

ATISN 15 483 Freedom of Information Request - All correspondence between Welsh Government, Swansea University and/or Biofresh between 2 September 2021 and 1 May 2021, regarding ozone disinfection machines.

From: [REDACTED] bio-fresh [REDACTED] <[REDACTED]>
Sent: 05 May 2021 10:22
To: '[REDACTED] gov.wales' <[REDACTED]>
Cc: '[REDACTED] gov.wales' <[REDACTED]>; [REDACTED] bio-fresh [REDACTED]>
Subject: RE: Introductions and General Queries

Hi [REDACTED],

Thanks, Friday morning is good for me also so please just let me know when is convenient and whether a phone call or video is better.

Thanks,

[REDACTED]

From: [REDACTED] gov.wales
Sent: 05 May 2021 10:02
To: [REDACTED] bio-fresh [REDACTED]
Cc: [REDACTED] gov.wales; [REDACTED] bio-fresh [REDACTED]
Subject: RE: Introductions and General Queries

Hi [REDACTED]

Today is a pretty full day and tomorrow not much better. [REDACTED] is on leave on Friday but happy to have an initial chat Friday morning, in the meantime I will try to get some thoughts from colleagues on the metal box fabricators.

Best regards

[REDACTED]

From: [REDACTED] bio-fresh [REDACTED]
Sent: 05 May 2021 08:38
To: [REDACTED] gov.wales>
Cc: [REDACTED] gov.wales>; [REDACTED]
<[REDACTED] bio-fresh [REDACTED]>
Subject: FW: Introductions and General Queries

Hi [REDACTED],

Following on from the meeting with you and [REDACTED] last week, we have been looking at some of the options in terms of supply frameworks and I would like to ask your advice on a couple of points. Would it be OK to do a quick phone or video call at some point today?

Also you mentioned you might be able to help with potential Welsh suppliers. I think probably the metal box fabricators may be a good candidate for this. Any pointers that you could give would be most welcome.

Thank you for your help.

Best regards,

[REDACTED]

From: [REDACTED] [REDACTED] gov.wales [REDACTED]
Sent: 07 May 2021 11:30
To: [REDACTED] Swansea [REDACTED]>
Cc: [REDACTED] Swansea [REDACTED]>
Subject: RE: Press release draft

I though [REDACTED] would be keen , she's a great advocate ! is this the latest draft ? My colleague is keen to give this a try but if we slow things down too much then we would just need to accept .

Send me your latest and we will do our best , keep us posted on progress your side too.

Thanks

[REDACTED]

From: [REDACTED]swansea [REDACTED] >

Sent: 07 May 2021 11:14

To: [REDACTED] [REDACTED]gov.wales [REDACTED]

Cc: [REDACTED]swansea [REDACTED] >

Subject: RE: Press release draft

I think it's more likely that's it's just not a priority for them at the moment.

I've just got hold of [REDACTED] on the phone, who said it needed to go to her manager at NPT and then presumably through a similar process at the school. So we'll see.

I'll try again if I haven't heard anything next week.

From: [REDACTED] [REDACTED]gov.wales [REDACTED]

Sent: 07 May 2021 10:41

To: [REDACTED] [REDACTED]Swansea [REDACTED] >; [REDACTED] [REDACTED]Swansea [REDACTED] >

Cc: [REDACTED]gov.wales

Subject: RE: Press release draft

That's a shame, I wonder if there is some nervousness on their part ?

On timing, I will take advise from our comms side, if it's to be a quote we need a minister to be appointed and the initial weeks is full of bringing them upto speed.

Give me a couple of days to see what could be feasible !

Thanks

[REDACTED]

From: [REDACTED]swansea [REDACTED]>
Sent: 07 May 2021 10:38
To: [REDACTED] [REDACTED] [REDACTED]gov.wales [REDACTED]; [REDACTED] [REDACTED].
<[REDACTED]Swansea [REDACTED]>
Cc: [REDACTED] [REDACTED]gov.wales>
Subject: RE: Press release draft

Hi [REDACTED]

Funny, I was thinking the same as I went to vote yesterday!

I am still chasing for a quote and sign off from the school. I am not getting a reply so think we may have to make a decision to go without it, which would be a shame. Either way, it'll probably be a couple of weeks before we can release anything now, does that give enough time?

[REDACTED]

From: [REDACTED] <[REDACTED]gov.wales>
Sent: 07 May 2021 10:24
To: [REDACTED]Swansea [REDACTED]>; [REDACTED]Swansea [REDACTED]>
Cc: [REDACTED]gov.wales
Subject: RE: Press release draft

Hi [REDACTED]

Just realised we will be out of purdah v shortly , what is the latest on timescales of this ? A quote may delay it but perhaps there is scope to be more specific on the funding ?

Best regards

[REDACTED]

From: [REDACTED] Swansea [REDACTED] >

Sent: 13 May 2021 16:57

To: [REDACTED] gov.wales

Cc: [REDACTED] Swansea [REDACTED] >; [REDACTED] Swansea [REDACTED] >; [REDACTED]
<[REDACTED] Swansea [REDACTED] >; [REDACTED] Swansea [REDACTED] >

Subject: RE: Press release draft

Hi all,

Just to let you know that I've received this quote below from [REDACTED], which we'll use instead of one from the school.

Councillor [REDACTED]

[REDACTED], said: "We were happy for three of our schools to be involved in developing this new device which uses no chemicals, leaves no residues and is a highly effective surface sanitiser.

"As Covid-19 restrictions are gradually reduced and we start to come out of the health emergency we must do so with caution and devices such as this will help our transition, especially in schools, be as safe as possible."

[REDACTED], I'll wait to hear from you about what changes Welsh Gov would like, and could someone please confirm what if any changes are needed in the wording about funding? Currently: *The research was funded by UKRI and the Welsh Government, and SPECIFIC's work is funded by the Engineering and Physical Sciences Research Council and the European Regional Development Fund through the Welsh Government.*

If anyone has any good quality photos of the device too then that'd be helpful. [REDACTED] sent a couple from the testing but they're of a prototype device.

Thanks,

[REDACTED]

From: [REDACTED] <[REDACTED]@gov.wales>

Sent: 10 May 2021 15:52

To: [REDACTED] Swansea [REDACTED] >

Cc: [REDACTED] [REDACTED] Swansea [REDACTED] >; [REDACTED] Swansea [REDACTED] >; [REDACTED]
<[REDACTED] Swansea [REDACTED] >; [REDACTED] Swansea [REDACTED] >

Subject: RE: Press release draft

Hi [REDACTED]

Got further feedback today that people are keen to get stronger recognition of our involvement in this, how it was instigated by education and funded by welsh gov innovation, some caution because of procurement etc. There may also be a chance to speak to the technical advisory group which would be a good outcome of this. [REDACTED] – I'm not sure what this will entail but will get back to you as soon as I know !

On the funding is the wording correct, we directly funded the project and covered the majority of the costs , UKRI funding was a bit different as I understand as it reads it sounds more like we co-funded ?

As we agreed I will keep you posted .

[REDACTED]

From: [REDACTED] swansea [REDACTED] >

Sent: 07 May 2021 11:40

To: [REDACTED] [REDACTED] [REDACTED]@gov.wales>

Cc: [REDACTED] <[REDACTED]@swansea [REDACTED] >

Subject: RE: Press release draft

Hi [REDACTED]

The latest version is attached. Will keep in touch!

[REDACTED]
From: [REDACTED] <[REDACTED]@gov.wales>

Sent: 28 May 2021 09:11

To: [REDACTED] Swansea [REDACTED] >

Cc: [REDACTED] [REDACTED] Swansea [REDACTED] >; [REDACTED] [REDACTED] Swansea [REDACTED] >;
[REDACTED] [REDACTED] Swansea [REDACTED] >

Subject: RE: Report - Ozone Disinfection of Schools

Hi [REDACTED]

Thank you very much for this , I look forward to reading it. I may not get to it today as its my last day before a week off and a bit of a backlog to clear ! I haven't heard from [REDACTED] on the technical advisory group but I'm expecting to need to give them some quite detailed info but I'm sure this is all in the report but there may be some points of clarification.

Well done to the team on getting this project through to this point, I'm really sorry I missed the biofresh webinar. Hopefully the TAG meeting will give us a clear way forward .

This also means I can process the claim . Have a great long weekend and enjoy the sunshine in Swansea, I think I will need to head west at some point next week but heading north first to Mid Wales !

Best regards

[REDACTED]

From: [REDACTED] [REDACTED] swansea [REDACTED] >

Sent: 27 May 2021 19:00

To: [REDACTED] [REDACTED]@gov.wales>

Cc: [REDACTED] <[REDACTED]@swansea [REDACTED] >; [REDACTED] [REDACTED] swansea [REDACTED] >;
[REDACTED] swansea [REDACTED] >

Subject: Report - Ozone Disinfection of Schools

Hi [REDACTED],

Please find attached the final report on the school's disinfection by ozone project. Please review it and if you note anything missing, please let me know.

Thank you for your reading.

Kind regards,

[REDACTED]

Hi [REDACTED], {WG}

I am receiving an out of office message from [REDACTED] until August 23rd, but given the timing I want to clarify where we are with this project. Is ozone still under consideration for school sanitisation, and if so then can you let us know if there is anything that we can be doing to help with the project?

Thank you for your help.

Best regards,

[REDACTED] {BIO-FRESH}

From: [REDACTED] [REDACTED] {BIO-FRESH}

Sent: 10 August 2021 18:24

To: [REDACTED]@gov.wales

Cc: [REDACTED]@gov.wales; [REDACTED] [REDACTED] <[REDACTED]@gov.wales bio-fresh [REDACTED]>

Subject: RE: Introductions and General Queries

Hi [REDACTED],

Sorry to push for this, but can you confirm if the project is still under consideration? Obviously we are coming close to the start of the new school year and so I want to make sure we are positioned correctly if there is a potential requirement.

Thanks,

[REDACTED]

From: [REDACTED] [REDACTED] {BIO-FRESH}
Sent: 30 July 2021 11:49
To: [REDACTED] <[REDACTED]@gov.wales>
Cc: [REDACTED]@gov.wales; [REDACTED] [REDACTED] <[REDACTED]@bio-fresh[REDACTED]>
Subject: RE: Introductions and General Queries

Hi [REDACTED],

I hope that you are well and keeping safe.

I am conscious that we are moving closer to September and are running out of time for potential supply for the new school year. Has there been any update for the project?

Thanks,

[REDACTED]

From: [REDACTED] <[REDACTED]@gov.wales>
Sent: 22 June 2021 13:45
To: [REDACTED] [REDACTED] <[REDACTED]@bio-fresh[REDACTED]>
Cc: [REDACTED]@gov.wales; [REDACTED] <[REDACTED]@bio-fresh[REDACTED]>
Subject: RE: Introductions and General Queries

Hi [REDACTED]

As you can probably imagine we are dealing with a couple of moving targets !
Colleagues have a couple of important steps to go through, hopefully things will move in the next couple of weeks.

[REDACTED]

From: [REDACTED] [REDACTED] {BIO-FRESH}
Sent: 14 June 2021 10:24
To: [REDACTED]@gov.wales
Cc: [REDACTED]@gov.wales; [REDACTED] [REDACTED] <[REDACTED]@bio-fresh[REDACTED]>
Subject: RE: Introductions and General Queries

Hi [REDACTED] and [REDACTED],

I thought it might be a good idea to catch up on this project. I know that [REDACTED] mentioned possibly needing to place a small order this month for a trial run before potential larger volumes in September.

Should we arrange for another call to catch up or is there anything that we can be doing in the meantime?

Thanks,

[REDACTED]

From: [REDACTED]@bio-fresh[REDACTED] <[REDACTED]>
Sent: 05 May 2021 10:22
To: '[REDACTED]' <[REDACTED]@gov.wales>
Cc: [REDACTED] <[REDACTED]@gov.wales>; '[REDACTED]@bio-fresh[REDACTED]' <[REDACTED]>
Subject: RE: Introductions and General Queries

Hi [REDACTED],

Thanks, Friday morning is good for me also so please just let me know when is convenient and whether a phone call or video is better.

Thanks,

[REDACTED]

Hi [REDACTED],

The manufacturer/supplier of the machines should provide certification. We will not be manufacturing these machines. We helped a manufacturer in developing the machine but due to procurement rules, other suppliers may also make bids for their machines.

[REDACTED]

From: [REDACTED]@gov.wales <[REDACTED]>

Sent: 02 September 2021 12:37

To: [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>

Subject: RE: Ozone Machines - Wales on Line

Thanks you all – can I confirm who did the independent certification – sorry if in doc's, on tight deadline...

From: [REDACTED] <[REDACTED]@swansea[REDACTED]>

Sent: 02 September 2021 11:44

To: [REDACTED] <[REDACTED]@gov.wales>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>

Subject: RE: Ozone Machines - Wales on Line

Hi [REDACTED],

I would also add that ozone is not ruled out from the mix of technologies to use for the pandemic (<https://www.hse.gov.uk/coronavirus/disinfecting-premises-during-coronavirus-outbreak.htm>) but like any other technology, precautions and guards must be taken and specific risk assessments must be made before using the technology. In addition to its powerful disinfection property and as opposed to other disinfectants, ozone has the advantage of being easy to convert back to safe oxygen using catalytic destructors directly integrated in the machine. The media do present the story as if ozone was directly breathed by people but that is not the case. I also note that they don't present what would be the alternative? Opening windows in cold winter will affect the health of children (e.g. catching flu) and will also disperse the virus to nearby areas – I am not aware of any study that evaluated window opening impact on covid control. I've also attached few notes that may help.

Thanks,

[REDACTED]

From: [REDACTED] <[REDACTED]@gov.wales>
Sent: 02 September 2021 11:00
To: [REDACTED] <[REDACTED]@swansea.gov.wales>; [REDACTED] <[REDACTED]@swansea.gov.wales>;
[REDACTED] <[REDACTED]@swansea.gov.wales>
Subject: RE: Ozone Machines - Wales on Line

Thanks [REDACTED] – I understand fully the media has taken this out of context – thanks for these lines

[REDACTED]

From: [REDACTED] <[REDACTED]@swansea.gov.wales>
Sent: 02 September 2021 10:39
To: [REDACTED] <[REDACTED]@gov.wales>; [REDACTED] <[REDACTED]@swansea.gov.wales>; [REDACTED] <[REDACTED]@swansea.gov.wales>
Subject: RE: Ozone Machines - Wales on Line

Hi [REDACTED]

It is important to note that the media has got completely the wrong end of the stick with the use of ozone. It never the intention to use ozone with anyone present. And the residual ozone levels will always be below the safe legal limit before a room is used again. We have extensive evidence to support this.

Working with [REDACTED], we have also measure disinfection by products from ozone treatment. True this was a limited study due to time and the resources available, but we have measured them.

It is also well known that any disinfection process can leave residues. And chlorination-based processes which have been extensively advised since Covid struck, are particularly prone to these. For example, we have studied DBPs in the water industry for many years and yes they are a problem but water chlorination has saved millions of lives over the years. The key difference here is that we destroy the ozone once it has done its job. That is not possible with any other disinfectant. So for chlorine, it keeps reacting until it dissipates which is not a good plan on so many levels (open the window and it disappears into the environment causing havoc) or leave it in the room to produce as many DBPs as it wants to.

So scientifically, producing a disinfectant which kills the virus and can then be rapidly removed is the ideal.

Which is why we chose ozone.

Does that help at all?

Best wishes

[REDACTED]

From: [REDACTED] <[REDACTED]@gov.wales>
Sent: 02 September 2021 10:04
To: [REDACTED] [REDACTED] <[REDACTED]@Swansea[REDACTED]>; [REDACTED] [REDACTED] <[REDACTED]@Swansea[REDACTED]>; [REDACTED]@Swansea[REDACTED]>
Subject: Ozone Machines - Wales on Line

Morning all

I see there is growing press attention towards ozone machines – we have some internal meetings today to discuss.

I recall one of you gents previously referring to issues associated with use of fogging machines and the chlorine residue/vapour - I believe this was referred to in a form of comparison to use of ozone. Do you have any info on this to hand?

<https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.walesonline.co.uk%2Fnews%2Feducation%2Fwales-33m-plan-give-schools-21457305&data=04%7C01%7CLowri.Jones%40Gov.Wales%7C7bb49b391aaf4dfce9708d96de18c34%7Ca2cc36c592804ae78887d06dab89216b%7C0%7C0%7C637661637787174903%7CUnknown%7CTWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C1000&sdata=tSyrUQA6fHx1oC2ZYfPZIIcQdQaX%2Bpoo5LcoTa8z5%2B0%3D&reserved=0>

Many thanks

[REDACTED]

Hi [REDACTED],

I would also add that ozone is not ruled out from the mix of technologies to use for the pandemic (<https://www.hse.gov.uk/coronavirus/disinfecting-premises-during-coronavirus-outbreak.htm>) but like any other technology, precautions and guards must be taken and specific risk assessments must be made before using the technology. In addition to its powerful disinfection property and as opposed to other disinfectants, ozone has the advantage of being easy to convert back to safe oxygen using catalytic destructors directly integrated in the machine. The media do present the story as if ozone was directly breathed by people but that is not the case. I also note that they don't present what would be the alternative? Opening windows in cold winter will affect the health of children (e.g. catching flu) and will also disperse the virus to nearby areas – I am not aware of any study that evaluated window opening impact on covid control. I've also attached few notes that may help.

Thanks,

[REDACTED]

From: [REDACTED] <[REDACTED]@gov.wales>
Sent: 02 September 2021 11:00
To: [REDACTED] <[REDACTED]@Swansea.gov.uk>; [REDACTED] <[REDACTED]@Swansea.gov.uk>; [REDACTED] <[REDACTED]@Swansea.gov.uk>
Subject: RE: Ozone Machines - Wales on Line

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[REDACTED]

From: [REDACTED] <[REDACTED]@swansea[REDACTED]>
Sent: 02 September 2021 10:39
To: [REDACTED]@gov.wales>; [REDACTED] [REDACTED]
<[REDACTED]@Swansea[REDACTED]>; [REDACTED] [REDACTED] <[REDACTED]@Swansea[REDACTED]>
Subject: RE: Ozone Machines - Wales on Line

Hi [REDACTED]

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It is also well known that any disinfection process can leave residues. And chlorination-based processes which have been extensively advised since Covid struck, are particularly prone to these. For example, we have studied DBPs in the water industry for many years and yes they are a problem but water chlorination has saved millions of lives over the years. The key difference here is that we destroy the ozone once it has done its job. That is not possible with any other disinfectant. So for chlorine, it keeps reacting until it dissipates which is not a good plan on so many levels (open the window and it disappears into the environment causing havoc) or leave it in the room to produce as many DBPs as it wants to.

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Which is why we chose ozone.

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Best wishes

[REDACTED]

From: [REDACTED] <[REDACTED]@gov.wales>

Sent: 02 September 2021 10:04

To: [REDACTED] <[REDACTED]@Swansea.gov.uk>; [REDACTED] <[REDACTED]@Swansea.gov.uk>; [REDACTED] <[REDACTED]@Swansea.gov.uk>

Subject: Ozone Machines - Wales on Line

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Many thanks

[REDACTED]