

## Organics Processing Plant Community Liaison Group Meeting Minutes

16 November 2021, 6:30pm

Venue: Microsoft Teams Meeting

Facilitator - Carl Pascoe

Christchurch City Council (CCC) - Lynette Ellis, Ross Trotter, David McArdle, Michael Croucher, Yani Johanson (Councillor for Linwood)

Environment Canterbury (ECan) – Ruth Sarson, Marty Mortiaux, Judith Earl-Goulet, Nicole Marshall (ECan Councillor)

Living Earth – Jaco Kleinhans

Bromley Residents – Andy Walker, Vickie Walker, Bruce King, Carol Anderson, Geoff Hemm, Geoffrey King, Alexandra.

Minutes - Nichola Ainslie

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

Apologies - Janet Stokes, Councillor Cotter

### **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.

Michael Croucher of Christchurch City Council gave a presentation which he also shared of the workings and recovery efforts to the Wastewater Treatment Plant since the fire on 1 November 2021.

Overview of process pre-fire - The primary process of the treatment plant is to remove organic matter from the incoming waste and breakdown the nutrients that are contained in the wastewater and the plant uses a combination of physical and biological processes to do this. Michael referred to the diagram to explain.

- **Screens** - The effluent wastewater goes through the screens which removes any inorganic matter.

- **Grit Removal** – Grit removal removes any sands or silts that gets in there as this can damage the pumps.
- **Sedimentation Tanks** - The sedimentation tank allows any large or dense organic matter to sink to the bottom and once it has sunk to the bottom it is removed and moved on to the digesters.
- **Digesters** – The digesters cook the bio matter that comes out in various stages and dries and then that material is used for land remediation.
- **Trickling Plant** - The rest of the wastewater then flows from the sedimentation tank, then goes through the trickling filters which contain 24000 cubic meters of plastic media which is coated in a micro sludge, so the effluent is sprinkled over that and sludge and that eats away at the nutrients within the wastewater. As the sludge feeds off the nutrients, it grows and some of it slides off and drops to the bottom of the trickling filters along with the effluent that trickles down.
- **Aeration Tanks** – The aeration tanks continue the process of allowing the sludge to digest the nutrients by creating an aerobic environment, where bubbles come up from the bottom of the tanks aerating the water and suspending the sludge that is sledged of the trickling filters and it continues feeding on the nutrients.
- **Clarifiers** – There are four clarifiers, and those clarifiers allow the sludge to settle and once the sludge has settled to the bottom it is pulled off the clarifiers, some of which is used to reseed the biological process and the rest goes off to digestors and is cooked, dried off and then turned into bio-solids and sent off to land remediation works.
- **Oxidation Ponds** – Is where the polishing of the wastewater takes place, and this is done by the sun as the UV radiation of the sun neutralises any remaining pathogens that may be remaining in the water and from then it is pumped to the ocean outfall pipe, and it's delivered several kilometres offshore.

The whole process of wastewater from when it enters the plant to when it reaches the outfall pipe is around 20 days.

The damage that was caused in November was serious to the trickling filters, so much so that they were rendered inoperative and taken offline. The trickling filters were responsible for removing about 60% of the nutrient load and they are a key component of the biological process in the plant. The efficient removal of the nutrients early on in the treatment process is critical for the management of odour and during the fire, runoff from the burn filtered down passing through the aeration tanks, clarifiers and out into the ponds so the oxygen depleted run off killed the sludge which effectively terminated the biological processing ability of the plant and created some issues in the oxidation ponds which allowed significant odour to be produced.

The Council's initial response after the fire was to isolate the trickling filters to begin with as they were unusable, and this was done by installing a temporary overland by-pass that takes effluent from the sedimentation tanks straight through to the aeration tanks. Poli-dosing was then introduced to the sedimentation tanks as it clumps together and encourages clumping together of any other heavy or dense organics and helps settle it to the bottom to get rid of any of the biomass within the wastewater.

The dead sludge was also removed from the activation tanks it was just sitting at the bottom and rotting and stopping the biological process from restarting. To restart the biological process some sludge was shipped in from Lyttleton wastewater treatment plant and because it was a biological process, it is slow to regrow and takes time to settle in and do its job again. The

aeration was maximised within the aeration tanks, where there would normally be two blowers going with two of the four tanks being utilised but now utilising all four tanks with the three blowers going 24/7.

Hydrogen peroxide was also being added to the outfall of the oxidation ponds which breaks down into water and oxygen and the purpose of doing this was to improve the quality of the water within the ponds going forward.

The initial response enabled the plant to comply with its consent conditions in terms of outfall it didn't do much to reduce the odour issues and are very aware of the odour issues. The Interim plan which is kicking in now should address those issues significantly.

The interim plan is to convert two of the four clarifiers into aeration basins which will increase sludge contact time with the wastewater and the increased time will substitute the treatment that was provided by the trickling filters. In order to do this, there are going to be four aerators in each of the two clarifiers. The other two clarifiers have been emptied out and maintained to make sure they are in good running order.

Components of the aerators have been ordered from various places around the world and have started arriving on site and the intention is that the aerators will be in place to an operable state by the end of March and operating by early April. It will take time for the sludge to adjust and take its place, but it's expected that once the system is up and operating within several weeks there should be a reduction in smell.

The long term solution is dependent on the findings of the damage assessment, once the investigation is complete a decision can be made whether the trickling filters will be repaired, rebuilt or replaced and be looking at whether there are other technologies out there if it goes down the path of replacement. It is expected to be around three years before a selected option is in place and operating and the council is already investigating various long-term solution options around repair, rebuild or replace and nothing included in the draft remedial action plan which will be submitted to ECAN further down the line once there is some certainty around what path will be taken and the final draft will be prepared by consultants.

Michael confirmed that the council is aware of the problems with odour and the effect it is having on people's lives and are doing everything possible to control and reduce the levels of odour coming from the plant and thanked the community for their understanding and patience.

- Q) **Vickie Walker - Community:** Is hydrogen peroxide no longer being used?
- A) **Michael Croucher of CCC:** Still being used and will continue to be used until the aerators and clarifiers are up and running and the clarifier conversion.
- Q) **Vickie Walker - Community:** What can the Council promise the community and when, and is further building going to stop?
- A) **Michael Croucher of CCC:** The interim plan are the aerators and clarifiers and are confident it will work and allow the plant to meet conditions and provide significant reduction in omissions. As a result of trying to substitute trickle filters will be 100% capacity.
- Q) **Bruce King- Community:** Why wasn't second sewerage plant in Halswell not built and why in the last two and half months has nothing been done inside the filters?

- A) **Michael Croucher of CCC:** Will get the answer to the first question and come back at a later date and until the damage assessment is finished not much can be done as we may cause more damage that may not be covered for by insurance.

**Observation by Bruce King** – The lack of action has lost time.

Michael noted that they are not as sturdy as they look, and it may be that a robotic digger possibly has to go in.

#### **Discussion around previous meeting minutes**

It was requested by Geoffrey King that the meeting minutes are back for review within 10 working days of the meeting.

It was requested by Bruce King that the minutes have the name of the community member asking the question represented in the minutes.

Bruce King requested that the next meeting not be taken up by the oxidation plant

Ross Trotter noted that it was discussed at the last meeting to have the wider content but happy to go with the community's request.

Ross Trotter also discussed that the meeting minutes can be released earlier however the timeframe for reports may be longer and would have to follow.

Environment Canterbury and Living Earth advised that reports will be available one week prior to next meeting.

- Q) **Councillor Johanson:** Questioned that, at the previous meeting it was requested that the PdP Report, which is an annual report on the dust monitoring be circulated and this was not made clear in the minutes and asked that it can be noted.
- A) **Ross Trotter of CCC:** Confirmed that this would be noted and that the report would be circulated

#### **Discussion around Environment Canterbury & Living Earth Reports**

**Bruce King** from the community discussed that Environment Canterbury reported a vast reduction of people reporting the odour and he believes there is confusion around people who have not lived in the area long cannot differentiate between the two plants, although when Bruce is walking his dog, he can tell the difference from the smell from the oxidation plant and the smells from Living Earth Plant.

- Q) **Geoffrey King - Community:** Advised that in a 90-day period he made 54 reports, although the reports don't show this. The windrows were moved but the smell is still bad and if they have been moved why is the smell still there?
- Q) **Andy Walker - Community:** Commented that he has not really noticed odour from the OPP recently, but has from the wastewater treatment plant. Explained that he has complained about the wastewater treatment plant through the SmeltIt app but the Bromley Facebook page said not to use SmeltIt for the wastewater treatment plant, but to call ECan. Asked for the app to be modified so it can be used for the wastewater treatment plant.

- A) **Ruth Sarson of ECan:** Smelt it App from the ECan Report, there has been a big rise in reports on Smelt It with regards to the wastewater treatment plant when that happened in November. The initial response when the reports were coming through made it difficult to see what was specifically to do with Living Earth. When Smelt It was set to deal with that issue and not to become an avenue for reporting on all kinds of odour, however it is recognised that it has become a very effective reporting tool for people and there have been discussions at Environment Canterbury over the last year or two about what is done with regards to Smelt It, however it is not as easy as just changing it to incorporate other odours, there is a lot more to it. There is a lot of admin and cost that goes into changing it and the decision was made that the Smelt It app would be for people to report odours from the Living Earth Plant and the preference to keep it that way.
- Q) **Vickie Walker – Community:** Why does it have faecal matter on the list then?
- A) **Ruth Sarson of ECan:** That option has always been there since it began in 2018/2019 when it was being trialled and they are based on the Ministry for the Environment guidelines for odour assessments.

**Geoffrey King** - Noted that the Smelt It App! Doesn't work its quicker to call the call centre and report with them.

- Q) **Bruce King - Community:** Does reporting stop on 31 January?
- A) **Ruth Sarson of ECan:** Yes, this reporting period was November to January and February, March and April will be next meeting
- Q) **Councillor Johanson:** a) What are ECan actively doing to inform people on how to lodge complaints if the odour is a problem. Is there a programme of informing people to keep complaining now that the abatement notice has now expired to have people aware of what to do? b) At the last meeting there was a discussion around the Halswell dust issue and that a trial is being conducted around community mapping and would you consider doing something similar to that?
- A) **Ruth Sarson of ECan:** With regards to actively promoting Smelt It, No and the reason being that it is specific issues in Bromley and Northern Timaru and the concern would be that if it was made more available there would be people all over Christchurch and Canterbury using Smelt It to report odours which would make it more difficult to deal with particular issues in Bromley. With regards to the issues to the dust, it might be that we had a Dust It App that was being trialled.
- Q) **Councillor Johanson:** What should people do to make a complaint and what happens now?
- A) **Marty Mortiaux:** ECanis not upping communication to encourage people to report something that might not be occurring, the communication that is going out at the moment is to carry on as it is, so if smell odour you go through Smelt It or through the hotline. It is not being encouraged for people to report for the sake of it. With regards to what's happening next it is still being evaluated.

Q) **Councillor Johanson:** How many exceedances of the consent limit were there for dust for this period?

A) **Ruth Sarson of ECan:** This information is not to hand as it's not usually discussed at the CLG. As part of the report ECan provide how many complaints have been received around dust and there have been none this reporting period.

**Councillor Johanson** - Thought it might be good to have record of the dust exceedances in terms of the consent limits to be recorded in each report and put this out to the community group.

Q) **Vickie Walker - Community:** Asked if a report of the exceedances would be circulated as this would be a good thing.

A) **Ruth Sarson of ECan:** Agreed to do this.

Q) **Bruce King - Community:** Rang up and reported dust, house is Omaru stone and had been cleaned recently and it now needs done again due to the dust.

A) **Ruth Sarson of ECan:** It is difficult to prove that the dust is coming from one particular site but note the concerns and will have more through reporting and next CLG.

**Geoffrey King** - Confirmed that he has the same issue as Bruce with the dust on his roof and in the gutters. It has been brushed and cleaned and then within the month its back and would like something done about it.

Q) **Bruce King - Community:** There should be no smell or dust over the boundary, but it is there every day. As the Living Earth report about the dust it shows, a great increase over Testing Site 7 over December and January so the dust has been coming over quite considerably and it shows in the report.

A) **Jaco Kleinhans of Living Earth:** Monitoring will be done down at pump station but an excessive amount of movement on site in clearing that specific area round the site but will have a look at that during the PdP independent assessment, but this is the area we have cleared down bottom at pond. Not surprised due to this but should get better moving forward.

Q) **Andy Walker - Community:** How much compost is sitting on site?

A) **Jaco Kleinhans of Living Earth:** No compost on site it is tailings which is screened material. Compost not on site anymore, as the material is screened it is now moved off site and this happens on a daily basis. You will see from the aerial photos there are still some tailings, but this will drop of moving forward.

Q) **Andy Walker - Community:** What do tailings comprise of?

A) **Jaco Kleinhans of Living Earth:** Tailings are larger material - greens, sticks and larger material.

**Ross Trotter of CCC:** Tailings are then used as part of processing for the kerb side material, what comes in green bins, and we need something with more porosity to make the new batch of compost. There are more than normal due to the grass coming in with the growth this year. There is more than we would like but 31,000 tonnes has been removed so far.

More potential of dust because over that period due to the large amount of material going out, but no stock will be held on site apart from what needs to go out for new process until decision on facility.

**Geoffrey King:** When will we find out about the future of the facility?

- Q) **Geoffrey King - Community:** The windrows have been lifted but stench is still there, can you advise the source of the stench and when will it be fixed? Is it coming from the Bio Filter?
- A) **Jaco Kleinhans of Living Earth:** The windrows were fully screened, and all material moved off site so that process no longer happens but cannot comment on the odour, although working close with ECAN and independent service providers to assess after the process changes have been made.
- A) **Ruth Sarson of ECan:** Useful to know Ruth, David, Jaco and gentleman from Paddle Delamare Partners all met in Bromley between 10am and 11am to assess the odour in line with Ministry of Environment guidelines and can agree from the meeting this morning that that is the case.

**Jaco Kleinhans of Living Earth:** Agreed that he experienced very weak odour intermittently all working closely together to fix this but cannot comment on what Geoffrey is smelling, however meetings with ECan are to find this out.

**Bruce King - Community** - Noted that when he was dumping green waste, there were tailings three to four metres and the smell was coming from the tailings. If it is still the same formulation as originally, it has a toxicity to it. Toxic chemicals, dust and pathogens are being breathed in.

- Q) **Vickie Walker - Community:** At the last meeting probiotics was mentioned, is this happening?
- A) **Jaco Kleinhans of Living Earth:** Advised that yes probiotics are being used and having good results and plan is to keep feeding into system. Goes into the waste before it goes into tunnels.
- Q) **Councillor Johanson:** Noted that if it is looked at what's happened over the last couple of months, things are being done and attempts are being made to fix the issue, although it doesn't justify noncompliance at the moment. It would be good to get some sense of what people think is causing the odour. Is it possible to get something circulated around the noncompliance? There are expectations for things to improve and there must be some idea of what's causing the odour.

- A) **Marty Mortiaux of ECan:** People do smell things differently and there are different odour sources on the site and Marty was on site with the purpose of making sure the wind rows were gone and look at the tailings. Whilst Marty was there, he witnessed one of the trucks being loaded with the screened material and Jaco, told him at the time the misters that were going at the time was in order to keep the dust levels down while the trucks were being loaded and while he was on site there was minimal dust being discharge through the loading process. While walking around the site there were no whiff of odour until slightly downwind from the tailings, different conditions and different people's experiences. Marty advised that he also walked past the Bio Filter and there was a smell but when you were about 5 meters away the smell was gone.

**Geoffrey King – Community** - Advised not to stand on top of Bio Filter due to past experiences, but this is where the smell is worst.

**David McArdle of CCC** - Advised that the Council is still working towards same timeline of presenting the Elected Members on 10<sup>th</sup> March 2022. The previous information has been given that the Council is looking at options for the Organics Processing Plant by either redeveloping the existing site or exploring other sites and alternate technologies. The Council has received the first incomplete draft report from Jacobs the independent consultant that has been engaged for the project and it is expected that the first draft be sent to the Council tomorrow. The information is confidential at the moment but when we present the Elected Members and then we should have decision and then we can provide more information.

- Q) **Geoffrey King – Community:** Since this was first announced the council have had 16 months, what has happened in this time?
- A) **David McArdle of CCC:** In this time, tenders have gone out and offers have been received and this will all go into the Jacob's report where they assess those tenders.
- Q) **Geoffrey King – Community:** The present site in the middle of residential site should not be there and it needs to be moved, has another site been found?
- A) **David McArdle – CCC:** - Reiterated his previous answer and confirmed that all options will be looked at and will have more of an idea around the 10March 2022.

**Ruth Sarson of ECan:** With regards to consent compliance regarding the format moving forward it was understood at last meeting to go back to Community Liasion Group format. It is suggested that if the community wish to discuss other odours in Bromley, then this could be done in a different forum.

- Q) **Vickie Walker – Community:** The community would still like to be updated on the wastewater as questions locally and it is good to have an answer to take back to people.
- A) **Ruth Sarson of ECan:** It was suggested that a discussion be had with Christchurch City Council as to how the Council and the community have a forum for this to be discussed but for this to be separate from the consent condition requirements that Living Earth have these quarterly meetings.



- Q) **Bruce King – Community:** Asked if the meeting on 10 March is an open public meeting or public excluded meeting?
- A) **Councillor Johanson:** This meeting may have community sensitive information but wants public to have as much information as possible but does not want to jeopardise any opportunities to get the site or the budget but will, put as much in the public arena as possible.
- Q) **Bruce King – Community:** Will it be possible to have a copy of the content so input can be given?
- A) **Councillor Johanson:** Will have to speak with other staff and colleagues regarding the content of the report, around sensitive information and the last thing we want is not being able to get the best outcome for the local community. Council is working very hard to get a better more permanent solution for something that is clearly a problem.
- Q) **Vickie Walker – Community:** Had a question regarding Tracey Clennon Local MP, regarding a letter received asking Vickie and Andy to sign petition to move the composting plant and not sure where she stands in this?
- A) **Councillor Johanson:** Is not sure but should be aware of what the council is doing and should be on the circulation list for these meetings.

**Bruce King – Community:** Advised that he has spoken to Tracey Clennon and she will be at the meeting on 10 March as she is presenting.

Close of Meeting

### Actions

- Community Liaison Group is going to be focused on the Living Earth, and the wider issues will not be part of this group, but information updates will be given around the waste water treatment plant. Which goes back to the original Terms of reference for this group.
- **Carl Pascoe – Chair:** Is happy to continue to chair if everyone is happy, although Geoffrey King would like a discussion and vote around this.
- **Ross Trotter of CCC:** Advised that it can take time to find a chair for meetings and to advise what the outcome is ASAP with a decision.
- PdP Report to be circulated.
- Minutes to note names of community members.
- ECan report on dust to be provided.