

**Finance and Performance Committee
MINUTES ATTACHMENTS**

Date: Thursday 28 April 2022
Time: 9.30am
Venue: Via Audio/Visual Link

TABLE OF CONTENTS	PAGE
5.2. Michael Williams	
A. Michael Williams presentation	3
5.6. Don Gould	
A. Don Gould presentation	5
7. Christchurch Wastewater Treatment Plant Recovery Update	
A. Staff Presentation Waste Water Treatment Plant Update.....	23
16. ChristchurchNZ Holdings Ltd - Draft Statement of Intent for 2022/23	
A. Item 16 Christchurch NZ.....	36
17. Local Government Funding Agency - Draft Statement of Intent 2022/23 and Shareholder Presentation	
A. Local Government Funding Agency	40

Greetings, my name is Michael Williams, I am a retired Locomotive Engineer and also a relatively new resident in Bromley. Approx. 2 years.

The Organics Composting plant must be relocated. We all understand that the current location is a mistake. Composting at an industrial scale combined with its location and the direction of the prevailing wind will continue to impact adversely on the residents of Bromley.

The odour issue has now been understood for what is safe to say years.

OPPs non-compliance with their resource consent and the indifference shown by Ecan to multiple clear breaches must stand as a bench mark case In regulatory failure.

Why has this situation been allowed to continue for so long.

I digress here.

At the last deputation in regard to this issue I was asked by a councillor why would I move into an area with known air quality issues.

At the time I was incredulous that I should be asked this question.

What I now believe is that in this question is what goes to the heart of the problem which has been for many years the total indifference by a majority of our elected councillors and Ecan.

Since moving into Bromley I have been subjected to what appears to be institutionalised form of snobbery were we in Bromley are treated as second class citizens not deemed worthy of the investment that would enable us to partake of what the citizens of Christchurch take for granted. The right to breath air uncontaminated by this pollution plague. As in many forms of institutionalised behaviour this is often subtle and not always a conscious behaviour.

How else can we explain the high tolerance for this on-going issue?

So what's in a name?

The very name of Bromley is synonymous with sewage. All too often the Christchurch Water Treatment plant is called the Bromley water treatment plant, what other suburb is known by its association to a sewage treatment station and an organics processing plant This I believe has created an inbuilt bias resulting in a level of indifference that would not be accepted any were else in our city.

Just take a minute and think have I been guilty of this, have I subconsciously been influenced by the long standing of association of Bromley as the sewerage suburb of Christchurch. Would I as an elected representative have tolerated this any were else in this city. Has my role in Ecan been affected by this bias. How else can we even begin to explain this total indifference over many years to the stench from the OPP operation?

So today when making the decision that will affect the residents of Bromley in so many ways please take into consideration that, it is very easy to be influenced by subconscious biases, in this case the name of our suburb, Bromley.

I see now that the council has accepted in principal that the OPP needs to be relocated, but in yesterday's Press the headline gives a possible time frame of 6 years. This now leads us to what steps can be taken to continue the work that has already been done to mitigate the odours and ensure the OPP operation meets its resource consents and operates as a good neighbour.

One step that could be taken is the removal of all food waste from the OPP operation. This would in my view significantly assist in this outcome. While food waste being placed in the red bin would come at a cost this would go a long way in reducing the odour from the plant.

With a possible time line of six years continued action is required now.

The residents of Bromley have the right that Ecan and the Christchurch city council will work together to take all possible steps to ensure that our quality of life does not continue to be impacted by the OPP plant.



TREATMENT PLANT REPORT FEEDBACK AND CONCERNS

DON GOULD
28 APRIL 2022



MY MAJOR CONCERNS WITH THE REPORT

- Lacks detail for good governance.
- To high level.
- Doesn't empower the community to support the council in dealing with the infrastructure disaster.
- We have seen Press articles and radio interviews with very frustrated elected members, as well as council meetings with members of the public in tears.
- Members should be considering if a bigger, dedicated team is required.

CONCERNS IN MORE DETAIL

WILDLIFE

I OF 15

- No environmental advisor.

Given the air born wildlife in the area.

Signatories / Ngā Kaiwaitohu

Authors	Michael Croucher - Senior Programme Manager Adrian Seagar - Insurance & Asset Manager Elizabeth Neazor - Manager Legal Service Delivery, Commercial & Property Simon Makker - Senior Communications Advisor Adam Twose - Manager Operations Kurt Scoringe - Senior Health & Safety Advisor Carolyn Gallagher - Programme Director Strategic Support
Approved By	Jane Davis - General Manager Infrastructure, Planning & Regulatory Services



Health effects on humans at various H₂S concentrations ¹⁴

Concentration (ppm)	Symptoms/effects
0.00011-0.00033	- Typical background concentrations
0.01-1.5	- Odour threshold (rotten egg smell is noticeable) - Odour becomes more offensive at 3-5 ppm - Prolonged exposure may cause nausea, tearing of the eyes, headaches or loss of sleep - Airway problems (bronchial constriction) in some asthma patients
2.5	- Possible fatigue - loss of appetite - Headache - Irritability - Poor memory - Irritation - Above 30 ppm, odour described as sweet or sickeningly sweet.
20	- Slight conjunctivitis ("gas eye" or "pink eye") and respiratory tract irritation after 1 hour - May cause digestive upset and loss of appetite.
50-100	- Coughing, eye irritation, loss of smell after 2-15 minutes (olfactory fatigue) - Altered breathing, drowsiness after 15-30 minutes
100	- Throat irritation after 1 hour - Gradual increase in severity of symptoms over several hours - Death may occur after 48 hours.
100-150	- Loss of smell (olfactory fatigue or paralysis)
200-300	- Marked conjunctivitis and respiratory tract irritation after 1 hour - Pulmonary oedema may occur from prolonged exposure.
500-700	- Staggering, collapse in 5 minutes. - Serious damage to the eyes in 30 minutes. - Death after 30-60 minutes.
700-1,000	- Rapid unconsciousness - "knockdown" or immediate collapse within 1 to 2 breaths - Breathing stops - Death within minutes.
1,000-2,000	- Nearly instant death

CONCERNS IN MORE DETAIL COVER

2 OF 15

- Cover considerations seems like a rushed list in response to MP query, with some quite silly considerations.
- It lacks real thought.
- It doesn't consider a scaffolded umbrella, set 1 meter off the top, to provide cover and ventilation.
- We have been told the key issue is keeping the damaged filter media dry

Health effects on humans at various H₂S concentrations ¹²

Concentration (ppm)	Symptoms/effects
0.00011-0.00033	- Typical background concentrations
0.01-1.5	- Odour threshold (rotten egg smell is noticeable)
2-5	- Odour becomes more offensive at 3-5 ppm. - Prolonged exposure may cause nausea, tearing of the eyes, headaches, or loss of sleep. - Airway problems (bronchial constriction) in some asthma patients.
20	- Possible fatigue - Irritability - Above 30 ppm, odour described as sweet or sickeningly sweet. - Loss of appetite - Poor memory - Headache - Dizziness
50-100	- Slight conjunctivitis ("gas eye" or aka pink eye) and respiratory tract irritation after 1 hour. - May cause digestive upset and loss of appetite.
100	- Coughing, eye irritation, loss of smell after 2-15 minutes (olfactory fatigue). - Altered breathing, drowsiness after 15-30 minutes - Throat irritation after 1 hour. - Gradual increase in severity of symptoms over several hours. - Death may occur after 48 hours.
100-150	- Loss of smell (olfactory fatigue or paralysis)
200-300	- Marked conjunctivitis and respiratory tract irritation after 1 hour. - Pulmonary oedema may occur from prolonged exposure.
500-700	- Staggering, collapse in 5 minutes. - Serious damage to the eyes in 30 minutes. - Death after 30-60 minutes.
700-1,000	- Rapid unconsciousness - "Knockdown" or immediate collapse within 1 to 2 breaths - Breathing stops - Death within minutes.
1,000-2,000	- Nearly instant death



Attachment B: Odour Management Options

Option	Description	Notes	Issues	
1	Remove odour from building floor	Use of odour treatment	Odour is not addressed above ground level	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
2	Odour control building floor	Use of odour treatment	Length of time for odour to reach building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
3	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
4	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
5	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater

Option	Description	Notes	Issues	
1	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
2	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
3	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
4	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater
5	Use of odour treatment in the building floor	Use of odour treatment	Use of odour treatment in the building floor is not addressed	Environmental Management Plan required for dealing with odour emissions from the treatment of Trade Wastewater

