes	No other items accepted.
7	Organic waste containing putrescible material {food waste} shall be processed in a tunnel compost system contained within the process building.	Yes	All kerbside organics and foodwaste collection vehicles are emptied inside the processing hall and processed

			in the tunnels.
8	Organic waste not containing putrescible material may be composted in managed windrows.	Yes	This is only material that does not contain food waste
	Tunnel Compost System		
9	The tunnel compost system shall consist of a process building, outdoor uncovered windrows and screening and stockpiling.	Yes	No more windrows processing on site.
10	The process building shall: <ul style="list-style-type: none"> a. House all receiving, shredding and blending of organic waste that is to be composted in the tunnel composting process; and b. Be operated under a negative pressure system with all discharges to air being treated via a biofilter. 	Yes	<ul style="list-style-type: none"> a) All receipting, shredding, and blending of materials is completed in the process hall before being loaded into tunnels. b) The negative pressure of the biofilter fan (tunnel exit) is typically maintained at -100Pa and monitored via a computer control system.
11	The incoming organic material shall be placed into the tunnel composting system on a daily basis within 24 hours of receipt.	Yes	This is completed. OPP operates on public holidays in line with the kerbside collection trucks. We are open and processing on all days that collection occurs.
12	The tunnel composting process shall have a duration of not less than seven days, which includes an allowance of up to half a day for tunnel emptying, cleaning and filling. During the tunnel composting process, the temperature of all the compost shall be maintained at greater than 55 degrees Celsius for a minimum of three continuous days or less at higher temperatures, so that pathogen destruction has occurred in compliance with New Zealand Composting Standard NZ4454. At the same time or after the tunnel composting process, the compost shall be aerobically treated for 14 days or longer, during which time the temperature must always be over 40 degrees Celsius and the average temperature must be higher than 45 degrees Celsius.	Yes	During this period typical time was 14 days in tunnel.
13	Records shall be maintained showing compliance with Condition (12). Such records shall be available to Canterbury Regional Council on request.	Yes	Reports recorded via computer control system recording time and temperature.
14	The maturation composting stage shall be an uncovered windrow system that allows the process to meet Condition (27) of this consent.	Yes	No new windrow processing. Existing windrows was cleared during this period.
	Greenwaste Windrow Compost System		
15	Organic wastes not containing putrescibles are to be shredded, blended and formed into windrows within 24 hours of receipt.	Yes	Green waste windrows cleared during this period. All Green waste is processed through the tunnels.
16	Any organic waste which contains putrescible material is to be redirected into the tunnel composting system.	Yes	All Green waste is processed through the tunnels.
17	Not more than 30,000 tonnes per annum of greenwaste shall be composted in full in the outdoors windrows.	Yes	We receive less than this. All Green waste is processed through the tunnels.
18	The uncovered windrows shall meet the following criteria: <ul style="list-style-type: none"> a. The windrow shall be maintained in an aerobic state throughout; and b. The state of the windrows shall be monitored for oxygen, temperature and moisture as follows (and records retained): 	Yes	No new windrow processing. Existing windrows was cleared during this period.

	<ul style="list-style-type: none"> a. Oxygen: Weekly for the first four weeks after the row is constructed and thereafter if the row is suspected of turning anaerobic; b. Temperature: Weekly; c. Moisture Content: Every second day 		
	Odour Extraction System – Organics Processing Plant		
19	The odour extraction system on the process building shall be designed by a person competent in this area of technology to industry best practices.	Yes	n/a during the period
20	The odour extraction system shall be of sufficient capacity to prevent any fugitive discharge of odours from the process building under all operating conditions.	Yes	n/a during the period
21	The discharge shall exhaust via a biofilter with an average loading of not greater than 80 cubic metres of air per hour per cubic metre of bed material	Yes	Biofilter size 20.7m x 42.5m size. Maximum airflow ex fan is 90,000m ³ /hr. If media is > 1.17m deep then 80m ³ /hr/m ³ of media cannot be exceeded. Bed depth typically 1.3 – 1.5m. fan speed typically <90% of max. Fan can be limited in the control system to maximum speed as required. Fan operation measured, controlled, and monitored by computer control system.
22	The odour extraction systems shall operate at all times during processing of raw materials or products.	Yes	Operates 24/7 and monitored but computer system.
23	<p>The bio filters shall be maintained in such a way as to effectively reduce odours from the organics processing plant so Condition (27) is met. This shall include but not be limited to:</p> <ul style="list-style-type: none"> a. Maintaining satisfactory moisture levels in the biofilter. b. Maintaining an appropriate pH range, typically 4 to 8. c. Maintain aerobic conditions at all times. d. Replace the biofilter media at an appropriate time, determined when any of the above operating parameters, odour levels, or, airflow backpressure are unable to be maintained within their operating limits. 	Yes	<ul style="list-style-type: none"> a) Humidifier operates at inlet to the biofilter. Moisture tested January 2022 as 58% b) pH recorded January 2022 as 6.5 c) Oxygen levels >20% d) Back pressure monitored for bed media condition. Media last changed in May 2021.
	Dust Control		
24	<p>The consent holder shall implement the following measures to minimise the generation and discharge of dust:</p> <ul style="list-style-type: none"> a. Use water sprays with any mechanical handling of compost when conditions are likely to generate dust. b. Provide an impervious base to all outdoor composting areas. c. Limit the height and slope of outdoor piles to less than five metres in height. d. Bulk carriers removing material from site shall be covered. e. Use water tankers and/or sprinklers to dampen down areas of heavy vehicle access when wind speed exceeds five metres per second (five minute average) during dry conditions. 	Yes	<ul style="list-style-type: none"> a) Mistors and water trucks are used b) Site is asphalt sealed c) Input piles are under 5m in height d) Bulk loads covered e) Mistors and water trucks are used f) Monitored on site, data reported each minute.

	<p>f. Suspend all product load-out and windrow turning operations during dry conditions when the wind speed measured by the on-site meteorological station, blowing from between 10 degrees and 130 degrees, exceeds 10 metres per second for two consecutive five-minute averages. Recommencement of load-out and windrow turning operations may occur if recorded wind speeds from that sector are less than 10 metres per second for two consecutive five minute averages.</p>		
25	<p>a. Within 12 months of this consent coming into effect the consent holder shall establish and maintain suitable tree windbreaks around all areas where compost is stored.</p> <p>b. Notwithstanding condition 25(a), a further line of tree shelter shall be established along the boundary with Affordable Storage Limited and the boundary with Dogwatch Sanctuary Trust, to fill in gaps in the existing tree shelter plantings where establishment or growth has been poor such that a continuous shelter belt more than 1.8 metres high has not been formed. These additional shelter trees shall be planted within six months of commencement of the change to conditions. All shelter trees shall have a minimum height of 1.8 metres and shall be maintained and irrigated until they reach a height of at least five metres. Any dead, diseased or damaged trees shall be replaced immediately. The trees shall be protected from the prevailing wind during at least the initial three years of establishment of the trees by wind cloth fencing or similar in order to optimise tree growth.</p> <p>c. A plan showing planting and landscaping works to be undertaken to comply with Condition 25(b) shall be prepared by a suitably qualified person and shall be submitted to the Canterbury Regional Council within three months of commencement of the change to conditions.</p>	Yes	Trees was replaced and with the clearing of the windrows the open area is regularly cleaned.
26	On-site vehicle speeds in the outside windrow, compost storage and compost screening areas shall be restricted to not more than 15 kilometres per hour. A sign, capable of being read at a distance of five metres, shall be erected at the main vehicle entrance to the outside storage area to inform all drivers of this requirement.	Yes	Signs in place, all drivers, and contractors inducted with specific mention made of consent compliance.
27	The discharges to air shall not cause odour or dust which is offensive or objectionable beyond the boundary of the site on which this consent is exercised.	No	<p>Notices of non-compliance have been received by Living Earth from Ecan during this period.</p> <p>Transition plan in place.</p>
28	Notwithstanding Conditions 24 and 27, all product load-out, heavy vehicle operation and windrow turning activities shall cease at any time when these activities cause visible suspended particulate matter beyond the western site boundary, including at properties occupied by Affordable Storage Limited, Dogwatch Sanctuary Trust or their successors.	Yes	<p>Monitored daily.</p> <p>New internal barrier installed lined with water cannons and misters.</p>
29	<p>The consent holder shall maintain records of any odour or dust complaints received by the consent holder. These records shall include:</p> <p>a. Location of complainant when odour or dust was detected;</p> <p>b. Date and time of odour or dust detection;</p>	Yes	Complaints made to Ecan are reported by Ecan.

	<ul style="list-style-type: none"> c. Weather conditions, including wind direction, at the composting facility when odour or dust was detected; d. Strength of the odour complained of, assessed on a scale of 1 to 5 by the complainant with the following rating system: 1 odour noticeable but not persistent; 2 odour clear and persistent; 3 odour unpleasant and persistent; 4 odour strong, offensive and persistent; 5 odour very strong and offensive. e. The amount of dust complained of, assessed on a description of the visible quantities and extent of dust deposits on a scale of 1 to 5 by the complainant with the following rating system: 1 noticeable and not extensive; 2 clear and minor coverage; 3 nuisance and moderate coverage; 4 objectionable and extensive coverage; 5 significant extensive deposits, offensive. A description of the appearance of the dust shall also be recorded; f. Any possible cause for the odour or dust complained of; and g. Any corrective action taken. <p>Records demonstrating compliance with the above condition shall be provided to the Canterbury Regional Council on request and shall be summarised as part of the Annual Environmental Report required under Condition 36.</p>		
	Monitoring		
30	<p>The consent holder shall undertake site-boundary odour assessments at least once per day, in a manner consistent with Work Instruction WI30 Issue 6, dated 1 September 2010, submitted with the application, or an equivalent later document. These assessments shall occur at no fewer than eight locations around the site boundary, including at least one location downwind of the composting tunnels and the maturation windrows. In the event of strong odours being detected, that may create adverse effects beyond the site boundary, then the consent holder shall take all practicable efforts to mitigate the odour using measures that may include the use of masking agents, capping the source, and returning odorous material to the tunnels. Records shall be kept that include the date and time of the assessment, meteorological parameters at the time, odour descriptions and odour intensities at each monitoring location. Staff members responsible for these assessments shall have calibrated noses, determined by suitably qualified persons at an accredited laboratory. These staff members shall be recalibrated for odour sensitivity at least once every three years.</p>	Yes	<p>Completed.</p> <p>New staff will be send for the calibration process once the Covid traffic light levels change in Auckland allows.</p>
31	<p>The consent holder shall, prior to unloading a tunnel, undertake an odour assessment of the compost material, in a manner consistent with Work Instruction WI4 Issue 6, dated 1 September 2010, submitted with the application, or an equivalent later document. In the event of strong odours being detected, that may create adverse effects beyond the site boundary, then the consent holder shall return the assessed material to the tunnel and shall not empty the tunnel until it has been determined that the material is no longer odorous to the point where it may create an adverse effect beyond the site boundary. Staff members responsible for these assessments shall have calibrated noses, determined by suitably qualified persons at an accredited laboratory. These staff members shall be recalibrated for odour sensitivity at least once every three years.</p>	Yes	<p>Odour assessments are completed on a continuous basis when tunnels are being emptied.</p>

32	<p>a. At all times during exercise of this consent, wind speed and wind direction shall be measured by an anemometer established on the site.</p> <p>b. The anemometer shall be installed at a height of at least five metres above ground level at a location free from any obstruction that has potential to significantly affect wind flow.</p> <p>c. Wind speed resolution of measurement shall be not more than 0.1 metres per second and wind speed accuracy of measurement shall be at least within +/-0.2 metres per second.</p> <p>d. The anemometer shall be established, located and operated to the satisfaction of the Canterbury Regional Council.</p> <p>e. Wind speed and direction shall be continuously recorded with an averaging time for each parameter of not more than five minutes.</p> <p>f. These data shall be:</p> <p>(i) recorded using an electronic data logging system; and</p> <p>(ii) provided to the Canterbury Regional Council upon request.</p>	Yes	Weather station located on site.
33	<p>a. Dust deposition monitoring shall occur in at least two dust gauges sited near to the boundary with Affordable Storage Limited or successor and the boundary with Dogwatch Sanctuary Trust or successor and at least one further control dust gauge. The location of the dust deposition gauges shall be determined by a suitably qualified person and shall be provided in writing to the Canterbury Regional Council. The method of monitoring shall be ISO DIS-4222.2 or a similar method to the satisfaction of the Canterbury Regional Council. Samples shall be collected monthly and the monitoring results shall be included and summarised in the Annual Environmental Report required under Condition 36.</p> <p>b. Dust control measures shall be implemented to maintain the rate of dust deposition at the consent holder's boundary, measured in accordance with Condition 33(a), at less than 4g/m²/30 days above the background concentration measured at the control site. Any exceedance of this trigger level shall be reported to the Canterbury Regional Council, including the likely reasons for exceedance and any remedial action undertaken.</p>	Yes	A Total of eight dust gauges are used as controls (2), onsite (3) and offsite (3). Offsite gauges are in the immediate neighboring properties and these are used to monitor compliance against this consent.
	Management Plan		
34	<p>(a) The consent holder shall prepare and implement an Environmental Management Plan (EMP) that addresses the control of discharges to air from the site.</p> <p>(b) The EMP shall be prepared and provided to the Canterbury Regional Council: attention: RMA Compliance and Enforcement Manager, within three months of the granting of this consent variation and within one month of the completion of annual reviews.</p> <p>(c) The EMP shall be reviewed annually.</p> <p>(d) The EMP and any revisions shall include all measures necessary to achieve compliance with the conditions of this consent.</p> <p>(e) The EMP shall include, but not be limited to:</p> <p>a. A description of the dust and odour sources on site;</p> <p>b. The methods to be used for controlling dust and odour at each source;</p>	Yes	Independent review of the EMP completed in 2020.

	<ul style="list-style-type: none"> c. A description of consent and monitoring requirements; d. A system of training for employees and contractors to make them aware of the requirements of the EMP; and e. Identifying staff responsible for implementing and reviewing the EMP. 		
	Community Liaison Group		
35	<ul style="list-style-type: none"> a. Within one month of the commencement of the change of conditions, the consent holder shall invite local residents and interested people to attend a meeting to establish a Community Liaison Group. The invitation to attend and establish a Community Liaison Group shall be extended to include: <ul style="list-style-type: none"> (i) all property owners and occupiers with boundaries adjoining, or but for the presence of roads, with boundaries immediately next to the site; and (ii) all parties who made a submission on the application to change consent conditions. b. A representative of the consent holder shall attend all meetings of the Community Liaison Group. The Canterbury Regional Council shall be invited to send a representative to attend all meetings. c. The consent holder shall ensure that members of the Community Liaison Group are provided with the opportunity and facilities to meet at least once every three months. d. The main purposes of the Community Liaison Group shall be to: <ul style="list-style-type: none"> a. Identify and address any adverse effects of discharges to air from the site, including possible remedial action; and b. Discuss the results of all monitoring and reporting required under this consent. 	Yes	Ongoing CLG meetings held as required, including this meeting.
	Reporting		
36	The consent holder shall, no later than the 30 th of June of each year, provide an Annual Environmental Report to the Canterbury Regional Council setting out all monitoring and reporting results required by conditions of consent and their interpretation by an appropriately qualified person, including dust deposition monitoring and complaints recording undertaken in relation to this consent over the previous period. Where the result of any test or monitoring undertaken in relation to this consent exceeds the relevant limit/trigger level or does not comply with the relevant condition, then the steps that were taken to rectify the non-compliance shall be specified.	Yes	Annual report provided to Ecan.
	Administration		
37	This consent shall not be exercised concurrently with CRC930514.	Yes	
38	<p>The Canterbury Regional Council may annually, on or about the last working day of March each year, 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 the consent; or 	Yes	OPP upgrade options being considered

	<ul style="list-style-type: none">b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; orc. Complying with the requirements of an operative regional plan.		
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