

Emily McDowall

From: [REDACTED]
Sent: Friday, 29 January 2016 1:52 pm
To: Blair@interwaste.co.nz
Subject: Interwaste change of conditions

Hi Blair

Thank you for your answer to my enquiry regarding the flow rate through the biofilter and for providing an explanation as to why the flow rate is higher than the condition in your consent allows.

In its current state, having a flow rate over the consented limit is a **technical breach of the consent**.

Given that the Biofilter has been assessed as performing adequately and operating within the Ministry for the Environment recommended residence time of 50 to 100m³(air)/m³(media)/hr³ it would seem that the best option would be to apply for a change of conditions in your consent that would reflect the optimum or current air flow through the biofilter.

We alter consents regularly using the form below - if you do apply, please include the correspondence with [REDACTED] as 'justification' for the requirement to change a condition in your consent. To apply for an administrative change in a consent condition please follow the link <http://www.gw.govt.nz/assets/Resource-Consents/Forms/Form-1c-Application-to-change-or-cancel-resource-consent-conditions.PDF>.

It is possibly best to discuss with [REDACTED] what the appropriate consent condition will be. Having reviewed the Biofilter report the condition could be changed to either a gas-volume to bed-volume rate between 50 to 100 therefore within the recommended MfE guidelines or that the condition could relate to the average flow rate in the duct, which in the Biofilter assessment is 2,150m³/hr.

Please do not hesitate to get in contact if you have any questions.

Regards

[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 7 December 2015 6:16 p.m.
To: [REDACTED]
Subject: FW: Bio Filter final assesment for Interwaste Wellington

Good afternoon [REDACTED]

I hope the year has been good to you, it has been keeping me on my toes.

I apologise for the lateness of my reply but I have been asking around and talking to people about the flow rate of the bio filter.

We have just installed a new pressure vessel and this one is 6cbm compared to the 3 we had being 1.4cbm each. This also means that once we open the chamber the entire 6cbm of steam gets taken up through the bio filter. I have been instructed that we need to keep the extraction to what it is at the moment.

[REDACTED] (Jacobs) has made some comments below.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Monday, 7 December 2015 4:54 p.m.
To: Blair Chalmers
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Hi Blair,

The measured flow rate was 76 m3 air/m3 media, greater than the consent limit of 50 m3 air/m3 media. However it is within the good practice guidelines of 50-100 m3/m3, and the biofilter was seen to be treating the odour effectively.

In order to bring the flow rate down, you would either need to reduce the rate of extraction (which would decrease the odour extraction and treatment), or increase the size of the biofilter (or increase the depth of the bark). Given the good performance of the biofilter, I don't see that this is needed.

Regards

[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 7 December 2015 4:46 PM
To: [REDACTED]
Subject: FW: Bio Filter final assesment for Interwaste Wellington

Hi again [REDACTED]

What are your thoughts on the below email from [REDACTED] the Environmental protection officer at GWRC?

He wants to know if the flow rate is adequate or to high.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]@gw.govt.nz
Sent: Friday, 6 November 2015 3:29 p.m.
To: Blair Chalmers
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Hi Blair

Any news or updates on the biofilter system?

Regards

From: Blair Chalmers [mailto:Blair@interwaste.co.nz]
Sent: Friday, 25 September 2015 11:24 a.m.
To: [REDACTED]
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Thanks for reminding me [REDACTED]

I'm so busy at the moment that sometimes I need a kick in the right direction to remember to reply to my emails.

We are about to change our autoclave system in the next two – three weeks and I have asked the engineer to look into this and again once the new system is in place will need to adjust it to suit.

I should have it running to optimal performance by November. I have not made any changes to it yet as per advice from Jacobs until the new unit is in place and operating.

Thanks again for your continued support.

Regards
Blair

From: Simon Hunt [mailto:Simon.Hunt@gw.govt.nz]
Sent: Friday, 25 September 2015 10:04 a.m.
To: Blair Chalmers
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Hi Blair

Have you had a chance to ask about the flow rate with anyone about the flow rate through the Biofilter?

Regards

From: [REDACTED]
Sent: Tuesday, 8 September 2015 4:50 p.m.
To: 'Blair Chalmers'
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Hi Blair

My apologies for the delay. Thanks for sending in the annual report and biofilter assessment.

As noted in the biofilter report (pg 10) – the flow rate is higher than the consent allowed (although the flow rate was still within the recommended MfE guidelines and had a positive assessment).

Is this flow rate able to be altered or are you able to provide some information to say that the current flow rate provides optimal filtration? Due to your location I believe that it is important to have the biofilter running as optimally as possible.

I note that the expert opinion is that the “biofilter . . . performance should be adequate for removing odour from the building for treatment in the biofilter” so I will look into the best way to relate the flow rate to the consent condition.

I would also like to thank you for your effort and for the improvements that have gone into the biofilter - such as the lime, increased bed material and the automatic sprinkler system. It is very valuable progress.

I am on a training course tomorrow so will give you a call on Wednesday.

Regards

██████

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Tuesday, 8 September 2015 12:55 p.m.
To: ████████
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Good afternoon ████████

Have you had a chance to look at our consent reports?

I look forward to your reply.

Regards
Blair

From: ██████████@gw.govt.nz
Sent: Wednesday, 5 August 2015 8:42 a.m.
To: Blair Chalmers
Subject: RE: Bio Filter final assesment for Interwaste Wellington

Hi Blair

Thanks for sending this report through, I will have a look at it as soon as I can and get back in touch if I have any questions.

My apologies for not confirming that I received the last report, I have that also and will have a look at the reports together, hopefully early next week.

Regards

██████

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Wednesday, 5 August 2015 6:55 a.m.
To: ████████
Subject: Bio Filter final assesment for Interwaste Wellington

Good morning [REDACTED]

I have attached the final assessment of the Bio Filter check.

Please let me know if there is anything missing. I sent you my report last week, Can you please confirm that you have received this?

Regards

Blair Chalmers
Wellington Branch Manager



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International Waste Limited

Compliance monitoring assessment 2015-2016

Consent No:	WGN110357[31060]	Date: 22-06-16	Monitoring officer: [REDACTED]
Activity:	To discharge contaminants to air (namely odour) arising from the operation of a waste sterilisation facility		

Your compliance rating is 'Minor non-compliance'

		COMPLYING Well done! No further action required
[31060]		MINOR NON-COMPLIANCE Condition(s) not met / Action required (see comments below)
		MAJOR NON-COMPLIANCE Condition(s) not met / Immediate action required (see comments below)

Comments

Please continue to comply with all consent conditions.

As discussed, a change of conditions in your consent is still required to authorise the current flow rate through the biofilter system.

On this occasion we have decided not to take any formal enforcement action because the current flow rate is still with the MfE recommended guidelines. However, we may not be so lenient should you be responsible for any further breaches of the Resource Management Act 1991 RMA. Accordingly, you should to take all necessary steps to ensure you comply with your obligations under the RMA, including all conditions of your consent.

Your consent incurs variable compliance monitoring charges at your consent anniversary. These charges are likely to increase to reflect any additional time spent monitoring your consent to due to non-compliance.

GWRC compliance rating system

	<p>COMPLYING – Well done! No further action required – keep complying with your consent conditions</p> <ul style="list-style-type: none"> • Administrative conditions assessed are met (e.g. supplying information and/or records) • Effects based and best practice conditions assessed are met (e.g. complying with any maximum limits) • Some very minor breaches of consent conditions where no explanation or follow up is considered to be required
	<p>MINOR NON-COMPLIANCE – Condition(s) not met / Some action required</p> <ul style="list-style-type: none"> • Failure to supply information and/or keep adequate records. Failure to adequately notify GWRC of works • Minor works outside scope of consent issued but within scope of environmental effects considered when consent processed. • Minor breach of effects based or best practice consent conditions
	<p>MAJOR NON-COMPLIANCE – Condition(s) not met / Immediate action required</p> <ul style="list-style-type: none"> • Previous minor non-compliance has not been fixed or corrected • Breach of effects based or best practice consent condition with more than minor actual or potential environmental effects • Works outside scope of consents with more than minor actual or potential environmental effects

Consent monitoring charges

<p>Each consent receives a consent monitoring charge from GWRC.</p> <p>This charge is made up of three parts:</p> <ul style="list-style-type: none"> – A <i>customer service charge</i> that covers the administrative cost of your consent(s); – A <i>compliance monitoring charge</i> that covers all actual and reasonable time associated with assessing compliance with your consent(s) including the time spent visiting and assessing your site, information and reports you submit, file notes, travel time and reporting to you on compliance with your consent(s); and – A <i>State of the Environment (SoE) charge</i> that covers a proportion of the cost of GWRC monitoring the environment that relates to your activity. <p>For further information on consent monitoring charges, please see our <i>Resource Management Charging Policy</i>.</p>
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International Waste Limited
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www.interwaste.co.nz

30th August 2016

The Manager
Environmental Regulations
Greater Wellington Regional Council
PO Box 11646
WELLINGTON 6142

RE: WGN110357 [34191] Discharge to Air Consent

Dear [REDACTED]

I am pleased to report on the preceding years operations of our site at 12 Broken Hill Road in Porirua on behalf of International Waste Ltd.

This site has been fully operational since February 2012 and this report will cover the last 12 months operation covering all aspects related to our resource consent WGN110357 [34191].

Plant Volumes: (10)

Over the previous 12 months we have made no significant changes to our normal operating hours of 14 hours a day still occasionally increasing this to 16 hours per day in high demand seasons. In October 2015 the decision was made to relocate the three 1.5cbm San-I-Pac units we had to our Auckland site and install a 6cbm renovated Autoclave designed and installed by TP Engineering in the exact same position. Although we have increased the size of our machine the throughput of waste still remains the same with an average weight of 500kg per chamber load, we expect 9-10 loads per day continuing to process an average of 4,500kg per day. No other changes have been made.

Bio-Filter (14, 15)

We are very pleased with the operation of our Bio-Filter and with so notice minimal to no odour arising from the factory. For the third year in a row we have commissioned [REDACTED] of Jacobs SKM to test and verify that the Bio-Filter was working in accordance with our consent. Following his report we discovered that the flow rate was still too high. I have since made contact with the engineer who designed our Bio-Filter and we are working on installing a VSD (Variable Speed Drive) to decrease the flow rate under 100 m³ air/ hr / m³ per media.

Door Operation (16, 17)

All staff are trained and reminded of the importance of door operations on this site and this is monitored closely by management. No doors are to be left open for more than 10 minutes at a time while the plant is processing.



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Complaints (19)

Please find below details of a non odour complaint.

On the 9th of March 2016 we received a complaint from our neighbour at 10 Broken Hill Road regarding a large quantities of flies emitting from a skip outside our plant. The incident occurred as a result of us receiving a large amount of animal waste and after processing this waste was not removed immediately as per our practices.

Our subcontractor did not remove all the skips before the weekend due to time restraints. We were not aware of this until after the weekend. Due to the time of year and unusual nature of the waste, flies were attracted to the skip which multiplied over the weekend causing a nuisance. The skip was removed first thing after the weekend as soon as we were made aware of the problem.

Since that time we have repaired our compactor truck and all medical and quarantine waste (Other than sharps) is stored inside the plant in the back of the compactor truck until removed to landfill.

Please feel free to contact me at any time if any additional information is required.

Kind Regards

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

Blair Chalmers
Wellington Regional Manager
Ph: 04 237 9687
Mob: 021 727 138
Email: blair@interwaste.co.nz

Emily McDowall

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Monday, 12 September 2016 5:11 pm
To: [REDACTED]
Subject: Interwaste 2016 report
Attachments: blair_20160912_161416.pdf; IZ068200W001-draftV1.docx

Good afternoon [REDACTED]

I have attached my letter reporting on the year past.

The one thing I must mention is the fact that I had applied for our consent to alter the paragraph about the flow rate as previously mentioned. This was accepted and changed. After this change I received [REDACTED] report on the bio-filter and to my surprise the flow rate had come in even higher than 100m³ of air. I have since made contact with the engineer who designed and installed this machine and he is sending me a VSD so we can adjust the flow rate to how we like.

I have attached [REDACTED] report that shows all else is working well.

I will let you know as soon as the VSD is installed and I will be asking [REDACTED] back out here to test it for us again.

Regards
Blair Chalmers
Wellington Branch Manager
Interwaste Ltd

Emily McDowall

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Friday, 14 October 2016 10:04 am
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.
Attachments: DSC01510.jpg

Good morning [REDACTED]

We are deep in the busy season now.

I spoke to the engineer who built the bio filter and he sent us an inset / VSD. We installed this into the ducting and all was well for half a day but then the disk came loose and got damaged by the fan. I was going to email you to ask if you wouldn't mind popping out to site when you had some time up your sleeve but lucky I didn't as we will now have to get another disk and reinstall / secure it into place.

I have attached some photos for you to look at of the install and one of the aftermath. We will be going with the same design but looking at ways to secure it better. I will get back in touch once we are happy it is working well. Once we have this in would you mind coming out to do another test for us?

I have forwarded the invoice to the accounts team.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Friday, 14 October 2016 9:29 a.m.
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: RE: Bio filter Check.

Hi Blair,
Hope you're well. Have you managed to figure out a way to fix your fan speed issue? Let me know if there's anything we can do to assist. I'll be away for part of October/November on annual leave but should be contactable by email.
Also, I don't know if I sent the attached invoice before, but if not, here it is.

Regards
[REDACTED]

From: [REDACTED]
Sent: Tuesday, 6 September 2016 1:41 PM

To: 'Blair Chalmers'
Subject: RE: Bio filter Check.

Hi Blair,
Just left you a message, but thought I'd follow up with an email. There is a company in Petone that should be able to help with a VSD for your fan:

[REDACTED]
[REDACTED]
Petone, Lower Hutt, Wellington 5045
New Zealand
[REDACTED]

I spoke to [REDACTED] there earlier so if you gave him a call he should know what you need. He said he needs to know:

- Whether the fan is single phase or 3-phase
- What the amperage/kW rating is

Regards

[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 22 August 2016 5:06 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

This is a copy of our new consent and the flow rate is in section 13

From: [REDACTED]
Sent: Monday, 22 August 2016 4:28 p.m.
To: Blair Chalmers
Cc: [REDACTED]
Subject: RE: Bio filter Check.

Ok, I'll just tidy it up before sending – do you have a copy of your variation allowing the larger flow rate? Just so I can reference it in the report.

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 22 August 2016 4:25 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

Hi [REDACTED]

Yes if you could please that would be fantastic.

If you could send me through the report as it sits currently I will present this to the council and let them know that we are working on the flow rate.

Thanks for all your help.

Regards

Blair Chalmers

Wellington Branch Manager



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From: [REDACTED]
Sent: Monday, 22 August 2016 10:19 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,

Just wondering about your biofilter fan – any luck finding the issue? I'll be heading out your way for another job on 1st September, I could stop by and measure again if you'd like.

Regards
[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 25 July 2016 11:03 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

That would be great thanks [REDACTED]

See you then.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Monday, 25 July 2016 10:55 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,
How about 10:00 on Thursday?

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 25 July 2016 10:51 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

Awesome [REDACTED]

Give us a couple of days to block off the pipe.

Is Thursday OK?
Any time will suit us just give me an ETA.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Monday, 25 July 2016 10:49 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,
Good to know there is a reason for it! And sound like an easy fix. Yes, I can come out any time this week except Wednesday.

Regards

[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Monday, 25 July 2016 10:46 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

Good morning [REDACTED]

I just had a talk with [REDACTED] He looks after all the equipment here and is full of knowledge.

He mentioned that there is only one difference in the extraction system in the last 12 months and this most likely is the cause of the increased flow rate.

There is a 6in pipe that use to feed into the conveyor system on our old setup and this pipe had a damper on it. When the old system was removed the pipe was left open to help collect the steam coming from the autoclave.

I have asked [REDACTED] to block this pipe off and I was hoping you might be able to pop back out here to re test the flow rate? Will you have any time over the next week or two to re test this?

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Monday, 25 July 2016 9:46 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi again Blair,

Hope you had a good weekend. Just wondering if you had any luck with the fan? I asked around the office here and one of our guys said you might need a variable speed drive (VSD) for the fan which would let you control how much air the fan moves. It might cost some initially but would give you some flexibility in controlling the flow rate if it can't be otherwise dealt with.

Regards

[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Thursday, 21 July 2016 10:49 AM
To: [REDACTED]
Subject: RE: Bio filter Check.

Bugger.

I asked for them to accept between 50-100.
I cant think of anything that might be causing an increase in flow but will have my guys look into it and see if we cant get this decreased.

Thanks [REDACTED]

From: [REDACTED]
Sent: Wednesday, 20 July 2016 1:19 p.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,
I just looked at the flow measurements for your biofilter, and it looks like they are a fair bit higher than last year –

Parameter	2015 measurement	2016 measurement
Velocity (m/s)	8.5	14.4
Flow rate (Nm ³ /hr)	2150	3650
Biofilter media ratio (m ³ air/m ³ media/hr)	75	127

Is there anything you know of that might have caused the increase in flow rates? What did you ask for from the council about your consent change? Unfortunately the biofilter is currently above the recommended 100 m3/m3/hr range, although I think it's fair to say it's still working fine.

Regards

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Wednesday, 20 July 2016 9:19 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

No problem [REDACTED] we will see you then.

[REDACTED] can you please help [REDACTED] with the Bio Filter check if he it.

See you soon [REDACTED]

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Wednesday, 20 July 2016 9:14 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi again Blair,
I'm running a bit late this morning unfortunately – I'll probably be there around 10:00-10:30 if that suits?

Regards

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Thursday, 7 July 2016 9:24 AM
To: [REDACTED]
Subject: RE: Bio filter Check.

Thanks [REDACTED]

From: [REDACTED]
Sent: Thursday, 7 July 2016 9:21 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi again Blair,

Here's our counter-signed short form agreement for the biofilter assessment. I'll plan on showing up the morning of the 20th, but will touch base in a week or two to confirm.

Regards

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Wednesday, 6 July 2016 12:29 PM
To: [REDACTED]
Subject: RE: Bio filter Check.

Ok [REDACTED] that sounds great.

Thanks very much.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Wednesday, 6 July 2016 12:21 p.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,

Thanks for that. It will probably take more than a week to get the results back, usually it takes 3-4 weeks, but it can be as soon as 2 weeks. They can be expedited but it isn't really worth it since they basically double their charge. We can probably submit an interim report by the first if the results aren't in yet, providing what information we have (flow measurements and visual observations), and give them the final report when we get the lab results.

Regards

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Wednesday, 6 July 2016 11:51 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Bio filter Check.

Thanks for your quick reply [REDACTED]

I have signed the IPENZ agreement and attached.

The 20th is fine. Will it take more than a week after that to get the lab results back?
I have to submit my report to the council by the 1st of August.

Regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Wednesday, 6 July 2016 8:23 a.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi again Blair,

To get our paperwork rolling could you have a look at the attached proposal and if it looks ok, sign the IPENZ agreement?

Thanks and regards

[REDACTED]

[REDACTED] | Jacobs New Zealand Ltd | Air Quality Consultant, New Zealand | [REDACTED]
[REDACTED] | www.jacobs.com

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Tuesday, 5 July 2016 5:33 PM
To: Bender, Christopher
Subject: RE: Bio filter Check.

Good afternoon [REDACTED]

Yet another year already!!!

We are due to have our bio filter assessed again this month, do you have any time available in the next week or two?

I look forward to your reply.

Regards

Blair Chalmers
Wellington Branch Manager



International Waste Ltd www.interwaste.co.nz

From: [REDACTED]
Sent: Wednesday, 8 July 2015 2:20 p.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,
Sure how about next Wednesday morning?

Regards
[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Wednesday, 8 July 2015 11:38 AM
To: [REDACTED]
Subject: RE: Bio filter Check.

Good morning [REDACTED]

It has reached that time again where I need to get our Bio Filter checked.

I need to send a report to the GWRC next month so do you have any time available to come check out our bio filter?

Regards

Blair Chalmers
Wellington Branch Manager



International Waste Ltd www.interwaste.co.nz
D: +64 4 237 6982 | M: +64 21 727 138 | F: +64 4 237 4695

From: [REDACTED]
Sent: Tuesday, 14 October 2014 2:05 p.m.
To: Blair Chalmers
Subject: RE: Bio filter Check.

Hi Blair,

Good deal, I've attached a final copy as a pdf and will post a couple of hard copies to you as well.

Glad to hear the new sprinkler system is working! You might want to check every so often (every month or two would be good) that the biofilter is keeping moist by digging a hole in the media, and making sure that it's moist underneath the surface layer.

Regards
[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Tuesday, 14 October 2014 1:26 PM
To: [REDACTED]
Subject: RE: Bio filter Check.

Hi [REDACTED]

I have had a look through this and it looks great.

I didn't quite understand the Lab results but see that its not quite at the preferred density. We have installed a water sprinkler system that is keeping the bio filter at a good moisture level and am awaiting the truck load of bark to come in.

All in all I am happy with the result and where the bio filter is at presently. All the areas recommending attention have been completed.

Next year should be a breeze.

Kind regards

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Thursday, 9 October 2014 10:43 a.m.
To: Blair Chalmers
Subject: RE: Biofilter Check.

Hi Blair,

Please find attached a draft copy of your biofilter assessment report. Have a look and let me know if you have any questions or comments. If not, I'll finalise and send you a hard copy for your records.

Regards
[REDACTED]

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Tuesday, 19 August 2014 9:47 AM
To: [REDACTED]
Subject: RE: Biofilter Check.

Good morning [REDACTED]

Here is the section relating to the biofilter from our consent.

Cheers

Blair Chalmers
Wellington Branch Manager



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From: [REDACTED]
Sent: Tuesday, 19 August 2014 9:34 a.m.
To: Blair Chalmers
Subject: RE: Biofilter Check.

Hi again Blair,

Could you send a copy of your air discharge consent from GWRC? I'd like to make sure we're doing all the necessary testing for the biofilter on Thursday.

Regards

[REDACTED]

[REDACTED] | Air Quality Consultant, New Zealand | [REDACTED]
[REDACTED] | www.jacobsskm.com

From: Blair Chalmers [<mailto:Blair@interwaste.co.nz>]
Sent: Friday, 15 August 2014 3:59 PM
To: [REDACTED]
Subject: Biofilter Check.

Good Afternoon [REDACTED]

I am in the process of securing our annual consent from the council and one thing we need done is an inspection and report of our biofilter.

[REDACTED] has passed your info onto me.

Can you please touch base with me (Monday will be fine) and let me know when would be a good time for you to come out to inspect our biofilter.

I look forward to hearing from you.

Regards

Blair Chalmers
Wellington Branch Manager



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Emily McDowall

From: [REDACTED]
Sent: Wednesday, 21 June 2017 12:09 pm
To: 'Blair@interwaste.co.nz'
Subject: site visit yesterday, 20-6-17

Hi Blair

Thanks for yesterday – that was a very useful compliance visit. I had a look at the enviro mark website and the programme seems like a useful one so that's really encouraging.

To ensure compliance with your resource consent, please have a look at your OMP (condition 11) to make sure that it is up to date and if necessary adjust anything to reflect the replacement of the previous autoclaving machines. I do note that you discussed this replacement of the autoclave machines in your last annual report.

The biofilter looked good and I look forward to the next annual report and biofilter assessment in July or August.

Thanks again.

[REDACTED]

[REDACTED] Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington | PO Box 11646, Manners St, Wellington 6142
[REDACTED]

This information is intended to provide an initial guideline as to the requirements of the Regional Plans, based on the information you have provided. It does not represent a full assessment of the activity nor should it be relied on as a substitute for a certificate of compliance or resource consent.

International Waste Limited

Compliance monitoring assessment 2016-2017

Consent No:	WGN110357[31060]	Date: 22-11-17	Monitoring officer: [REDACTED]
Activity:	To discharge contaminants to air (namely odour) arising from the operation of a waste sterilisation facility		

Your compliance rating is 'Minor non-compliance'

[31060]		MINOR NON-COMPLIANCE Condition(s) not met / Action required (see comments below)
---------	--	--

Comments

Please continue to comply with all consent conditions including condition 18 which requires an annual report to be submitted by 1 August each year.

Please note that the Greater Wellington Regional Council (GWRC) has a responsibility to enforce the Resource Management Act 1991 (RMA). Accordingly, you should take all necessary steps to ensure you comply with your obligations under the RMA, including all conditions of your consent.

Your consent incurs variable compliance monitoring charges at your consent anniversary. These charges are likely to increase to reflect any additional time spent monitoring your consent to due to non-compliance.

GWRC compliance rating system

	<p>COMPLYING – Well done! No further action required – keep complying with your consent conditions</p> <ul style="list-style-type: none"> • Administrative conditions assessed are met (e.g. supplying information and/or records) • Effects based and best practice conditions assessed are met (e.g. complying with any maximum limits) • Some very minor breaches of consent conditions where no explanation or follow up is considered to be required
	<p>MINOR NON-COMPLIANCE – Condition(s) not met / Some action required</p> <ul style="list-style-type: none"> • Failure to supply information and/or keep adequate records. Failure to adequately notify GWRC of works • Minor works outside scope of consent issued but within scope of environmental effects considered when consent processed. • Minor breach of effects based or best practice consent conditions
	<p>NON-COMPLIANCE – Condition(s) not met / Immediate action required</p> <ul style="list-style-type: none"> • Previous minor non-compliance has not been fixed or corrected • Breach of effects based or best practice consent condition with more than minor actual or potential environmental effects • Works outside scope of consents with more than minor actual or potential environmental effects

Consent monitoring charges

<p>Each consent receives a consent monitoring charge from GWRC.</p> <p>This charge is made up of three parts:</p> <ul style="list-style-type: none"> – A <i>customer service charge</i> that covers the administrative cost of your consent(s); – A <i>compliance monitoring charge</i> that covers all actual and reasonable time associated with assessing compliance with your consent(s) including the time spent visiting and assessing your site, information and reports you submit, file notes, travel time and reporting to you on compliance with your consent(s); and – A <i>State of the Environment (SoE) charge</i> that covers a proportion of the cost of GWRC monitoring the environment that relates to your activity. <p>For further information on consent monitoring charges, please see our <i>Resource Management Charging Policy</i>.</p>
--

Emily McDowall

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Wednesday, 22 November 2017 4:32 pm
To: [REDACTED]
Subject: RE: site visit yesterday, 20-6-17

Not yet [REDACTED], my apologies. These last few months have been flat out.

There is not change to our operation and no complaints since your last visit and we have installed the air flow damper to the extraction unit.

I have also had [REDACTED] from Jacobs out to do his tests and waiting his report,

I will get this all down on paper for you formally by the end of the week.

Sorry for the delay,

Kind regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



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From: [REDACTED]@gw.govt.nz]
Sent: Tuesday, 21 November 2017 2:38 p.m.
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: RE: site visit yesterday, 20-6-17

Hi Blair

I had a look on file and could not see the 2017 annual report – was it sent in?

Cheers

[REDACTED]

[REDACTED] Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao

This information is intended to provide an initial guideline as to the requirements of the Regional Plans, based on the information you have provided. It does not represent a full assessment of the activity nor should it be relied on as a substitute for a certificate of compliance or resource consent.

From: [REDACTED]
Sent: Wednesday, 21 June 2017 12:09 p.m.
To: 'Blair@interwaste.co.nz'
Subject: site visit yesterday, 20-6-17

Hi Blair

Thanks for yesterday – that was a very useful compliance visit. I had a look at the enviro mark website and the programme seems like a useful one so that’s really encouraging.

To ensure compliance with your resource consent, please have a look at your OMP (condition 11) to make sure that it is up to date and if necessary adjust anything to reflect the replacement of the previous autoclaving machines. I do note that you discussed this replacement of the autoclave machines in your last annual report.

The biofilter looked good and I look forward to the next annual report and biofilter assessment in July or August.

Thanks again.

[REDACTED]
[REDACTED] Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington | PO Box 11646, Manners St, Wellington 6142

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www.interwaste.co.nz

24th November 2017

The Manager
Environmental Regulation
Greater Wellington Regional Council
P O Box 11646
WELLINGTON 6142

Re: WGN110357 Discharge to Air Consent

Dear [REDACTED]

International Waste Ltd, trading as Interwaste are pleased to report on the preceding years operation of our site at 12 Broken Hill Road in Porirua.

We are coming up to our sixth full twelve month period of operation. The site was fully operational as of 22nd February 2012.

Plant Volumes: (10)

Over the last 12 months we have made no changes to our normal operating hours still processing 14-16 hours per day 5 days per week. We aim to process 10 loads per day but average out to approximately 9 loads per day. We have a slight increase in waste over the last 11 months and projected increase of 42 Tonne on the year 2016.

Years January to December.

2015: 1,356,641 kg
2016: 1,355,486 kg
2017 YTD 1,280,969 kg

Bio-filter (14,15)

Our Bio Filter system is working at the best of its ability and makes a noticeable difference in keeping our generated odour under control. Over the last two years we have noticed a dramatic increase in air flow rate each time this was tested. In July 2016 I requested an amendment to section (13) of our consent to increase the air flow rate from 50 to 100 m³ air / hr/ m³ per media. These changes were accepted by the GWRC however once we checked the flow rate again, this was being exceeded. We tested a few dampers out on the extraction unit and after our third attempt we managed to get the flow rate to exactly where it is needed to meet the criteria in our consent.

PH testing has been carried out by myself bi annually and have returned good results each time.

██████████ of Jacobs SKM came back to our site to undergo a bio filter assessment on the 31st of October and reported that the bio filter was working well.

Door operation (17)

All of our staff are trained that the entry and exit doors are not to be left open for any extended periods of time following entrance or exiting of the plant.

I have noticed a great deal of effort from our team to maintain the standard of keeping the doors closed. This topic is still raised at tool box meetings on regular occasions.

Complaints (19)

Since our last report we have received no complaints of odour. We have a good system in place to monitor the odour on a daily basis and a “complaints register” that I am pleased to have not used this year. We still retain a good relationship with the neighbouring properties and have spoken to the all-in person. We encourage them to speak up if they notice any foul smells and offer them my direct involvement if any issues were to arise.

Please feel free to contact me at any time if you require any additional information.

Sincerely

Blair Chalmers
BRANCH MANAGER
Interwaste Wellington
12 Broken Hill Road
PORIRUA

Phone 04 237 9687
Mobile 021 727 138
Email blair@interwaste.co.nz



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Please feel free to contact me at any time if you require any additional information.

Sincerely

Blair Chalmers
BRANCH MANAGER
Interwaste Wellington
12 Broken Hill Road
PORIRUA

Phone 04 237 9687

Mobile 021 727 138

Email blair@interwaste.co.nz

Emily McDowall

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Tuesday, 19 December 2017 11:05 am
To: [REDACTED]
Subject: Interwaste Wellington Annual Report
Attachments: IZ068200W002.docx; GWRC Air Consent Report November 2017.docx

Good morning [REDACTED]

I apologise for the late report but I am pleased to report that we are meeting all aspects of our consent conditions.

It has taken a bit of work but as per [REDACTED] draft assessment report attached you will see we are meeting the consented flow rates.

A slight increase in waste volumes of approximately 42 tonne seems a lot but when we look at the big picture of over a million tonnes in a year this is simply good, busy business.

I am waiting on [REDACTED] to send through the final PDF report and will forward this to you when it comes through. We are all so very busy at this time of year 😊

I look forward to your reply.

Regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



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www.interwaste.co.nz





Porirua Waste Treatment Facility

Interwaste Ltd

2018 Biofilter Assessment

IZ068200W003| Final

6 September 2018



Porirua Waste Treatment Facility

Project No: IZ068200
 Document Title: 2018 Biofilter Assessment
 Document No.: IZ068200W003
 Revision: Final
 Date: 6 September 2018
 Client Name: Interwaste Ltd
 Client No:
 Project Manager: [REDACTED]
 Author: [REDACTED]
 File Name: I:\AEN\W\Projects\IZ068200- Interwaste 2016
 (Porirua)\Technical\2018\IZ068200W003.docx

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Document history and status

Revision	Date	Description	By	Review	Approved
Draft V1	September 2018	Draft for client review	[REDACTED]	[REDACTED]	
Final	September 2018	Final for issue	[REDACTED]	[REDACTED]	

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Appendix A. Test Pit Locations

Appendix B. ELS-Eurofins Laboratory Report

Important note about your report

The sole purpose of this report and the associated services performed by Jacobs is to undertake an inspection and assessment of the odour extraction system and biofilter at the Interwaste Porirua site, in accordance with the scope of services set out in the contract between Jacobs and the Client. That scope of services, as described in this report, was developed with the Client.

In preparing this report, Jacobs has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Client and/or from other sources. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

Jacobs derived the data in this report from information sourced from the Client (if any) and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report. Jacobs has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

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1. Introduction

International Waste Limited (Interwaste) operates a steam sterilisation plant located at 12 Broken Hill Road in Porirua. The plant has been in operation since December 2011. The facility utilises an odour extraction system that discharges to a *Pinus radiata* bark bed biofilter to treat ventilation air, specifically malodorous compounds from the plant's steam sterilisation operations.

Interwaste commissioned Jacobs New Zealand Ltd (Jacobs) to conduct an assessment of the biofilter media and the general performance of their biofilter, as required by Interwaste's air discharge consent from the Greater Wellington Regional Council (GWRC), which states:

"14. Annual biofilter monitoring: The consent holder shall employ an appropriately qualified person to undertake a comprehensive assessment of the performance of the biofilter on an annual basis (or more frequently if deemed appropriate by the consent holder). The assessment shall involve an evaluation of the media size distribution and composition and effectiveness in removing contaminants.

The results of this assessment, including a summary of the findings, details of any actions(s) to be taken to improve the efficiency and function of the biofilter, and a timetable for those actions to be undertaken, shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council in the annual report required by condition 19 of this consent."

The assessment also confirms compliance with Condition 13 of the resource consent, which outlines specific requirements of the biofilter, including:

- A minimum bed depth of filter media of 1.0 metre
- The flow rate shall not exceed 100 m³ air per hour per m³ of media
- A bed moisture content of between 40-65% by weight
- A pH of filter media between 6 and 8
- An even distribution of gas flow through the filter bed
- That there are no short circuits of untreated air through the filter bed.

On 29th August 2018 Chris Bender of Jacobs measured the flow in the ducting leading from the sterilisation area into the biofilter and examined the biofilter and biofilter media to assess the suitability of the biofilter to treat potential odour discharge from the steam sterilisation area. The assessment included a visual inspection of the biofilter and media, measurement of airflow into the biofilter, and collection of samples for laboratory analysis of moisture, pH and microbial activity.

This report sets out a general description of the biofilter, the sampling methodology used, sampling results, and recommendations to improve the unit's performance.

2. Biofilter Description

2.1 Biofilter Design

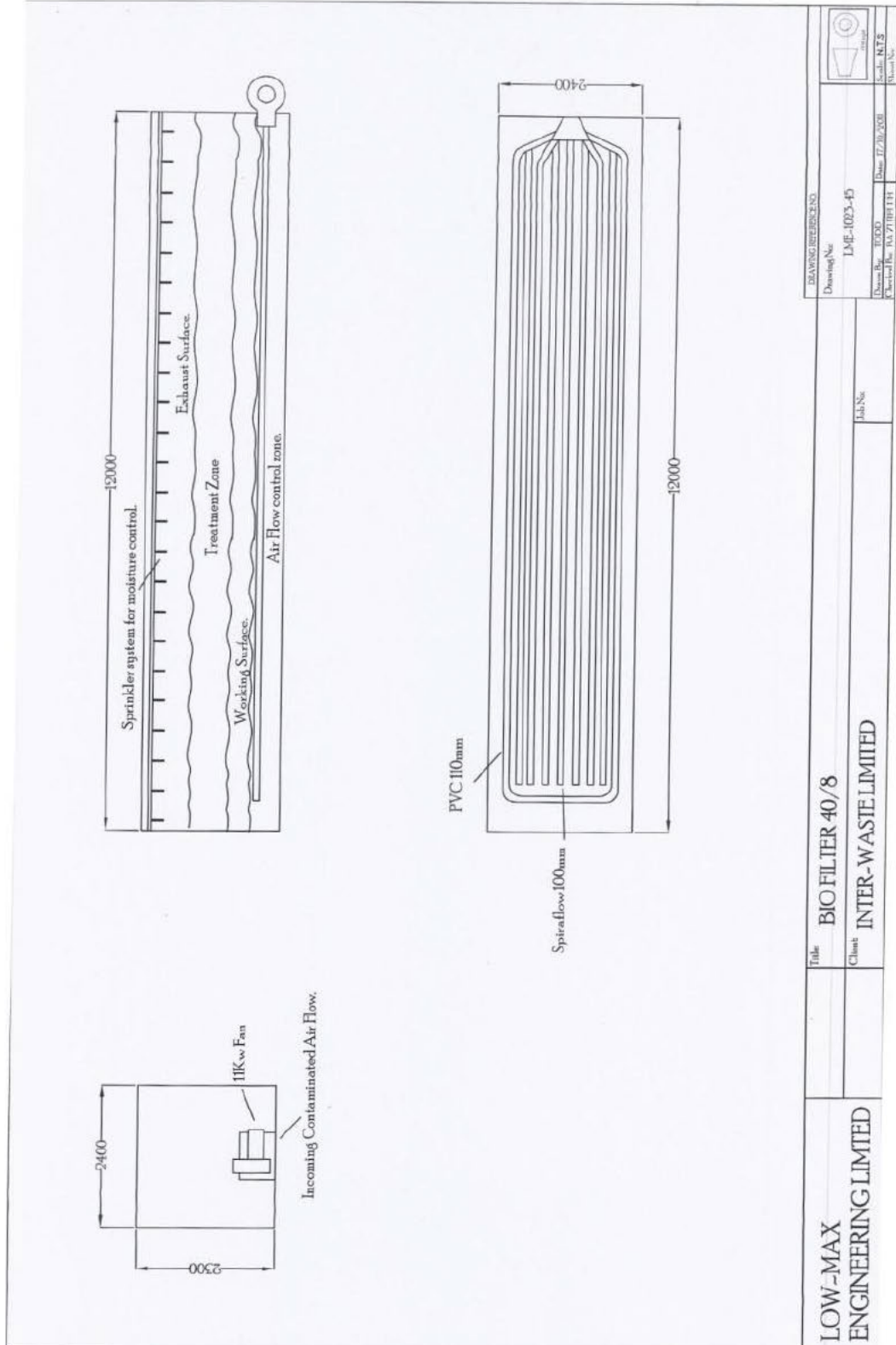
The odour treatment system at the site is designed to extract air from the steam sterilisation area of the plant and direct it through a biofilter where the odorous compounds can be adsorbed and broken down to inert compounds. The extraction system consists of a hood positioned directly over the autoclave unloading area. A fan creates a vacuum on the hood via a 0.3 metre diameter duct to capture the bulk of steam emitted from the sterilised waste when the autoclave is opened. Furthermore, the general sterilisation area is semi-enclosed by a curtain suspended approximately 1 metre from the ceiling, which has the effect of drawing fugitive odours from this area into the extraction system and through the biofilter.

The duct leading into the biofilter connects to a manifold at the bottom of the biofilter to distribute the extracted air evenly throughout the biofilter base. The biofilter bed is contained within a steel shipping container 12 metres long, 2.2 metres wide and 2.7 metres high. The biofilter bed itself is composed of coarse (30 to 40 mm) bark and is designed for a depth of approximately 1 metre. Beneath this layer is gravel/scoria in which the lateral ducts (flexible PVC tubing of 0.1 metre diameter) are embedded. The lateral ducts are capped at their termination and are perforated along their length to disperse waste air evenly throughout the bed. The bed is equipped with a sprinkler to supply water to the biofilter bed which is operated on a timer to supply water to the biofilter on an as needed basis. Figure 1 is photograph of the biofilter surface and a technical drawing of the biofilter is provided in Figure 2.

Figure 1 Interwaste biofilter surface



Figure 2 Biofilter Technical Drawing



2.2 Biofilter Media

The condition of the biofilter media is critical for maintaining good operation and performance of the biofilter. The media should have a high degree of surface area while still allowing free and even flow throughout the bed, and should provide a hospitable environment for bacteria and other microorganisms to grow on the media surface. The bacteria living on the media oxidise volatile organic compounds (VOCs) and other compounds which contribute to odour from the extracted air. The performance of the biofilter is therefore dependant on providing of a healthy environment for the microorganisms to live and grow, and on providing sufficient contact between the media surface and the extracted air so that the odorous compounds can be adsorbed onto the surface of the media.

The most important parameters for maintaining a healthy environment are moisture and pH. The microorganisms need water to remain active, and the presence of water also affects the transfer of the contaminants from the air to the media. It is therefore very important to ensure moisture levels are controlled in the biofilter for it to function properly. A moisture content of greater than 60% by weight is generally recommended, although the air discharge consent requires 40-65% moisture.

3. Assessment Methodology

The biofilter was assessed for compliance in accordance with Conditions 13 and 14 of the air discharge consent, which were based on the recommendations for biofilter design as described in the air discharge assessment of effects to the environment (AEE)¹, and informed by terms of good practice for biofilter use as recommended by the Ministry for the Environment (MfE)². These include:

- General effectiveness of odour extraction, including measurement of volumetric flows through the extraction system and visual inspection of steam extraction from the sterilisation area. Flows through the duct leading into the biofilter were measured in compliance with *USEPA Method 2 – Determination of Stack Gas Velocity and Volumetric Flow Rate*.
- Measurement of biofilter bed dimensions and assessment of adequacy for treating the volume of extracted air from the sterilisation area.
- Visual assessment of media condition for particle sizing and composition, moisture content, and distribution of air flow.
- Laboratory analysis of media samples for pH, moisture content, and bacterial activity.

3.1 Assessment Criteria

The MfE *Good Practice Guide* recommends the following design criteria for biofilters used for mitigation of odour from air discharges:

- Typical gas-volume to bed-area ratios to ensure adequate residence time from 50 to 100 m³/m²/hr, with bed depth of 0.8-1.2 metres.
- Moisture levels of biofilter media greater than 60% by weight.
- Humidification of inlet stream at or near 100% to prevent drying of the underside of the bed.
- Temperature in the 20-35°C range.
- pH between 6 and 8.

In addition, the biofilter was assessed in terms of compliance with Condition 13 of Interwaste's air discharge consent, which consists of the following criteria for the biofilter:

- A minimum bed depth of filter media of 1.0 metres
- The flow rate shall not exceed 100 m³ air/hr/m³ per media³
- A bed moisture content of between 40-65% by weight
- A pH of filter media between 6 and 8
- An even distribution of gas flow through the filter bed
- That there are no short circuits of untreated air through the filter bed.

3.2 Odour Extraction Assessment

The extraction hood over the autoclave unloading area was visually assessed to determine the adequacy for removing odour from the sterilisation area of the plant. Steam emitted from the process during the unloading of the autoclave was observed to be drawn into the hood, indicating good removal efficiency of potential odours.

¹ SKM, *International Waste Limited Porirua Waste Treatment Facility, Assessment of Effects on the Environment – Discharges to Air*, April 2011.

² MfE, *Good Practice Guide for Assessing and Managing Odour in New Zealand*, June 2003.

³ As of change to conditions dated 20th July 2016.

Provided the fan is turned on during the hours of operation, the system's performance should be adequate for removing odour from the building for treatment in the biofilter.

Initial flow measurements indicated a high rate of flow in excess of the consented level. Interwaste subsequently installed an adjustable damper in the inlet duct to the biofilter in order to regulate the extraction rate of the fan. The flow rate was re-measured and adjusted to the desired level to be in conformance with Condition 13 of the resource consent.

Flows measured in the duct leading into the biofilter were measured to be at an average velocity of 10.4 m/s, with an average flow rate of approximately 2,800 m³/hr. Assuming a media bed depth of 1 metre, the biofilter provides a gas-volume to bed-volume ratio of 97 m³/m³/hr, and so is in compliance with the 100 m³(air)/m³(media)/hr required by Condition 13 of the air discharge consent.

3.3 Media Conditions

The media was observed to be sufficiently moist overall, though the inlet side of the biofilter was dry at a depth below 200 mm. There was an even distribution of gas through the biofilter and the media had a uniform size distribution throughout. No odours from the sterilisation process were observed during the site visit.

3.4 Biofilter Media Moisture, Acidity and Microorganism Count

Two test pits were dug in the biofilter and samples collected at two depths (200 mm and 400 mm below the surface). The four samples were sent to a laboratory for analysis of moisture content, pH, and bacterial count. The laboratory test report is included as Appendix B, and the results are summarised in Table 1.

Table 1 Media Moisture, Acidity and Microorganism Count

Sample Number	Sample Location	Moisture Content (%) Dry Basis	Media Acidity (pH)	Viable Microorganism Count (cfu/g)
18/41395-01	Test pit 1 – depth 200 mm	63.1	6.8	220,000
18/41395-02	Test pit 1 – depth 400 mm	24.3	5.7	880
18/41395-03	Test pit 2 – depth 200 mm	60.0	6.6	3,200
18/41395-04	Test pit 2 – depth 400 mm	63.1	6.8	3,900

The moisture analysis results confirm visual observations, with the media being uniformly and adequately moist, with the exception of the sample Test Pit 1, which was relatively dry. On average the media was in compliance with the discharge consent condition requiring moisture content of 40-65% by weight.

The media was found to be only slightly acidic, with pH in the range of 5.7 to 6.8. This is somewhat lower than the measurements in 2016. The media pH is overall in the lower end of the range recommended by the Good Practice Guide, and generally in compliance with the air discharge consent condition requiring a pH of 6 to 8.

The biological activity in the biofilter media was low for the majority of the samples, and very low in the lower depth sample in in test pit 1. The microbial counts are below levels recommended in the literature (reasonable levels of colony forming units in the region of 10⁶ to 10⁹ cfu/g have been published⁴). Provided the media is within recommended moisture and pH ranges, microbial activity in biofilters is generally correlated with the loading of organic matter in the gas stream. The low microbial counts in the samples may therefore be a result

⁴ Deviny, J. S., M. A. Deshusses, and T. S. Webster. 1999. *Biofiltration for Air Pollution Control*. Boca Raton, NY: Lewis Publishers.

of a relatively clean air stream. Given the media is otherwise in good condition and the low level of odour emitted from the biofilter we do not consider the low measurements of microbial activity to be an issue.

3.5 Miscellaneous Observations

No significant odours were detected within the plant building, outside the building or from the biofilter.

4. Discussion and Recommendations

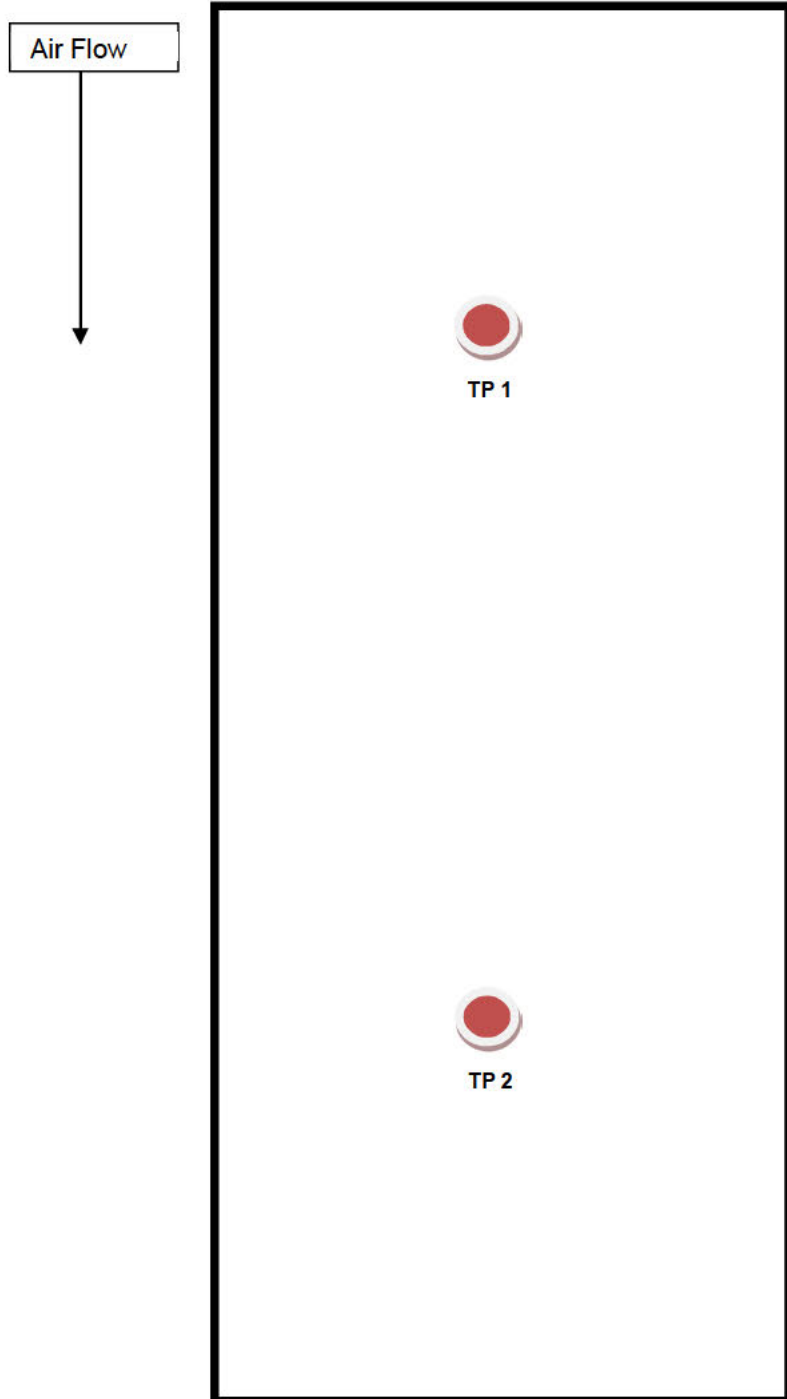
Overall the biofilter design was seen to be adequate for extracting and treating odours from the sterilisation process. Flow rates were set to be below the consented limit of $100 \text{ m}^3_{\text{air}}/\text{m}^3_{\text{media}}/\text{hr}$. No odours were detected during the assessment, and the biofilter was in conformance with the air discharge consent conditions. Moisture and pH measurements are on average within the limits for consent compliance. The biofilter would benefit from an increased application of water (e.g. increasing the watering period on the timer). Bacterial counts for most of the samples were relatively low, but consistent with what has been observed in previous years.

Continued good operation and maintenance of the biofilter, including regular watering, monitoring of pH and addition of lime as required should ensure that any odours generated during the sterilisation process will be treated and will not present a nuisance to the surrounding neighbours.

5. References

- 1) Deviny, J. S., M. A. Deshusses, and T. S. Webster. 1999. *Biofiltration for Air Pollution Control*. Boca Raton, NY: Lewis Publishers.
- 2) MfE, *Good Practice Guide for Assessing and Managing Odour in New Zealand*, June 2003.
- 3) SKM, *International Waste Limited Porirua Waste Treatment Facility, Assessment of Effects on the Environment - Discharges to Air*, April 2011.
- 4) SKM, *International Waste Ltd 2012 Biofilter Commissioning Assessment*, July 2012.
- 5) Jacobs NZ Ltd, *International Waste Limited Porirua Waste Treatment Facility, 2017 Biofilter Assessment*, December 2017.

Appendix A. Test Pit Locations



Appendix B. ELS-Eurofins Laboratory Report



Jacobs NZ Ltd
PO Box 10283
Wellington 6143

Attention: [REDACTED]

Eurofins ELS Limited

Analytical Report

Report Number: 18/41395
Issue: 1
03 September 2018

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/41395-01	SKM - Biofilter Bark		29/08/2018 00:00	30/08/2018 08:40	IZ068200
Notes: SKM00581/9, Site 1, 200 mm					
Test	Result	Units	Uncertainty	Signatory	
0087 Moisture	63.1	%	± 3.2	[REDACTED]	
0780 pH	6.8		± 0.2		
M1000 Aerobic Plate Count	220,000	cfu/g(mL)			
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/41395-02	SKM - Biofilter Bark		29/08/2018 00:00	30/08/2018 08:40	IZ068200
Notes: SKM00581/10, Site 1, 400 mm					
Test	Result	Units	Uncertainty	Signatory	
0087 Moisture	24.3	%	± 1.2	[REDACTED]	
0780 pH	5.7		± 0.2		
M1000 Aerobic Plate Count	880	cfu/g(mL)			
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/41395-03	SKM - Biofilter Bark		29/08/2018 00:00	30/08/2018 08:40	IZ068200
Notes: SKM00581/11, Site 2, 200 mm					
Test	Result	Units	Uncertainty	Signatory	
0087 Moisture	60.0	%	± 3.0	[REDACTED]	
0780 pH	6.6		± 0.2		
M1000 Aerobic Plate Count	3,200	cfu/g(mL)			
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/41395-04	SKM - Biofilter Bark		29/08/2018 00:00	30/08/2018 08:40	IZ068200
Notes: SKM00581/12, Site 2, 400 mm					
Test	Result	Units	Uncertainty	Signatory	
0087 Moisture	63.1	%	± 3.2	[REDACTED]	
0780 pH	6.8		± 0.2		
M1000 Aerobic Plate Count	3,900	cfu/g(mL)			

Comments:

Sampled by customer using ELS approved containers.

Test Methodology:

Test	Methodology	Detection Limit
Moisture	APHA 22nd Edition Method 2540 B. AOAC 20th Edition (online version) 950.46 B(a).	0.1 %
pH	Soil Suspension/pH Meter. ANZECC GUI 624.131.37.	0.1
Aerobic Plate Count	APHA Compendium, Ch 8 5th Ed:2015; AOAC 990.12 18th Ed:2005	10 cfu/g(mL)

*< means that no analyte was found in the sample at the level of detection shown. "Not Recovered" indicates that the compound was not successfully extracted from the matrix when it was added, at a known concentration, during the test. Detection limits are based on a clean matrix and may vary according to individual sample.

g/m3 is the equivalent to mg/L and ppm.

Samples will be retained for a period of time, in suitable conditions appropriate to the analyses requested.

All test methods and confidence limits are available on request. This report must not be reproduced except in full, without the written consent of the laboratory.



Report Released By



This laboratory is accredited by International Accreditation New Zealand and its reports are recognised in all countries affiliated to the International Laboratory Accreditation Co-operation Mutual Recognition Arrangement (ILAC-MRA). The tests reported have been performed in accordance with our terms of accreditation, with the exception of tests marked "not IANZ", which are outside the scope of this laboratory's accreditation.

This report may not be reproduced except in full without the written approval of this laboratory.

Emily McDowall

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Tuesday, 18 December 2018 2:17 pm
To: [REDACTED]
Subject: Re: Resource consent compliance - Interwaste [WGN110357]

Thursday will work well for me.

Thanks for your understanding and apologies for the inconvenience

Kind regards
Blair Chalmers

Wellington Branch Manager
Interwaste Limited
M 021 727 138. P 04 237 6982

From: [REDACTED]@gw.govt.nz
Sent: Tuesday, December 18, 2018 2:14 PM
To: Blair Chalmers
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Thanks for the email Blair, [REDACTED] Unfortunately I had made it out to Interwaste before I found out you weren't there, but no problem - happy to arrange another time for this week. The same time on Thursday will suit me if that works, otherwise should be able to make a time work any other day this week. Let me know.

Cheers,
[REDACTED]

[REDACTED] | Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington 6011
[REDACTED] | www.gw.govt.nz

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Tuesday, 18 December 2018 1:18 PM
To: [REDACTED]@gw.govt.nz
Subject: Re: Resource consent compliance - Interwaste [WGN110357]

Good afternoon [REDACTED]

I apologise for the late notice but [REDACTED] so won't be able to make our meeting.

I hope I haven't put you out too much and hope we can reschedule for another time this week?

Kind regards
Blair Chalmers

Wellington Branch Manager

Interwaste Limited
M 021 727 138. P 04 237 6982

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Wednesday, November 28, 2018 2:15 PM
To: [REDACTED]
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Thanks [REDACTED]

Please ensure you have steel toe boots, I can manage the rest.

See you then

Regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



International Waste Ltd
M: +64 21 727 138 | D: +64 4 237 6987 | F: +64 4 237 4695
www.interwaste.co.nz



From: [REDACTED] <[\[REDACTED\]@gw.govt.nz](mailto:[REDACTED]@gw.govt.nz)>
Sent: Wednesday, 28 November 2018 12:56 p.m.
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Thanks heaps for the reply Blair – December suits me better for a visit too. I have sent you a meeting request now for Tue 18 December. Let me know if any issues, otherwise I will see you then.

Cheers,

[REDACTED]

[REDACTED] | Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington 6011
[REDACTED] | www.gw.govt.nz

From: Blair Chalmers [<mailto:blair@interwaste.co.nz>]
Sent: Wednesday, 28 November 2018 12:45 p.m.
To: [REDACTED]
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Good afternoon [REDACTED]

I am awfully busy this week I'm afraid but my schedule is quite free over the week 17th – 21st. Any day during that week will work for me.

Let me know what date and time and I will schedule you in 😊

Regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



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From: [REDACTED] <[\[REDACTED\]@gw.govt.nz](mailto:[REDACTED]@gw.govt.nz)>
Sent: Tuesday, 27 November 2018 4:13 p.m.
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Hi Blair,

Just getting in touch again to see if we can lock in a suitable time for a site visit prior to Christmas. I am available for the rest of this week if that works, otherwise the week of 17th- 21st December would be good. Let me know when is best for you.

Cheers,

[REDACTED] | Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington 6011
[REDACTED] | www.gw.govt.nz

From: [REDACTED]
Sent: Tuesday, 23 October 2018 10:48 a.m.
To: 'Blair Chalmers'
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Thanks for the reply Blair.

Sometime mid-late November for a site visit sounds great. Would you be available on Tue 20th or Wed 21st November? If you could let me know an approximate time that will suit you then I will get something scheduled in.

Thanks and regards,

[REDACTED] | Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao

From: Blair Chalmers [<mailto:blair@interwaste.co.nz>]
Sent: Monday, 15 October 2018 5:37 p.m.
To: [REDACTED]
Subject: RE: Resource consent compliance - Interwaste [WGN110357]

Good afternoon [REDACTED]

Pleased to make your acquaintance 😊

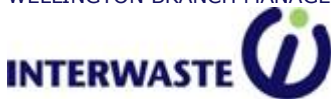
I am quite busy the next couple of weeks but any time from the 12th of November through to the 12th of January works for me. [REDACTED] any time after the 26th of January will also work for me.

It won't take long to show you around our site and we recently undertook an Enviromark audit and they also looked into our Discharge to Air Consent to make sure we are following all the rules so I have no reason to believe that you will be disappointed.

I look forward to seeing you once we have a date in place. (I am also here all of this week if your free any of these days)

Kind regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



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www.interwaste.co.nz



From: [REDACTED] <[\[REDACTED\]@gw.govt.nz](mailto:[REDACTED]@gw.govt.nz)>
Sent: Wednesday, 3 October 2018 1:14 p.m.
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: Resource consent compliance - Interwaste [WGN110357]

Hi Blair,

I have recently taken over as compliance officer for resource consent WGN110357[34191] held by International Waste Limited: to discharge contaminants to air arising from the operation of a waste sterilisation facility at 12 Broken Hill Road, Porirua.

Thank you for submitting your annual report, as per condition 18 of your consent.

I would like to schedule in a compliance visit sometime in the next few months. Could you please get in touch to let me know a suitable time/date for this to take place?

I can be contacted on [REDACTED] or by return email.

Thanks and regards,

[REDACTED] | Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington 6011
[REDACTED] | www.gw.govt.nz

From: Blair Chalmers [<mailto:blair@interwaste.co.nz>]
Sent: Thursday, 6 September 2018 11:32 a.m.
To: [REDACTED]
Subject: GWRC Air Consent Report September 2018.docx

Good morning [REDACTED]

I am please to submit my annual report for our discharge to air consent.

Late last year we installed the damper into the extraction unit for the bio filter and am pleased to say this is working well.

I have attached Jacobs inspection report for your records.

Kind regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



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reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise stated, any views or opinions expressed are solely those of the author, and do not represent those of the organisation.

FILE NOTE

DATE 21 December 2018
AUTHOR [REDACTED]
SUBJECT Compliance site visit on Thu 20 December 2018
FILE NUMBER WGN110357

[REDACTED] and I arrived at Interwaste at 1:22pm on Tue 18 December 2018. We spoke to the main office and found that Blair was away sick today and no one else was available to show us the biofilter so will reschedule. We left site at 1:26pm. Blair emailed soon after this and we rescheduled for the same time on Thu 20 December 2018.

[REDACTED] and I arrived at Interwaste at 1:24pm on Thu 20 December 2018. We noticed a slight odour when we got out of our vehicles, and this was getting stronger. We proceeded to the main office and met with Blair Chalmers, who we showed our warrants to.

We talked through the consent conditions and Blair confirmed they had taken on board Jacobs advice at their last assessment regarding increased water application in the biofilter so that the bark doesn't get too dry. They have a sprinkler system in the biofilter, which they regularly keep an eye on to ensure it doesn't get too dry.

Blair also explained that they had previous complaints from next door at 10 Broken Hill and have stepped up their communication with neighbouring properties. They keep a complaints register, however receive hardly any complaints with the last one being January 2018.

We had a look at the biofilter at 1:36pm and took photos.



Figure 1 top of biofilter and sprinkler system



Figure 2 outside of biofilter with gauge and vent

Blair explained that they get a lot of quarantine material from cruise ships as well as metal scrap and medical waste. We headed inside to look at the autoclave machine at 1:39pm.



Figure 3 Autoclave machine

Blair advised that the current autoclave process was due to finish in five minutes and that we could head inside to watch this from above.

On the way inside, a truck was parked in the entrance with the door left open while being cleaned. Blair instructed him to reverse the truck out and close the door. Blair advised that constant reminders are required for his staff in ensuring that the doors remain closed.

He explained that Enviromark had recently done their audit and go through the discharge to air consent thoroughly to ensure they are complying.

We watched the autoclave from above at 1:58pm and although we did not observe the autoclave open and steam emerge, we saw the material being moved and new material being put in the autoclave.

We left site at 2:08pm.

[REDACTED]
Environmental Protection Officer
Environmental Regulation


DD: [REDACTED]
[REDACTED]

International Waste Limited

Compliance monitoring assessment 2018-2019

Consent No:	WGN110357 [34191]	Date: 1/05/2019	Monitoring officer: [REDACTED]
Activity:	To discharge contaminants to air (namely odour) arising from the operation of a waste sterilisation facility		

Your compliance rating

[34191]		COMPLYING Well done! No further action required
---------	---	---

Comments

Please continue to comply with all consent conditions.

Thank you for submitting your annual report on 06 September 2018, as per condition 18 of your consent. Please ensure that your next report is submitted by 01 August 2019.

It was useful to see the plant in operation on 20 December 2018 during my site visit, thank you for your time showing me around. It was great to hear that you have taken on board Jacobs advice regarding increased water application in the biofilter from their last assessment, and that you have stepped up your communication with neighbouring properties regarding any complaints. I appreciate the continued effort to remind staff that the doors should not be open for extended periods of time, as noted in your report and observed during my visit.

GWRC compliance rating system

	<p>COMPLYING – Well done! No further action required – keep complying with your consent conditions</p> <ul style="list-style-type: none">• Administrative conditions assessed are met (e.g. supplying information and/or records)• Effects based and best practice conditions assessed are met (e.g. complying with any maximum limits)• Some very minor breaches of consent conditions where no explanation or follow up is considered to be required
	<p>MINOR NON-COMPLIANCE – Condition(s) not met / Some action required</p> <ul style="list-style-type: none">• Failure to supply information and/or keep adequate records. Failure to adequately notify GWRC of works• Minor works outside scope of consent issued but within scope of environmental effects considered when consent processed.• Minor breach of effects based or best practice consent conditions
	<p>NON-COMPLIANCE – Condition(s) not met / Immediate action required</p> <ul style="list-style-type: none">• Previous minor non-compliance has not been fixed or corrected• Breach of effects based or best practice consent condition with more than minor actual or potential environmental effects• Works outside scope of consents with more than minor actual or potential environmental effects

Consent monitoring charges

<p>Each consent receives a consent monitoring charge from GWRC.</p> <p>This charge is made up of three parts:</p> <ul style="list-style-type: none">– A <i>customer service charge</i> that covers the administrative cost of your consent(s);– A <i>compliance monitoring charge</i> that covers all actual and reasonable time associated with assessing compliance with your consent(s) including the time spent visiting and assessing your site, information and reports you submit, file notes, travel time and reporting to you on compliance with your consent(s); and– A <i>State of the Environment (SoE) charge</i> that covers a proportion of the cost of GWRC monitoring the environment that relates to your activity. <p>For further information on consent monitoring charges, please see our <i>Resource Management Charging Policy</i>.</p>
--

Emily McDowall

From: [REDACTED]
Sent: Wednesday, 1 May 2019 4:29 pm
To: blair@interwaste.co.nz
Subject: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019
Attachments: Compliance report 18-19 - International Waste Limited.pdf

Hi Blair,

Please find attached a compliance monitoring assessment for resource consent WGN110357[34191]. Your consent has received a rating of complying for the 2018-2019 year.

If you have any questions about the monitoring of your consent or your compliance assessment please contact me on [REDACTED] or return email.

Kind regards,

[REDACTED]

[REDACTED] | Environmental Protection Officer
GREATER WELLINGTON REGIONAL COUNCIL
Te Pane Matua Taiao
Shed 39, 2 Fryatt Quay, Pipitea, Wellington 6011
[REDACTED] | www.gw.govt.nz

Emily McDowall

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Tuesday, 30 June 2020 4:04 pm
To: Emily McDowall
Subject: RE: Annual compliance for Interwaste Porirua - WGN110357 [34191]
Attachments: W02333800_Final.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Thanks Emily

My apologies, I attached the wrong biofilter assessment. The attached is for last year.

Our flow rate should be around 50 but we have the availability to adjust when necessary. We had some issues a several years ago where flow rates were up around 100 m³ / m³ and these were determined to be too high and our consent requires 50.

Our site processes all medical and quarantine waste in the lower north island so we must operate in these hours to ensure we get through all the waste while keeping within regulations for operating an MPI approved transitional facility and the standard for healthcare waste, it keeps us busy 😊

Kind regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



International Waste Ltd

M: +64 21 727 138 | D: +64 4 237 6987 | F: +64 4 237 4695
www.interwaste.co.nz



From: Emily McDowall <Emily.McDowall@gw.govt.nz>
Sent: Monday, 29 June 2020 6:00 PM
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: RE: Annual compliance for Interwaste Porirua - WGN110357 [34191]

Brilliant, thank you very much for sending this through Blair.

Good to see that you have been proactive in following up on complaints and that you have a solid relationship with staff at neighbouring premises. Thanks for the quarterly pH testing results, looks fine. What air flow readings are you

aiming for with the biofilters? I looked back at the officer's report and original application but couldn't see what range is ideal. Gosh the hours at the business are long aren't they – up to 16 hours per day!

Thanks for arranging for the 2019-20 annual report to be completed. The biofilter assessment which you'd attached is for the year 2017-18, but if PDP could prepare another one (for 2019-20) to include with the annual report that would be much appreciated.

Ngā mihi, Emily

From: Blair Chalmers <blair@interwaste.co.nz>
Sent: Monday, 29 June 2020 4:37 PM
To: Emily McDowall <Emily.McDowall@gw.govt.nz>; Notifications <Notifications@gw.govt.nz>
Subject: RE: Annual compliance for Interwaste Porirua - WGN110357 [34191]

Good afternoon Emily

Thank you for your follow up and time allowance to get last years report to you.

I have attached out 2019 biofilter assessment, our complaints register that also contains PH testing and airflow results and a report for the year 2019.
This years report will indeed be quite different with the issues our nation has been dealing with in recent months.

I have made contact with Pattle Delamore Partners Limited who will be performing our annual biofilter inspection in July. I do not anticipate any delays in getting our 2020 report to you on time.

Kind regards

BLAIR CHALMERS
WELLINGTON BRANCH MANAGER



International Waste Ltd

M: +64 21 727 138 | D: +64 4 237 6987 | F: +64 4 237 4695
www.interwaste.co.nz



From: Emily McDowall <Emily.McDowall@gw.govt.nz>
Sent: Wednesday, 17 June 2020 5:00 PM
To: Blair Chalmers <blair@interwaste.co.nz>; Notifications <Notifications@gw.govt.nz>
Subject: Annual compliance for Interwaste Porirua - WGN110357 [34191]

Kia ora Blair,

I hope you're having a good week, also that [REDACTED] I'm your new compliance officer and if you can also please email notifications@gw.govt.nz going forwards as [REDACTED] receive these emails and direct them to the correct people.

Your email is timely as I have been doing the annual compliance monitoring for my air discharge sites this month.

Yes, we are expecting your annual report. If you could please provide the report for the 2019-2020 year by **1 August this year**, as per condition 18. If you could provide the report for 2018-2019 (at least the information that it is still possible to compile, so not the annual biofilter monitoring for instance) by **15 July** (one month's time) – do you agree that this gives you enough time to compile this information, whilst also recognising that the report is outstanding? Amber has since left GWRC (I think she is now working in a consenting role for a private firm – I started after her departure) which is why we hadn't picked up on this.

I've pasted the relevant conditions below, hopefully this is helpful.

Thanks for getting in touch and let me know if this sounds good about the dates for submitting those two annual reports.

Kind regards,
Emily



Emily McDowall
Resource Advisor – Environmental Regulation
Greater Wellington Te Pane Matua Taiao
DDI 04 830 4074 : M 021 191 9689
Shed 39, Fryatt Quay, Wellington
Follow us online: [Facebook](#) | [Twitter](#) | gw.govt.nz

18. The consent holder shall prepare and submit an annual report to the Manager, Environmental Regulation, Wellington Regional Council by 1 August each year. The report shall contain the relevant monitoring results, data and other information as required by conditions 10, 14, 15, 17 and 19 of this consent.
- The report shall meet the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.
- Note: The annual report shall report on the year 1 July to 30 June inclusive.
10. The consent holder shall keep and maintain a record of the volume and nature of the material processed by the waste sterilisation units. This record shall be presented to any Wellington Regional Council officer on request, and a copy shall be included in the annual report required by condition 18 of this consent. All recording methods shall be to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.
14. **Annual biofilter monitoring:** The consent holder shall employ an appropriately qualified person to undertake a comprehensive assessment of the performance of the biofilter on an annual basis (or more frequently if deemed appropriate by the consent holder). The assessment shall involve an evaluation of the media size distribution and composition and effectiveness in removing contaminants.
- The results of this assessment, including a summary of the findings, details of any action(s) to be taken to improve the efficiency and function of the biofilter, and a timetable for those actions to be undertaken, shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council in the annual report required by condition 18 of this consent.
- Actions to be assessed include, but are not limited to:
- Turning, restructuring and dampening of bed material
 - The addition of supplementary bed material
 - Partial bed material replacement
 - Total bed material replacement; and
 - The necessity for the provision of additional bed material (increase in overall biofilter volume)

15. **Scheduled biofilter monitoring:** The consent holder shall measure and record the following parameters:
- Continuous display of differential pressure for the biofilter
 - Weekly recording of pressure across the biofilter bed
 - Weekly general visual observations of the biofilter condition, including weed growth, compaction, and short circuiting
 - Quarterly media moisture content in the upper two thirds layer for the first two years of operation and then six-monthly thereafter
 - Quarterly monitoring of the pH of the biofilter bed media in the upper two thirds layer for the first two years of operation and then six-monthly thereafter

All monitoring results shall be recorded and analysed and be made available to an officer of Wellington Regional Council on request and included in the annual report required by condition 18 of this consent.

17. If the Manager, Environmental Regulation, Wellington Regional Council requests the consent holder to install an alarm on the door(s) in accordance with condition 16 of this consent the consent holder shall keep and maintain a record of the door(s) alarm.
- This record shall include details of the date and time each time the alarm is activated, and the reasons why the alarm activated. The record shall also detail any maintenance periods during which the door(s) may remain open beyond the time period specified in condition 16 of this consent.
- A copy of this record shall be included in the annual report required by condition 18 of this consent.

^ Looking at your file, I don't think we've asked for an alarm to be installed, but please let me know otherwise.

19. The consent holder shall keep a record of complaints received alleging adverse effects from the consent holder's operations. The complaints record shall contain the following where practicable:
- The name and address of the complainant, if supplied
 - Identification of the nature of the complaint
 - Date and time of the complaint
 - Weather conditions at the time of the complaint
 - Results of the consent holder's investigations, and
 - Any mitigation measures adopted

The consent holder will ensure that each complaint it receives is responded to.

The consent holder shall notify the Manager, Environmental Regulation, Wellington Regional Council of any complaints relating to the exercise of this consent immediately or the next working day.

Notification can be sent to the Wellington Regional Council at notifications@gw.govt.nz. Please include the consent reference (WGN100357) and the name and phone number of a contact person responsible for the discharge.

The consent holder shall forward to the Manager, Environmental Regulation, Wellington Regional Council a copy complaints recorded, in the annual report required by condition 18 of this consent.

^ This is also most likely not relevant as we have no records of complaints on file.

From: Notifications <Notifications@gw.govt.nz>
Sent: Wednesday, 17 June 2020 3:37 PM
To: Emily McDowall <Emily.McDowall@gw.govt.nz>
Subject: FW: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019 [#2DFD7B]

Hi Emily,

I see you've taken over compliance of this consent from [REDACTED]
I've saved this compliance update to ourspace.
Could you get in touch with Blair to discuss these annual updates?

Thanks,

[REDACTED] | Kaiāpiha Taiao / Resource Advisor, Environmental Regulation
GREATER WELLINGTON REGIONAL COUNCIL



From: GWRC <INFO@GW.GOV.T.NZ>

Sent: Monday, 15 June 2020 5:29 PM

To: Notifications <Notifications@gw.govt.nz>

Subject: FW: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019 [#2DFD7B]

Hi Consents team,

Are you able to follow up the customer's query please?

Thank you.

GW Contact Centre

-----Original Message-----

From: blair@interwaste.co.nz

Sent: Monday, 15 June 2020 4:09:24 PM

To: info@gw.govt.nz

Subject: FW: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019

Good afternoon

I have tried to email the Environmental Protection team but received a bound back as seen below:

This message was created automatically by the mail system (ecelerity).

A message that you sent could not be delivered to one or more of its recipients. This is a permanent error. The following address(es) failed:

>>> enviromental.protection@gw.govt.nz (after RCPT TO): 550 5.4.1

>>> Recipient address rejected: Access denied. AS(201806281)

>>> [SG2APC01FT015.eop-APC01.prod.protection.outlook.com]

My original email below, I am looking for a current contact in the Environmental Protect / Recourse Consent team please.

Cheers

Blair Chalmers

Wellington Branch Manager



International Waste Ltd

M: +64 21 727 138 | D: +64 4 237 6987 | F: +64 4 237 4695

www.interwaste.co.nz



From: Blair Chalmers

Sent: Monday, 15 June 2020 4:01 PM

To: 'environmental.protection@gw.govt.nz' <environmental.protection@gw.govt.nz>

Subject: FW: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019

Good afternoon team

I just sent an email through to [REDACTED] but this has bounced back to me.

I am looking for a current Environmental Protection Officer to discuss annual resource consent updates

Kind regards

Blair Chalmers
Wellington Branch Manager



International Waste Ltd

M: +64 21 727 138 | D: +64 4 237 6987 | F: +64 4 237 4695

www.interwaste.co.nz



From: Blair Chalmers
Sent: Monday, 15 June 2020 3:50 PM
To: [REDACTED] <[\[REDACTED\]@gw.govt.nz](mailto:[REDACTED]@gw.govt.nz)>
Subject: RE: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019

Good afternoon [REDACTED]

I have recently returned back to work [REDACTED]
[REDACTED]

Now that I am back I am checking all of our compliance documents and making sure we are all up to date but quickly found that our resource consent update was due August 2019!

Although there has been no changes in our process I still intend to send through a annual update letter that I will put together over the next day for you.

All of our checking and testing has been ongoing and compliant.

Please let me know if there is anything else you will need from me to get this back on track.

Kind regards

Blair Chalmers
Wellington Branch Manager



International Waste Ltd

M: +64 21 727 138 | D: +64 4 237 6987 | F: +64 4 237 4695

www.interwaste.co.nz



From: [REDACTED] <[REDACTED]@gw.govt.nz>
Sent: Wednesday, 1 May 2019 4:29 PM
To: Blair Chalmers <blair@interwaste.co.nz>
Subject: Compliance monitoring assessment for WGN110357 [34191] - 2018/2019

Hi Blair,

Please find attached a compliance monitoring assessment for resource consent WGN110357[34191]. Your consent has received a rating of complying for the 2018-2019 year.

If you have any questions about the monitoring of your consent or your compliance assessment please contact me on [REDACTED] or return email.

Kind regards,

[REDACTED]

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Oxygen-Pro

Grande Cartridge
30/60/90 Days



Oxygen-Pro
Dispenser

Grande Cartridge*
30/60/90 Days

Grande Cartridge*
30/60/90 Days

WORLD'S BEST ODOUR CONTROL SYSTEM

Continuous fresh scent & odour control

- ✓ Reliable
- ✓ Effective
- ✓ Economical
- ✓ Safe
- ✓ Eco-Friendly



Ideal For



Educational
Institutes



Health Care



Hospitality



Distributors



Health & Fitness



Retail Parks
& Shopping
Malls



Building Service
Contractors / Facility
Management/
Hygiene Services



Food Service



Transport Sector

& more..

* Available in a variety of fragrances.

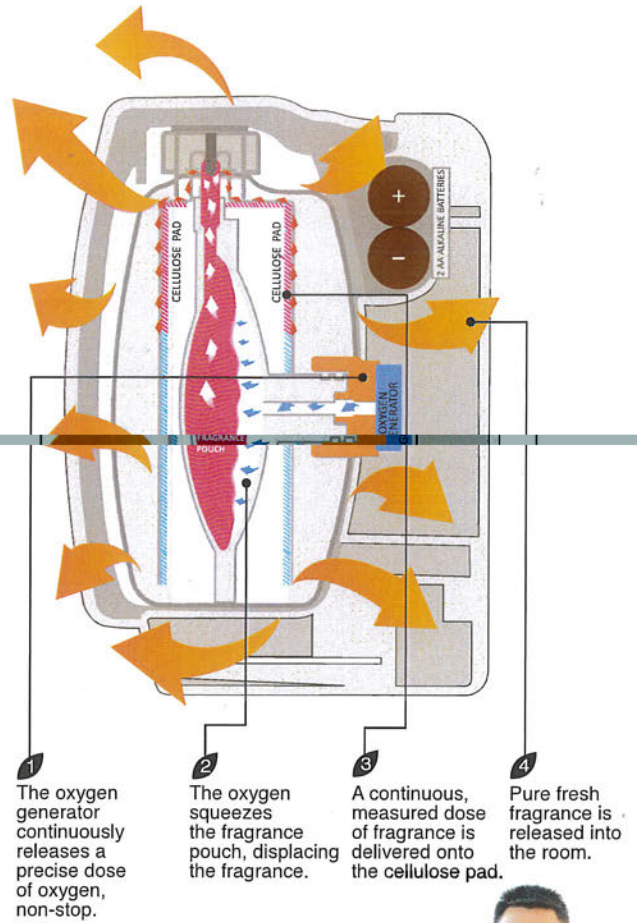
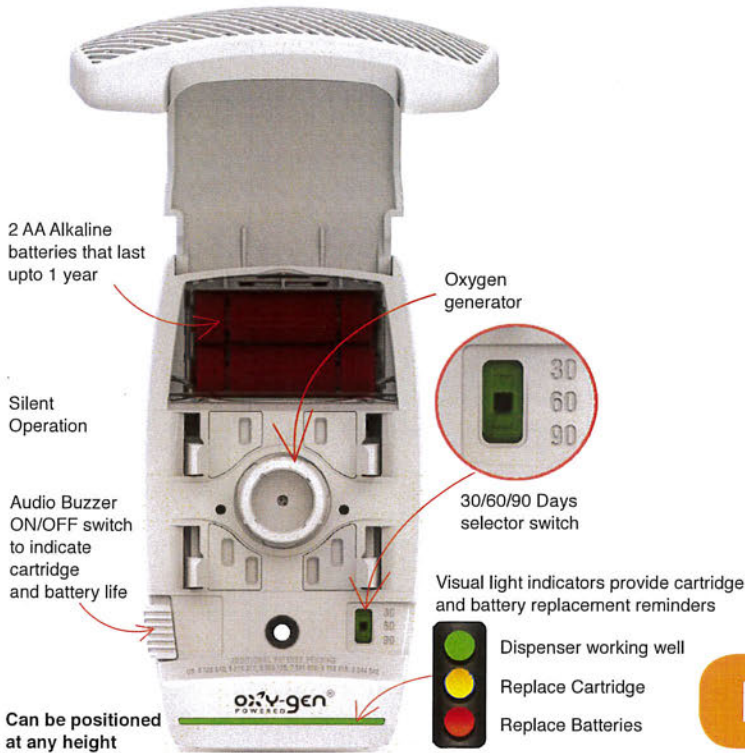
Oxygen-Pro
POWERED

Reliable Performance

Oxy-Gen Powered is the only technology that guarantees the delivery of fragrance in the air continuously, consistently and accurately for the entire duration of the cartridge life.

This precise technology is based on a fuel cell technology that is used in the pharmaceutical industry to deliver drugs to human beings and animals.

Oxy-Gen Powered technology is **simple, reliable and cost-effective.**



“Another great feature of the product is the management and reminder system as it alerts when the cartridge needs to be replaced. One less problem to worry about!”



Lowest Cost-in-Use

When using the **Grande cartridge**, the dispenser can be programmed to work for 30 days, 60 days or 90 days. The cartridge contains 35 ml of pure fragrance oil, that is approximately 7 times more fragrance oil than a standard metered aerosol can. The Fragrance intensity can be changed to a strong (30 days), normal (60 days) or mild scent (90 days). **The Oxygen-Pro cartridges are available in a wide range of fragrances and are compliant with the CARB, EU, IFRA and REACH regulations.**



Grande Cartridge 30/60/90 Days

Effective Fragrant Odour Control

All Oxygen-Pro Fragrant Odour Control Cartridges contain Neutra-lox, our proprietary odour eliminator ingredient that is extremely effective against the smell of urine, faeces, body odour, tobacco, pet malodour, kitchen odour, mold and mildew, etc.

neutra-lox malodour
eliminator

Unlike other systems that only mask odours, Oxygen-Pro cartridges eliminate odours and release fragrance effectively.

Fragrant Odour Control Cartridges



crush

An exotic mix of pineapple, tropical fruits and coconut.



glow

Juicy black cherries, with a hint of almond, plum, vanilla and cinnamon spice.



tang

An intensely fruity perfume with hints of orange supported by warm spices.



adore

A sophisticated fragrance that combines fresh apple notes with amber and spices.



charm

A fantasy melon fragrance modified with cool green notes, a hint of citrus and a slightly floral background.



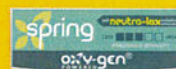
glee

Juicy black cherries, with a hint of almond, plum, vanilla and cinnamon spice.



punch

A tropical sensation that blends light fresh citrus with sweet mango and sun-ripened papaya.



spring

Intense floral notes of ylang, lavender and geranium with hints of fresh cologne and lemon.



zeal

A vibrant, bubbly scent of lime, lemon and grapefruit.



flair

A pure, clean fragrance of delicate florals and watery notes.



Non-Fragrant Odour Control Cartridges (With Super Strength Odour Eliminators)

Non-Fragrant Odour Control Cartridges with super concentrate odour eliminators are the ideal choice for any facility that desires odour elimination with Very Low or No fragrance, such as health care facilities, hotels, etc.



Oxygen-Pro Dispenser with Grande cartridge

Grande Cartridge
30/60/90Days



neutra-lox super
odor eliminator



With a hint of lemongrass fragrance, this is the ideal choice for areas where high odour elimination is required with Very Low fragrance, just as an indicator.



kleeer natural
odor eliminator



With no added fragrance oils and a %100 natural plant oil base as the active ingredient to neutralize a broad spectrum of odours, Kleeer Natural is the ideal choice for areas where No Fragrance is desired.



Malodors have decreased significantly, leaving a pleasant fragrance surrounding the care home.

Safe

With **no added solvents** and **no alcohol**, the Oxygen-Pro cartridges contain **100% pure fragrance oil** and are a safe choice for any facility. Since the cartridges are not pressurized containers, they are safe to transport and store.

Eco-Friendly

Unlike aerosols, the Oxygen-Pro system does **not contain any CFCs, has no added VOCs or propellants**, no 'spray and fade effect' and 'no noise'. A fresh, constant level of fragrance is released continuously, consistently and discreetly. The cartridges can be safely disposed of in a plastic recycling bin at the end of the cartridge life.



“ I know the washroom is clean, just because it smells so fresh. ”




• Malodours are eliminated • Your restroom is left with a clean, fresh scent

Easy To Install & Service


Grande Cartridge 30/60/90 Days

The dispenser can be easily mounted on the wall using double-sided tape or screws. The simple push and go format ensures that it is easy to replace cartridges or batteries.


Break the cartridge seal

Step 1  **ROTATE THE CAP CLOCKWISE WHILE PUSHING IT DOWN, UNTIL THE CAP ROTATES FREELY.**
Make sure that the cap is fully pushed down.

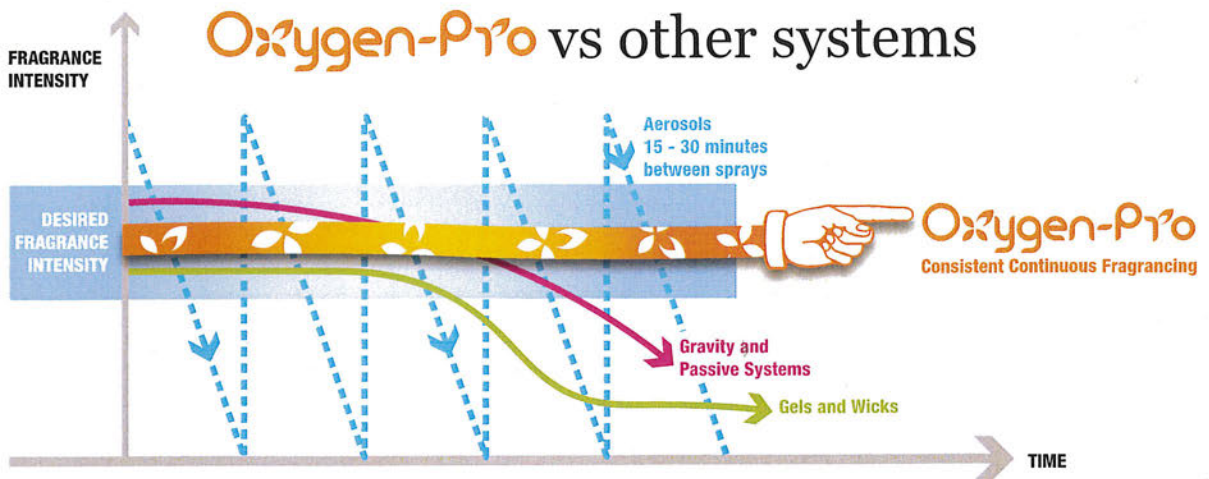
Remove the protective wrap

Step 2  **REMOVE THE PLASTIC WRAP AND DISCARD IT SAFELY.**

Insert the cartridge into the dispenser

Step 3  **PUSH THE CARTRIDGE FIRMLY INTO THE DISPENSER, UNTIL IT LOCKS INTO PLACE.**

“ Servicing Oxygen-Pro is so easy with no complicated programming. It takes just a few seconds to fit a new cartridge. ”



51 Arrenway Drive, Mairangi Bay, Auckland
PO Box: 305-503, Triton Plaza
North Shore 0757.
www.pacifichygiene.com



Scan QR code to
Watch our product video
<http://bit.ly/2yGUVUn>

FOR MORE DETAILS

Call us at: +64 (0) 9 477 5700
+64 (0) 9 476 3602

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